



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

TITLE V/STATE OPERATING PERMIT

Issue Date:	November 8, 2017	Effective Date:	August 4, 2023
Revision Date:	August 4, 2023	Expiration Date:	August 3, 2028
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 applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

TITLE V Permit No: 46-00005

Federal Tax Id - Plant Code: 22-1261880-1

Owner Information

Name: MERCK SHARP & DOHME LLC
Mailing Address: 770 SUMNEYTOWN PIKE
PO BOX 4, WP20-205
WEST POINT, PA 19486-8000

Plant Information

Plant: MERCK SHARP & DOHME LLC/WEST PT
Location: 46 Montgomery County 46953 Upper Gwynedd Township
SIC Code: 2834 Manufacturing - Pharmaceutical Preparations

Responsible Official

Name: DARREN O'TOOLE
Title: AVP, GWES PA OPER.
Phone: (267) 245 - 2243 Email: darren_otool@msd.com

Permit Contact Person

Name: KINNARI PATEL
Title: DIR WP SAFETY & ENV
Phone: (215) 652 - 6459 Email: kinnari.patel@merck.com

[Signature] _____
JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER



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

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**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
033	ERIE CITY BOILER 3	112.000 MMBTU/HR	
		120.000 MCF/HR	Natural Gas
		850.000 Gal/HR	#2 Oil
035	KEELER BOILER 5	93.400 MMBTU/HR	
		100.000 MCF/HR	NATURAL GAS
		675.000 Gal/HR	#2 Oil
041	BABCOCK WILCOX BOILER 7	168.800 MMBTU/HR	
		1,098.000 Gal/HR	#2 Oil
		168.000 MCF/HR	Natural Gas
042	ABCO BOILER 8	249.000 MMBTU/HR	
		1,804.000 Gal/HR	#2 Oil
		241.750 MCF/HR	Natural Gas
045	BOILER 10	249.000 MMBTU/HR	
		241.750 MCF/HR	Natural Gas
		1,804.000 Gal/HR	#2 Oil
039	COGEN II GAS TURBINE	366.000 MMBTU/HR	
		391.440 MCF/HR	Natural Gas
043	COGEN III GAS TURBINE	424.000 MMBTU/HR	
		333.000 MCF/HR	Natural Gas
105	BIOLOGICAL MANUFACTURING	N/A	SOLVENT
105A	SHELL FREEZERS (B28, B62, & B66)	N/A	SOLVENT
107	BUILDING 12	N/A	SOLVENT
108	BUILDING 66	N/A	SOLVENT
111	BUILDING 62	N/A	SOLVENT
112	BUILDING 38 DISINFECTION OPERATIONS	N/A	SOLVENT
150	EMERGENCY GENERATORS (INSTALLED BTW 1997 AND 1999)	N/A	Natural Gas
152	BLDG 28-2 DIESEL EMERG GEN	N/A	Diesel Fuel
153	EXEMPT NG GENERATORS (NSPS JJJJ)	N/A	Natural Gas
378	MISC VOC SOURCES	N/A	SOLVENTS
380	4 SHELL FREEZERS BLDG 12/12A	N/A	LAB SAMPLES
381	BLDG 12-1 NG EMERG GEN	5.800 MMBTU/HR	
		5,600.000 CF/HR	Natural Gas
383	REFRIGERATED TRAILER IC ENGINES	N/A	Diesel Fuel
384	BIOLOGICAL PROCESSES	N/A	SOLVENTS
385	GAS FUEL TANK/PUMP (5,000 GAL)	N/A	GASOLINE
732	BLDG 81 NG PEAK GENS (81-1, 81-2)	14.300 MMBTU/HR	
		13.884 MCF/HR	Natural Gas
733	M-5 MOBILE DIESEL GENERATOR	14.600 MMBTU/HR	
		104.000 Gal/HR	Diesel Fuel
734	M-6 MOBILE DIESEL GENERATOR	7.700 MMBTU/HR	
		55.000 Gal/HR	Diesel Fuel

**SECTION A. Site Inventory List**

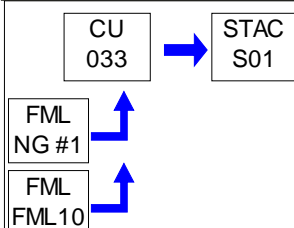
Source ID	Source Name	Capacity/Throughput	Fuel/Material
735	BLDG 44-E NG EMERG GEN	5.000 MMBTU/HR	
		4,825.000 CF/HR	Natural Gas
736	BLDG 82-1 NG EMERG GEN	1.900 MMBTU/HR	
		1.880 MCF/HR	Natural Gas
737	BLDG 33-1 DIESEL EMERG GEN	26.500 MMBTU/HR	
		189.000 Gal/HR	#2 OIL
		189.000 Gal/HR	Diesel Fuel
738	BLDG 24-2 NG EMERG GEN	5.200 MMBTU/HR	
		5.000 MCF/HR	Natural Gas
745	NO. 2 FUEL OIL GENERATORS	N/A	#2 Oil
		N/A	Diesel Fuel
746	PROPANE GENERATORS	N/A	Propane
747	NATURAL GAS GENERATORS	N/A	Natural Gas
748	BLDG 17-1 NG PEAK GEN	12.800 MMBTU/HR	
		12.465 MCF/HR	Natural Gas
749	VOC STORAGE TANKS	N/A	SOLVENT
750	BLDG 81 GODWIN PUMP	N/A	Diesel Fuel
750A	PORTABLE GODWIN PUMPS	N/A	Diesel Fuel
751	BLDG 29-3 DIESEL EMERG GEN	17.200 MMBTU/HR	
		123.000 Gal/HR	Diesel Fuel
752	PARTS CLEANERS	N/A	SOLVENT
753	BLDG 66-1 DIESEL EMERG GEN	15.200 MMBTU/HR	
		110.000 Gal/HR	#2 Oil
754	BLDG 70A-1 DIESEL PEAK GEN	9.864 MMBTU/HR	
		72.000 Gal/HR	Diesel Fuel
755	BLDG 75B-1 NG EMERG GEN	2.500 MMBTU/HR	
		2,394.000 CF/HR	Natural Gas
756	MISC. SUBPART ZZZZ PROPANE GENS	N/A	Propane
758	MISC. SUBPART ZZZZ NG GENS	N/A	Natural Gas
759	BLDG 95-2 DIESEL EMERG GEN	0.600 MMBTU/HR	
		4.200 Gal/HR	Diesel Fuel
761	MOBILE CENTRAL UTILITIES PUMP	N/A	Diesel Fuel
763	M-8 DIESEL PEAK GEN	156.000 Gal/HR	Diesel Fuel
764	M-9 DIESEL PEAK GEN	18.989 MMBTU/HR	
		156.000 Gal/HR	Diesel Fuel
765	BLDG 29-4 NG PEAK GEN	17.510 MMBTU/HR	
		17.000 MCF/HR	Natural Gas
766	BLDG 62-4 NG PEAK GEN	15.450 MMBTU/HR	
		15.000 MCF/HR	Natural Gas
767	BLDG 38-8 NG EMERG GEN	7.960 MMBTU/HR	
		7.729 MCF/HR	Natural Gas

**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
768	BLDG 46-2 NG EMERG GEN	8.961 MMBTU/HR	
		8.700 MCF/HR	Natural Gas
770	B60-2 NG PEAK GEN (1,300 KW)	15.017 MMBTU/HR	
		14.580 MCF/HR	Natural Gas
774	B16-2 NG EMERG GEN	8.874 MMBTU/HR	
		8,700.000 CF/HR	Natural Gas
777	BLDG 6 FIRE PUMP	N/A	Diesel Fuel
C001	SCR FOR BOILER 8		
C002	LO-NOX BURNERS AND FGR FOR BOILER 8		
C045	PEERLESS SCR		
C39	GE WATER INJECTION		
C45	STEAM INJECTION FOR BOILER 10		
FML02	DIESEL FUEL		
FML06	BLDG 33 TANK		
FML10	TWO (2) 396,600 GAL STORAGE TANKS		
FML11	PROPANE TANK		
NG #1	NATURAL GAS LINE		
S01	BOILER 3 STACK		
S03	BOILER 5 STACK		
S105A	B28, B62 & B66 SHELL FREEZER STACKS		
S150	POST RACT GEN STACK		
S152	BLDG 28-2 DIESEL EMER GEN STACK		
S153	EXEMPT GENERATOR STACK (NSPS JJJJ)		
S38	COGEN II STACK		
S380	BLDG 12/12A 4 SHELL FREEZERS STACK		
S381	BLDG 12-1 GENERATOR STACK		
S383	REFRIGERATED TRAILER IC ENGINE STACKS		
S384	BIOLOGICAL PROCESS VENT STACKS		
S39	BOILER 6 STACK (HRSG)		
S41	BOILER 7 STACK		
S42A	BOILER 8 STACK		
S42B	BOILER 9 STACK (HRSG)		
S43	COGEN III GAS TURBINE STACK (WASTE HEAT)		
S45	BOILER 10 STACK		
S732	BLDG 81 GENERATOR STACKS		
S733	M-5 MOBILE DIESEL GEN (1500 KW) STACK		
S734	M-6 MOBILE DIESEL GEN (750 KW) STACK		
S735	BLDG 44-E GENERATOR STACK		
S736	BLDG 82-1 GENERATOR STACK		
S737	BLDG 33-1 GENERATOR STACK		
S738	BLDG 24-2 GENERATOR STACK		

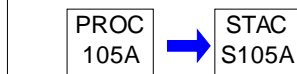
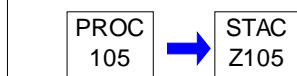
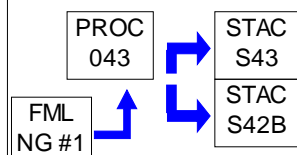
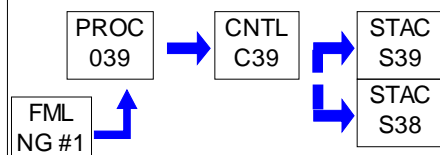
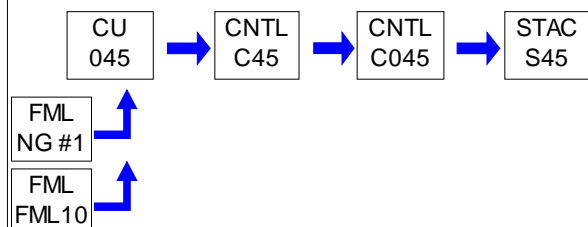
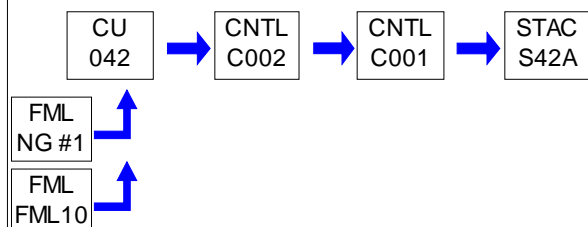
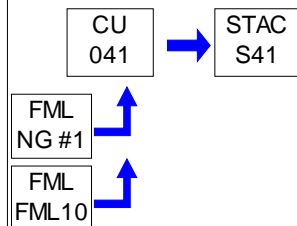
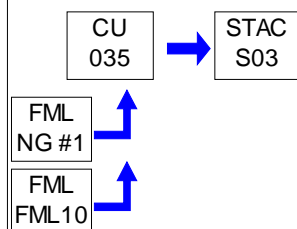
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
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S746	PROPANE GENERATOR STACKS		
S747	NAT GAS GENERATOR STACKS		
S748	BLDG 17-1 GENERATOR STACK		
S750	BLDG 81 GODWIN PUMP STACK		
S750A	PORTABLE GODWIN PUMP STACKS		
S751	BLDG 29-3 GENERATOR STACK		
S753	BLDG 66-1 GENERATOR STACK		
S754	BLDG 70A-1 GENERATOR STACK		
S755	BLDG 75B-1 GENERATOR STACK		
S756	MISC. SUBPART ZZZZ PROPANE GENERATOR STACKS		
S758	MISC. SUBPART ZZZZ NAT GAS GENERATOR STACKS		
S759	BLDG 95-2 GENERATOR STACK		
S761	MOBILE CENTRAL UTILITIES PUMP STACK		
S763	M-8 DIESEL PEAK GEN STACK		
S764	M-9 DIESEL PEAK GEN STACK		
S765	BLDG 29-4 NG PEAK GEN STACK		
S766	BLDG 62-4 NG PEAK GEN STACK		
S767	B38 EMER GEN STACK		
S768	B46-2 EMER GEN STACK		
S770	B60-2 PEAK GENERATOR STACK		
S774	B16-2 EMERG GEN STACK		
S777	BLDG 6 FIRE PUMP STACK		
Z105	BIO MFG FUGITIVES		
Z107	BUILDING 12 STACK		
Z108	BUILDING 66 STACK		
Z111	BLDG 62 FUGITIVES		
Z112	BUILDING 38 FUGITIVES		
Z378	DE MINIMIS FUGITIVES		
Z385	GAS FUEL TANK/PUMP FUGITIVE		
Z749	VOC TANK FUGITIVES		
Z752	PARTS CLEANERS FUGITIVES		

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PROC 107 → STAC Z107

PROC 108 → STAC Z108

PROC 111 → STAC Z111

PROC 112 → STAC Z112

PROC 150 → STAC S150

FML NG #1

PROC 152 → STAC S152

FML FML02

PROC 153 → STAC S153

FML NG #1

PROC 378 → STAC Z378

PROC 380 → STAC S380

PROC 381 → STAC S381

FML NG #1

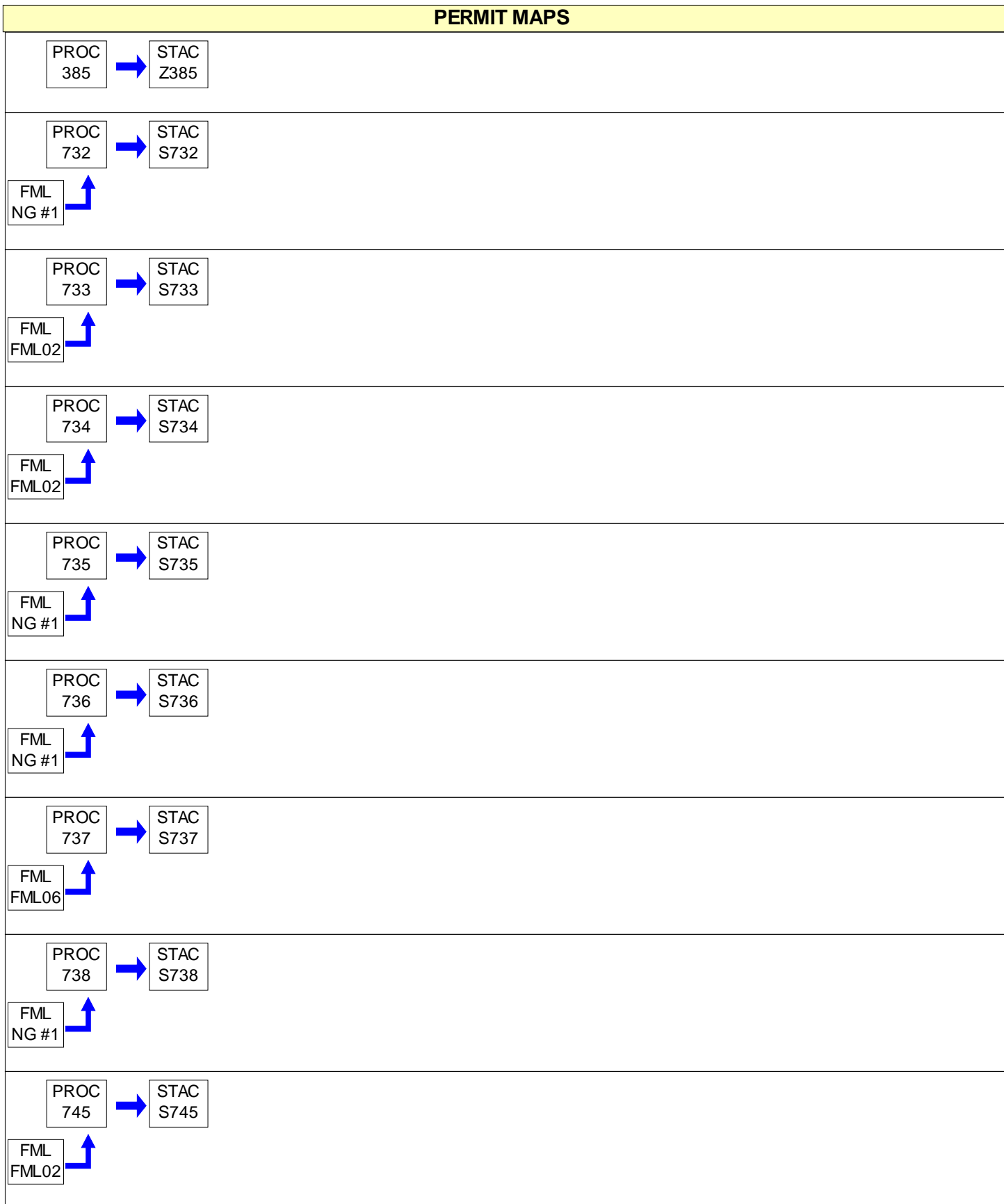
PROC 383 → STAC S383

FML FML02

PROC 384 → STAC S384

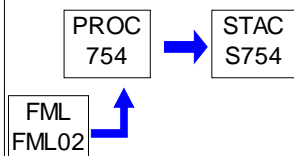
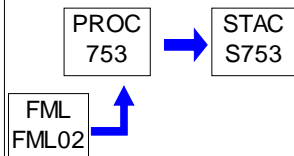
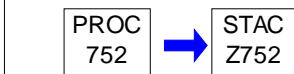
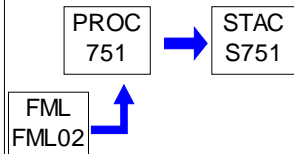
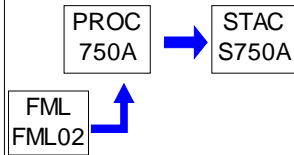
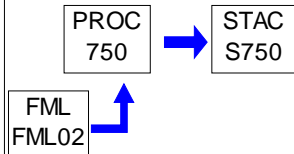
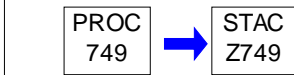
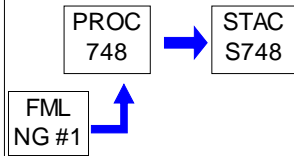
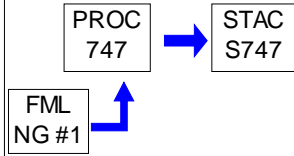
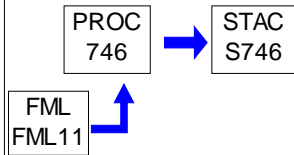


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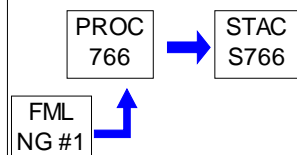
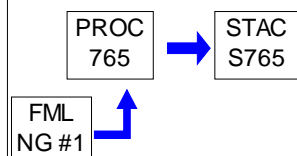
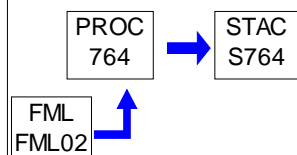
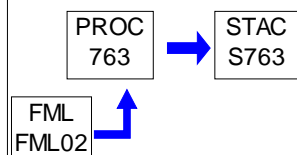
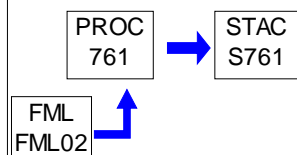
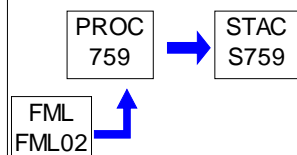
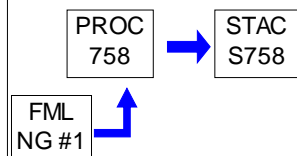
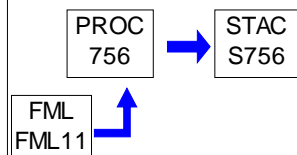
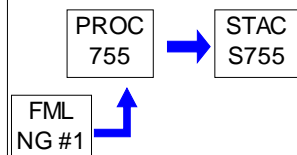


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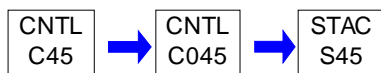
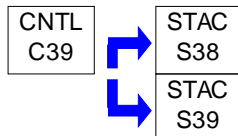
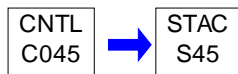
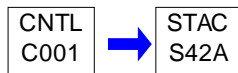
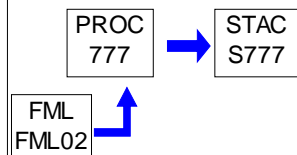
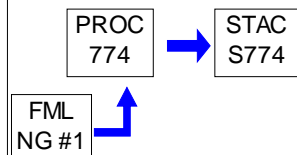
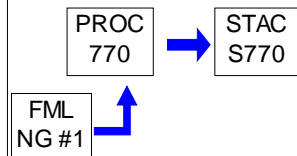
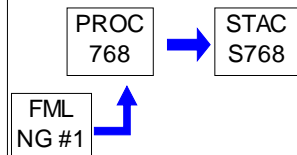
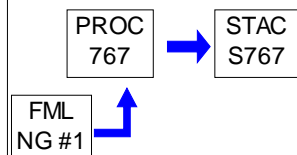


PERMIT MAPS





PERMIT MAPS



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

the Department.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

R3_Air_Apps_and_Notices@epa.gov

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

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

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

R3_Air_Apps_and_Notices@epa.gov

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

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

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

R3_Air_Apps_and_Notices@epa.gov

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

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

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

R3_Air_Apps_and_Notices@epa.gov

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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(5) The results of the analyses.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (a) Construction or demolition of buildings or structures;
- (b) Grading, paving and maintenance of roads and streets;
- (c) 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;
- (d) Clearing of land;
- (e) Stockpiling of materials;
- (f) Open burning operations, as specified in 25 Pa. Code § 129.14;
- (g) Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting;
- (h) Coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in 25 Pa. Code §§ 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations); and
- (i) Sources and classes of sources other than those identified in (a)-(h), above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - (1) The emissions are of minor significance with respect to causing air pollution; and
 - (2) The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

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

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

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

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

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

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:

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

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

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

**SECTION C. Site Level Requirements**

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

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

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

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

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.99(c).]

- (a) VOC emissions from Research and Development activities shall not exceed eighteen (18) tons in any 12 consecutive month period. The permittee shall notify the Department in writing, before installing any new laboratories or pilot equipment in a building not listed below. The permittee shall keep a record of the emissions of VOCs due to Research and Development activities at the West Point facility.
- (b) As of December 14, 2020, the following buildings comprise Research and Development activities toward the 18 ton VOC limit above: 1, 14, 16, 17, 20, 28, 34, 36, 38, 44, 45, 46, 65, 69D, 75, 78, 81, 82, and Mobile R&D Laboratory 1.

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

(a) The permittee has elected to restrict the facility's Hazardous Air Pollutants (HAPs), as defined in Section 112b of the Clean Air Act, at the facility to the following, not to exceed in any 12 consecutive month period:

- (1) Any single HAP to less than ten (10) tons; and,
- (2) Total HAPs to less than twenty-five (25) tons.

(b) The facility's site-wide HAP emissions shall be monitored and calculated for individual HAP and total HAP emissions on a monthly basis and on a 12 consecutive month period. The above limits are considered synthetic minor HAP emissions limits for the facility.

(c) The permittee shall notify the Department within thirty (30) days of becoming knowledgeable of exceeding the synthetic minor HAP emission limits indicated in (a), above.

**SECTION C. Site Level Requirements****II. TESTING REQUIREMENTS.****# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The following are applicable requirements for each source that is required to be stack tested as specified in Section D for a specific source:

- (a) The permittee shall perform a stack test using the Department-approved procedures once every five calendar years, or as specified in a specific source condition, whichever is more stringent. Such testing shall be conducted at least twelve (12) months prior to the expiration of this permit. The stack test results shall be submitted for review no later than six (6) months before the permit expiration;
- (b) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples;
- (c) The stack test shall, at a minimum, test for the regulated pollutants for each individual source. Tests shall be conducted in accordance with the provisions of EPA Test Methods or other Department approved methodology and 25 Pa. Code Chapter 139;
- (d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test;
- (e) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval; and,
- (f) in the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

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

- (a) If at any time the Department has cause to believe that air contaminant emissions from any source(s) listed in Section A, of this Permit, may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).
- (b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139 and the most current version of the DEP Source Test Manual, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

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

For use in demonstrating compliance with the managing of refrigerants during servicing, maintenance, repairs and/or disposal, the permittee shall perform leak detection methods during initial and final verification testing procedures, as applicable for appliances containing more than 50 pounds of Class I, or II refrigerants. The permittee shall use any of the following test methods:

- (a) Soap bubble test;
- (b) Electronic leak detectors;
- (c) Ultrasonic leak detectors;
- (d) Pressure test;
- (e) Vacuum test;
- (f) Fluorescent dye and black light test;
- (g) Infrared test;
- (h) Near infrared test;
- (i) Halon refrigerant gas detection methods; or
- (j) Any other Department approved method.

**SECTION C. Site Level Requirements****# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The following applies whenever the permittee is required to submit stack test protocols, stack test reports, notifications pertaining to such stack testing, or any other related documents:

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

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

(1) Test Date(s)

- (i) For protocols, provide the proposed date on which testing will commence or "TBD"
- (ii) For reports, provide the first and last day of testing

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

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

(4) Testing Requirements (all that apply)

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

(c) Mail all paper submissions to both the PSIMS Administrator and the Air Quality Program Manager for the Southeast Regional Office. Mailing addresses are provided below:

Central Office
Pennsylvania Department of Environmental Protection
Attn: PSIMS Administrator
P.O. Box 8468
Harrisburg, PA 17105-8468

Southeast Region
Pennsylvania Department of Environmental Protection
Attn: Air Quality Program Manager
2 East Main Street
Norristown, PA 19401

(d) Eliminate shading, color ink for data emphasis, small font size, and color saturation as the scanning to create an electronic file is done in black and white. Shading and color emphasis do not scan well and make the electronic copies difficult to read.

(e) Email all electronic submissions to both the PSIMS Administrator in Central Office and the Air Quality Program Manager for the Southeast Regional Office. Email addresses are provided below:

Central Office
RA-EPstacktesting@pa.gov

**SECTION C. Site Level Requirements**

Southeast Region
RA-EPSEstacktesting@pa.gov

(f) The Department limits emails to 15 MB and PSIMS has a file size limitation of 100 MB for electronic files. Submit just one electronic file (convert any Microsoft Word or Excel files to an Adobe PDF format and combine them with the report or protocol), unless the submission contains CONFIDENTIAL information.

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

III. MONITORING REQUIREMENTS.**# 013 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

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

014 [25 Pa. Code §127.511]**Monitoring and related recordkeeping and reporting requirements.**

(a) The following information shall be monitored on a monthly basis for use in demonstrating compliance with the site-wide Hazardous Air Pollutant (HAP) emission limits, found in this Section, of this Permit:

- (1) For the Biological Manufacturing area (Source #105) and other biological manufacturing sources (Sources #107, 108, 111, 112, and 384), which includes shell freezing (Sources #105A and 380), disinfection, and the miscellaneous sources (Source #378) of QC labs and BIO Process vents: - monitor solvent purchases or freezer usage, as described in each of the above listed sources in Section D.
- (2) For the Research & Development (R&D) area and the miscellaneous source of Pharmaceutical Testing Lab (Source #378): - monitor the quantity and species of HAP solvent purchases and/or usage.
- (3) For the Pharmaceutical Manufacturing area (Pharm), which includes the Waste Alcohol Tanks (Source #749) and the following miscellaneous sources (Source #378), QC Laboratory, material supply sampling, and alcohol tanks: - monitor the number of samples, the number of batches, solvent usage, material usage, or material throughput, as described in each of the above listed sources in Section D, of this permit.
- (4) For the Powerhouse area, which includes Boilers #3, 5, 7, 8, and 10 (Sources #033, 035, 041, 042, and 045), two Cogen units (Sources #039 and 043), generators (Sources #150, 152, 153, 381, 732, 733, 734, 735, 736, 737, 738, 745, 746, 747, 748, 751, 753, 754, 755, 756, 758, 759, 761, 763, 764, 765, 766, 767, 768, 770, and 774), refrigerated trailer IC engines (Source #383), and the VOC miscellaneous source (Source #378): - monitor fuel throughput or hours of operation, as described in each of the above listed sources in Section D, of this permit.
- (5) For the Maintenance Area, which includes the Paint and Carpentry Shops in Miscellaneous VOC Source (Source #378), and the parts cleaners (Source #752): - monitor solvent usage or purchases, as described in each of the above listed sources in Section D, of this permit.
- (6) For Miscellaneous VOC Sources (Source #378), which include the gasoline tank and diesel tank, the permittee shall monitor throughput.
- (7) For the Water Utilities area, which includes the Bldg 81 Godwin pump (Source #750), the portable Godwin pumps (Source #750A), and the Bldg 6 fire pump (Source #777) - monitor the hours of operation, as described in each of the above listed sources in Section D, of this permit.

**SECTION C. Site Level Requirements**

(b) The monitoring required by (a)(1)-(3), above, shall be based upon, but not limited to, the following Department and EPA approved methods:

- (1) Approved test methods;
- (2) Certified product data sheets; and/or
- (3) Formulation data from the manufacturer(s).

(c) Any change in the process specific factors for the sources above will require an operating permit modification.

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

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

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

- (1) Odors which may be objectionable (as per 25 Pa. Code § 123.31);
- (2) Visible emissions (as per 25 Pa. Code §§ 123.41 and 123.42); and
- (3) Fugitive particulate matter (as per 25 Pa. Code §§ 123.1 and 123.2).

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

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

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

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

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

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

(a) The following information shall be recorded on a monthly basis for use in demonstrating compliance with the site-wide Hazardous Air Pollutant (HAP) emission limits, found in this Section, of this Permit:

- (1) For the Biological Manufacturing area (Source #105) and other biological manufacturing sources (Source 107, 108, 111, 112, and 384), which includes shell freezing (Sources #105A and 380), disinfection and the miscellaneous sources (Source #378) of QC labs and BIO Process vents: - HAP emissions shall be calculated using the process specific factors and procedures submitted to the Department on July 17th, 2002, or other Department approved method, and solvent purchases or shell freezer usage, as described in each of the above listed sources in Section D, of this permit.
- (2) For the Research & Development (R&D) area and the miscellaneous source of Pharmaceutical Testing Lab (Source #378): - HAP emissions shall be calculated using the quantity and species of HAP solvents purchased and/or used, and an emission factor for lab activities or other future Department approved method.
- (3) For the Pharmaceutical Manufacturing area (Pharm), which includes the Waste Alcohol Tanks (Source #749) and the following miscellaneous sources (Source #378): QC Laboratory, material supply sampling, and alcohol tanks:

**SECTION C. Site Level Requirements**

- HAP emissions shall be calculated using the most recent version of the Tank ESP program (or other appropriate program), EmitExcel (or other appropriate program), the number of samples or batches, solvent usage, material usage or throughput with site specific emission factors and procedures as submitted to the Department on July 17th, 2002, or other Department approved method, and as described in each of the above listed sources in Section D, of this permit.

(4) For the Powerhouse area, which includes Boilers #3, 5, 7, 8, and 10 (Sources #033, 035, 041, 042, and 045), two Cogen units (Sources #039 and 043), generators (Sources #150, 152, 153, 381, 732, 733, 734, 735, 736, 737, 738, 745, 746, 747, 748, 751, 753, 754, 755, 756, 758, 759, 761, 763, 764, 765, 766, 767, 768, 770, and 774), refrigerated trailer IC engines (Source #383), and the miscellaneous VOC source (Source #378): - HAP emissions shall be calculated using the source specific emission factors from stack testing, AP-42 emission factors, or EPA revised HAP factors developed for MACT screening along with the monitored fuel throughput or hours of operation, as described in each of the above listed sources in Section D, of this permit.

(5) For the Maintenance Area, which includes the Paint and Carpentry Shops in Miscellaneous VOC Source (Source #378), and the parts cleaners (Source #752): - HAP emissions shall be calculated using a source specific emission factor along with solvent purchases or usage, as described in Section D, of this permit.

(6) For Miscellaneous VOC Sources (Source #378), which include the gasoline tank and diesel tank: - HAP emissions shall be calculated using the TankESP program (or other appropriate program) and throughput.

(7) For the Water Utilities area, which includes the Bldg 81 Godwin pump (Source #750, the portable Godwin pumps (Source #750A), and the Bldg 6 fire pump (Source #777) - HAP emissions shall be calculated using AP-42 factors along with hours of operation, as described in each of the above listed sources in Section D, of this permit.

(b) The recording required by (a)(1)-(3), above, shall be based upon, but not limited to, the following Department and EPA approved methods:

- (1) Approved test methods;
- (2) certified product data sheets; and/or
- (3) formulation data from the manufacturer(s).

(c) Any change in the process specific factors for the sources above will require an operating permit modification.

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

The permittee shall maintain a record of all reports of fugitive particulate matter, visible emissions and malodors which deviate from the terms and conditions of this permit. The report shall contain, at a minimum, the following items:

- (a) Date, time, and location of the incident(s);
- (b) The cause of the event; and
- (c) The corrective action taken to abate the deviation and prevent future occurrences.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.100(e).]

(a) The permittee shall maintain records of solvent purchases as a means of estimating VOC and HAP emissions, using the procedures and factors outlined in the recordkeeping condition above concerning the site-wide HAP limits, or other future Department approved method, from the Research and Development (R&D) activities to assure compliance with the R&D VOC emission limit found in Site Condition #008 (referring to VOC emissions from R&D activities).

(b) These records shall be aggregated monthly and used in the 12 consecutive month VOC calculations.

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

In accordance with 40 CFR § 82.166, the permittee shall:

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- (a) Provide evidence of refrigerant removal from the appliance(s) being disposed to the person(s) disposing of the appliance(s);
- (b) Maintain service records documenting date and type of service, date refrigerant was added, and quantity and type of refrigerant added;
- (c) Maintain copies of technician certification records; and,
- (d) Maintain copies of information and correspondence from the facility to the EPA as, or if, generated per requirements of 40 CFR § 82.166(n), (o), or (q) to demonstrate compliance with the management of refrigerant usages.

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

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

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

V. REPORTING REQUIREMENTS.**# 021 [25 Pa. Code §135.21]****Emission statements**

The permittee shall submit by March 1, of each year, an annual emission statement for the preceding calendar year.

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

The permittee shall make reports to the EPA as needed in accordance with 40 CFR Part 82, Subpart F (Recycling and Emission Reduction). The permittee shall report to the EPA, information as required by 40 CFR § 82.166(n), (o), and (q), as necessary and applicable, for repair efforts on appliances that contain fifty (50) or more pounds of refrigerant that are expected to exceed repair time limits as described in 40 CFR § 82.156(i)1, (i)2, (i)3, or (i)5.

023 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.511(c) and 127.513]

- (a) The Department is not requiring the permittee to submit reports of all required monitoring as indicated in Section B, Condition #023(b), only those that are specifically identified in this permit.
- (b) For those contaminants monitored by a Department certified continuous monitor for which the Department's Enforcement Policy - Continuous Emission Monitoring System (CEMS) established penalties for excess emissions, the semiannual deviation and annual compliance certification reporting requirements shall be waived.

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

- (a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- (b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of

**SECTION C. Site Level Requirements**

excess emissions to the Department within three (3) business days of the telephone report.

(c) The report shall describe the following:

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

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

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

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

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

025 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Asbestos notifications shall be submitted as required under 40 CFR Part 61, Subpart M.

026 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall submit the following reports:

(a) An annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under condition #026 of section B of this permit. The annual certificate of compliance and any required semi-annual Title V reports shall be submitted to the Department in paper form, and EPA Region III in electronic form at the following email address: R3_APD_Permits@epa.gov.

(b) A semi-annual deviation report, due by October 1, of each year, for the period covering January 1 through June 30 of the same year. Note: The annual certification of compliance fulfills the obligation for the second deviation reporting period (July 1 through December 31).

(c) Electronic copies to the EPA for the annual and semi-annual reports should be sent to the following email address: R3_APD_Permits@epa.gov

(d) The subject line in each electronic report shall contain the permittee's name and the TVOP number.

VI. WORK PRACTICE REQUIREMENTS.

027 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

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

**SECTION C. Site Level Requirements**

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

028 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

For use in demonstrating compliance with the managing of emissions from halon fire-suppression systems, the permittee, or a hired third party vendor will perform the following:

- (a) Test, maintain, service, or dispose of fire suppression systems and components that contain halon, including halon itself, in accordance with the requirements of 40 CFR § 82.270,
- (b) Ensure halon is recovered or recycled in accordance with the applicable NFPA standards, or destroyed in accordance with the applicable methods listed in 40 CFR § 82.270(e),
- (c) Employ technicians trained in halon emission reduction and trained on intentional venting of halon in accordance with 40 CFR § 82.270(b), and,
- (d) Properly maintain halon-containing fire suppression systems in order to minimize the potential for halon releases.

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

The procedures outlined in the following federal regulations shall be followed when performing renovations or demolitions in an area that contains asbestos:

- (a) 40 CFR § 61.145 - Requirements for demolition and removals.
- (b) 40 CFR § 61.148 - Insulating materials.
- (c) 40 CFR § 61.150 - Requirements for waste disposal from demolition and removals.
- (d) 40 CFR § 61.152 - Air Cleaning.

030 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

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

031 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

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

032 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.100.]

For use in demonstrating compliance with the VOC emission limits, the R&D VOC emissions shall be expressed as a quantity of solvents purchased, multiplied by a site-specific emission factor.

**SECTION C. Site Level Requirements****# 033 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall operate and maintain the sources and air pollution control devices, listed in Section A, of this permit, in accordance with good operating and maintenance practices. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

034 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

To demonstrate compliance with 40 CFR Part 82, Subpart F (Recycling and Emission Reduction), the following shall be conducted:

- (a) Refrigerant will be evacuated, recovered, recycled, or pumped out from appliances or their appropriate isolated components (as applicable) for disposal, maintenance, repair, or service, in accordance with the applicable requirements of 40 CFR § 82.156(a)-(e) and (h);
- (b) Appliances will have leaks repaired in accordance with the applicable requirements of 40 CFR § 82.156(a)(1)(i) and (a)(3); and,
- (c) The permittee shall use technicians certified in accordance with the requirements of 40 CFR § 82.161 to maintain, service, and/or repair refrigerated appliances.

035 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

To demonstrate compliance with the managing of emissions from refrigerants, the permittee shall review new construction projects to ensure refrigerants approved under 40 CFR Part 82, Subpart G, are utilized.

036 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.100.]

- (a) Research & Development (R&D) sources shall be operated and maintained in accordance with good air pollution control practices.
- (b) The permittee shall provide annual training in responsible environmental laboratory practices to promote VOC emission reduction and to demonstrate compliance with the VOC emission limits.

037 [25 Pa. Code §129.201]**Boilers**

- (a) By October 31 of each year, the permittee shall calculate the difference between the actual emissions from the unit for the period from May 1 through September 30 and the allowable emissions for that period.
- (b) The permittee shall calculate allowable emissions by multiplying the unit's cumulative heat input for the period by one of the following emission rates:
 - (1) When firing on natural gas or a noncommercial gaseous fuel, an emission rate of 0.10 pounds of NO_x per million Btu heat input; or
 - (2) For boilers firing with solid or liquid fuel, an emission rate of 0.20 lbs of NO_x per MMBtu of heat input.
- (c) This condition affects the following individual sources:
 - (1) Source 033;
 - (2) Source 041;
 - (3) Source 042; and,
 - (4) Source 045.

**SECTION C. Site Level Requirements****# 038 [25 Pa. Code §129.203]****Stationary internal combustion engines.**

By October 31 of each year, the permittee shall calculate the difference between the actual emissions from the affected internal combustion engines during the period from May 1 through September 30, and the allowable emissions for that same period.

(a) The allowable emissions shall be calculated by multiplying the cumulative hours or operations for this source for the period by the horsepower rating of the unit and by the applicable emission rate below:

- (1) For compression ignition engines - 2.3 g of NO_x per brake hp-hr; or
- (2) For spark ignition engines - 3.0 g of NO_x per brake hp-hr.

(b) This condition affects the following individual sources:

- (1) Source 152;
- (2) Source 732;
- (3) Source 733;
- (4) Source 734;
- (5) Source 737;
- (6) Source 748;
- (7) Source 751;
- (8) Source 753;
- (9) Source 754;
- (10) Source 758 (Bldg 38-6 NG Emerg Gen);
- (11) Source 763;
- (12) Source 764;
- (13) Source 765;
- (14) Source 766;
- (15) Source 767;
- (16) Source 768;
- (17) Source 770; and,
- (18) Source 774.

039 [25 Pa. Code §129.204]**Emission accountability.**

(a) The permittee shall surrender to the Department one CAIR NO_x allowance and one CAIR NO_x Ozone Season allowance, as defined in 40 CFR § 96.102 and 96.302 (relating to definitions), for each ton of NO_x by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.

(b) If the combined allowable emissions from units subject to 25 Pa. Code § 129.204 at a facility from May 1 through September 30 exceed the combined actual emissions from same units at the facility during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the permittee's other facilities.

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

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

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

**SECTION C. Site Level Requirements**

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

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

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

(f) This condition affects the following individual sources:

- (1) Source 033;
- (2) Source 041;
- (3) Source 042;
- (4) Source 045;
- (5) Source 152;
- (6) Source 732;
- (7) Source 733;
- (8) Source 734;
- (9) Source 737;
- (10) Source 748;
- (11) Source 751;
- (12) Source 753;
- (13) Source 754;
- (14) Source 758 (Bldg 38-6 NG Emerg Gen);
- (15) Source 763;
- (16) Source 764;
- (17) Source 765;
- (18) Source 766;
- (19) Source 767;
- (20) Source 768;
- (21) Source 770; and,
- (22) Source 774.

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

040 [25 Pa. Code §129.204]

Emission accountability.

(a) If the affected source has NO_x CEMS, the permittee shall determine actual emissions in accordance with the CEMS data reported to the Department shall be used. Any data invalidated under 25 Pa. Code, Chapter 139 (relating to sampling and testing) shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.

**SECTION C. Site Level Requirements**

(b) If the permittee is not required to monitor NO_x emissions with a CEMS, one of the following shall be used to determine actual emissions of NO_x:

- (1) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NO_x.
- (2) The maximum hourly allowable NO_x emission rate contained in the permit or the higher of the following:
 - (i) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of the EPA publication, "AP-42 Compilation of Air Pollution Emission Factors."
 - (ii) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of EPA's "Factor Information Retrieval (FIRE)" data system.
- (3) CEMS data, if the owner or operator elects to monitor NO_x emissions with a CEMS. The owner or operator shall monitor emissions and report the data from the CEMS in accordance with Chapter 139 or Chapter 145 (relating to interstate pollution transport reduction). Any data invalidated under Chapter 139 shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.
- (4) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The operator of the unit shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.

(c) This condition affects the following individual sources:

- (1) Source 033;
- (2) Source 041;
- (3) Source 042;
- (4) Source 045;
- (5) Source 152;
- (6) Source 732;
- (7) Source 733;
- (8) Source 734;
- (9) Source 737;
- (10) Source 748;
- (11) Source 751;
- (12) Source 753;
- (13) Source 754;
- (14) Source 758 (Bldg 38-6 Generator);
- (15) Source 763;
- (16) Source 764;
- (17) Source 765;
- (18) Source 766;
- (19) Source 767;
- (20) Source 768;
- (21) Source 770; and,
- (22) Source 774.

VII. ADDITIONAL REQUIREMENTS.

041 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The permittee shall manage the emission of halon from halon-containing fire suppression systems in accordance with 40 CFR 82, Subpart H.

**SECTION C. Site Level Requirements****# 042 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

For all limits based on a 12 consecutive month total, which have been in effect less than 1 (one) year at the effective date of the Title V permit or limits which are newly effective at the effective date of the Title V permit (This does not include the Synthetic Minor HAP emission limits, below), the following shall apply during the first effective 12 consecutive month period of the limit:

- (a) Within thirty (30) days after the month for which compliance must be demonstrated (compliance month), the permittee shall demonstrate that the actual emissions for the aggregation of months from the effective date of the limit to the compliance month is less than the permit limit.
- (b) Once a limit based on a 12 consecutive month total has been in effect long enough to collect 12 compliance months of actual data, the permittee must demonstrate compliance by aggregating the actual emissions from the compliance month with actual emissions from the preceding eleven (11) compliance months.
- (c) For all limits based on a 12 consecutive month total, that have been in effect less than one (1) year, the site must maintain readily available records indicating the effective date of the limit.

043 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

(a) The permittee has opted to be a synthetic minor for the Pharmaceutical MACT (40 CFR 63, Subpart GGG). The permittee has elected to restrict the facility's Hazardous Air Pollutants (HAPs), as defined in Section 112b of the Clean Air Act, at the facility to the following, not to exceed in any 12 consecutive month period:

- (1) Any single HAP to less than ten (10) tons, and,
 - (2) Total HAPs to less than twenty-five (25) tons.
- (b) The facility's site-wide HAP emissions shall be monitored and calculated for total, and individual, HAP emissions monthly as a sum of the previous 12 consecutive month period. HAP emissions shall be initially monitored and calculated as a monthly average for the previous 11 months, with the first month of actual HAPs data beginning with September 2002. The monthly average figures shall be replaced with actual HAP emission figures as actual data is accumulated at the end of each successive month.
- (c) The above emission limits are considered synthetic minor HAP emissions limits for the facility.
- (d) The permittee shall notify the Department within thirty (30) days of becoming knowledgeable of exceeding the synthetic minor HAP emission limits indicated in (a), above.
- (e) On, or before, October 21, 2002, the permittee shall provide documentation that the site-wide HAP emissions for the 12 consecutive month period prior to this date for each individual HAP emission is below 10 tons, and the total HAP emissions are below 25 tons. This is to include, but is not limited to, sufficient records on monitoring data, raw material purchase order receipts, VOC tracking, raw material usage, and operation logs.

044 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

The permittee may, at any time after the issuance of this permit, initiate the process to change their HAP emitter status from Synthetic Minor to Major. This includes, but is not limited to; application for a Plan Approval, issuance of the Plan Approval by the Department, and removal of the synthetic minor limits from the Title V Permit via the Administrative Amendment process (25 Pa. Code § 127.450) upon issuance of the Plan Approval.

045 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

Final compliance with 40 CFR 63, Subpart GGG shall be achieved within three (3) years of the issuance of the Plan Approval, as referenced by the previous condition, or within three (3) years of the facility being determined to be a major source for HAPs as defined by Section 112a of the Clean Air Act, whichever is earlier.

**SECTION C. Site Level Requirements****# 046 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

The permittee shall complete the implementation of 40 CFR 63, Subpart GGG and the provisions of Subpart A, as provided for in Table 1, of 40 CFR 63, Subpart GGG, by following the following schedule:

(a) Within 120 days after the issuance of the Plan Approval changing the facility status from HAP synthetic minor to major, or within 120 days of the facility being determined to be a major source for HAPs as defined by Section 112a of the Clean Air Act, whichever is earlier, the permittee shall submit an initial notification to the Department and the Administrator of the USEPA meeting the requirements of 40 CFR § 63.9(b).

(b) Within twenty-eight (28) months after issuance of the Plan Approval, as referenced by the condition above (concerning changing the HAP emitter status from Synthetic Minor to Major), or within 120 days of the facility being determined to be a major source for HAPs as defined by Section 112a of the Clean Air Act, whichever is earlier the permittee shall submit an application for permit modification. The permit modification shall include, at a minimum, the following:

- (1) 40 CFR § 63.1252, General Standards
- (2) 40 CFR § 63.1254, Process Leak Standards
- (3) 40 CFR § 63.1255, Equipment Leak Standards
- (4) 40 CFR § 63.1256, Wastewater Standards
- (5) 40 CFR § 63.1258, Monitoring Standards
- (6) 40 CFR § 63.1259, Recordkeeping Standards
- (7) 40 CFR § 63.1260, Reporting Standards

047 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

Within thirty (30) months of issuance of the Plan Approval changing the facility status from HAP synthetic minor to major, the permittee shall submit a precompliance report to the Department.

048 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

At least ninety (90) days prior to the performance testing required by 40 CFR 63, Subpart GGG, the permittee shall notify the Department of the test date and submit for Department approval and determining consistency with 25 Pa. Code Chapter 139 the procedures for the test.

049 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

Within forty-one (41) months of issuance of the Plan Approval changing the facility status from HAP synthetic minor to major, the permittee shall submit a notification of Compliance Status Report to the Department.

050 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

The permittee shall obtain prior approval from the Department for the construction of a new affected source of modification of a source according to all applicable requirements of 40 CFR 63, Subparts A and GGG.

051 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

The permittee may request a compliance extension of up to one (1) year in accordance with 40 CFR § 63.1250(f)(4).

052 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

The Department reserves the right to amend, for cause, the compliance schedule concerning changing the facility status from HAP synthetic minor to major and the procedures and factors used to determine the VOC and HAPs emissions indicated in the recordkeeping requirements, above.

053 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

All RACT-related permit conditions under 25 Pa. Code §§ 129.112 - 129.115 are to be SIP-approved and any future revisions to any of these will require a co-incident SIP revision.

**SECTION C. Site Level Requirements****# 054 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall manage emissions of Class I and Class II refrigerants during the service, maintenance, repair, and disposal of regulated appliances in accordance with the requirements of 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

(b) New refrigerated appliances shall utilize alternatives approved under 40 CFR Part 82, Subpart G (Significant New Alternatives Policy Program).

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

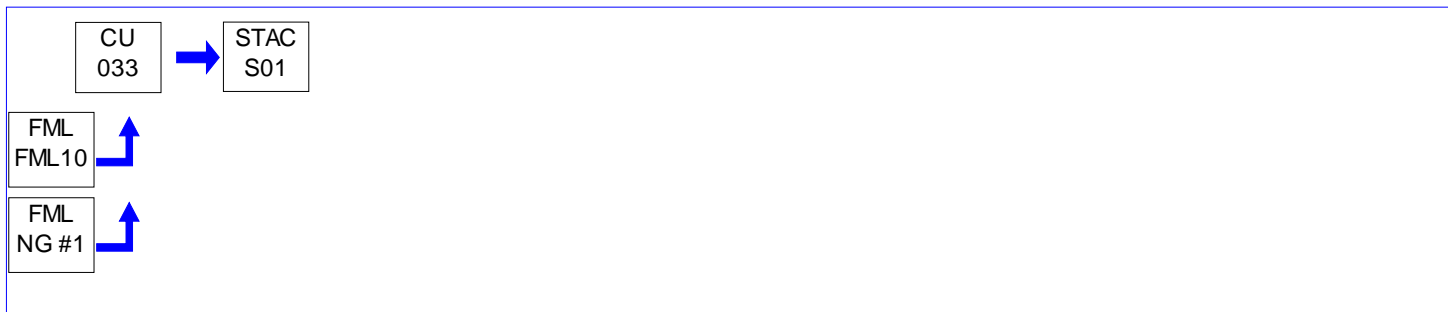
***** Permit Shield In Effect *****

**SECTION D. Source Level Requirements**

Source ID: 033

Source Name: ERIE CITY BOILER 3

Source Capacity/Throughput: 112.000 MMBTU/HR
 120.000 MCF/HR Natural Gas
 850.000 Gal/HR #2 Oil

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

Particulate matter emissions shall not exceed the rate determined by the following formula:

$$A = 3.6E^{-0.56}, \text{ where}$$

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

E = Heat input to the combustion unit in millions of BTUs per hour.

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

The combined VOC emissions from Source ID's 033, 035, 039, 737, 745, 746, and 747 shall not exceed 12.3 tons in any 12 consecutive month period.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.99.]

NO_x emissions from this boiler, shall not exceed any of the following:

- (a) 0.15 lbs/MMBtu, on a daily basis when firing on natural gas;
- (b) 0.15 lbs/MMBtu, on a daily basis when firing on #2 fuel oil; and
- (c) 98.0 tons in any 12 consecutive month period, which is based on the design capacity of this boiler.

Fuel Restriction(s).**# 004 [25 Pa. Code §123.22]****Combustion units**

The maximum sulfur content in commercial fuel oil used in this source shall not exceed 0.0015% by weight, except as specified in 25 Pa. Code § 123.22(e)(2)(ii) and (iii).

[Compliance with this streamlined permit condition ensures compliance with 25 Pa. Code § 123.22(e)(1).]

005 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

Only Natural gas, No. 2 fuel oil, or diesel fuel shall be burned in this boiler.

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.****# 006 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable for the analysis of commercial fuel oil to demonstrate compliance with the sulfur limitation, for this boiler:

- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).
- (2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).
- (3) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained each time a fuel oil delivery is made to demonstrate compliance with the sulfur limitation for this boiler.

(c) In lieu of fuel oil analysis or fuel oil receipts with each delivery, the permittee shall receive annually from the fuel oil supplier, a certification that all of the fuel oil delivered to the facility indicates the sulfur content is not in excess of 0.05%, by weight, except as specified in 25 Pa. Code § 123.22(e)(2)(ii) and (iii).

(d) if the permittee changes fuel oil supplier during the course of the calendar year, the above certifications shall be required from each new fuel oil supplier.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.100(a)(4).]

The permittee shall conduct a Department-approved emissions source test for NO_x emissions one time in each 5-year calendar period.

For the purpose of this condition, a 5-year calendar period is defined as beginning with the calendar year the latest stack test is performed and ending on December 31, five years later.

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

[additional authority for this permit condition is derived from 25 Pa. Code § 129.100(d).]

The permittee shall monitor the fuel type and hours of operation daily for use in demonstrating compliance with the VOC and NO_x emission limits.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.100(d).]

The permittee shall record the fuel type and hours of operation daily for use in demonstrating compliance with the VOC and NO_x limits for this boiler.

Emission calculations and records shall be maintained as follows:

- (a) NO_x - monthly and on a 12-consecutive month basis; and
- (b) VOC - monthly and on a 12-consecutive month basis.

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

The permittee shall retain receipts, or test results, of the percentage sulfur in the fuel oil for use in demonstrating compliance with the sulfur limits for this source.

**SECTION D. Source Level Requirements****# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]****SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

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

The permittee shall maintain the following records:

- (a) a copy of each notification and report submitted to comply with the Area Source Boiler MACT (6J) and all documentation supporting any Initial Notification and Notification of Compliance Status that you submitted.
- (b) conformance with the work practices and management practices required by 40 CFR § 63.11214 and as specified in (b)(1) and (b)(2) below:
 - (1) records must identify the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; and
 - (2) records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.
- (c) the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment;
- (d) actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
- (e) the information identified below for each required inspection or monitoring:
 - (1) the date, place, and time of the monitoring event;
 - (2) person conducting the monitoring;
 - (3) technique or method used;
 - (4) operating conditions during the activity;
 - (5) results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation; and
 - (6) maintenance or corrective action taken (if applicable).

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

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

Your records must be in a form suitable and readily available for expeditious review. These records shall be kept onsite for at least two (2) years after the date of each recorded action. The records may be kept off site for the remaining three (3) years.

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

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

By March 1 of the year after the tuneup has been completed, the permittee must prepare, and submit to the Department and the US EPA upon request, a compliance certification report for the previous calendar year containing the information below:

- (a) company name and address.
- (b) statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements 40 CFR 63, Subpart JJJJJJ. Your notification must include the following certification(s) of compliance and be signed by a responsible official:
 - (1) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."

**SECTION D. Source Level Requirements**

(2) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."

(c) Unless requested by the Department, the permittee is not required to submit this report, but shall retain the record for a minimum of five (5) years.

(d) The permittee must submit the report by March 15 if the source experiences any deviations from the applicable requirements during the reporting period. The report shall include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

V. REPORTING REQUIREMENTS.

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11214]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?

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

The permittee shall conduct a tune-up of the boiler biennially, which shall include the following:

- (a) inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shut down, but you must inspect each burner at least once every 36 months);
- (b) inspect the flame pattern and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (c) inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly;
- (d) optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
- (e) measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made);
- (f) maintain onsite and submit, if requested by the Administrator, biennial report containing the following information.
 - (1) the concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler;
 - (2) a description of any corrective actions taken as a part of the tune-up of the boiler; and
 - (3) the type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.
- (g) if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

VI. WORK PRACTICE REQUIREMENTS.

015 [25 Pa. Code §127.512]

Operating permit terms and conditions.

(a) Compliance with the particulate matter emission limit shall be determined by using the stack test emission factor.

(b) Compliance with the VOC emission limit shall be calculated by the following equation:

(Emission factor) X (Boiler fuel feed rate) X (Hours of operation),

where the emission factor is based on an AP-42 factor or as determined by stack testing.

(c) For use in demonstrating compliance with the NO_x lbs/MMBtu emission limit, the permittee shall maintain on file, stack test results of the emission rate. Compliance with the NO_x tons/12 month emission limit shall be calculated by the following equation:

(Emission factor) X (Boiler feed rate) X (Hours of operation)

**SECTION D. Source Level Requirements****# 016 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.97(d).]

The permittee shall operate and maintain this boiler and air pollution control devices in accordance with good operating and maintenance practices. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11223]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****How do I demonstrate continuous compliance with the work practice and management practice standards?**

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

The permittee shall conduct a biennial performance tune-up and retain records of the tune-up.

Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.

VII. ADDITIONAL REQUIREMENTS.

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

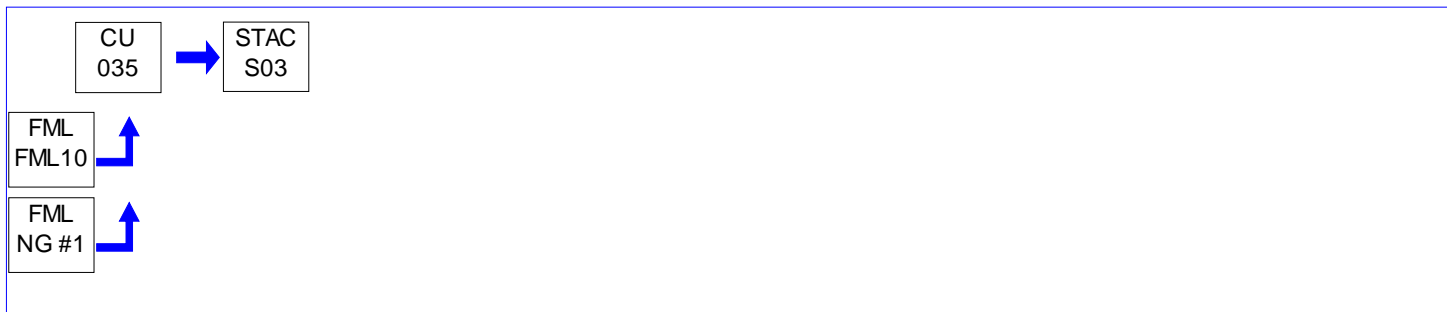
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 035

Source Name: KEELER BOILER 5

Source Capacity/Throughput: 93.400 MMBTU/HR
 100.000 MCF/HR NATURAL GAS
 675.000 Gal/HR #2 Oil

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

Particulate matter emissions shall not exceed the rate determined by the following formula:

$$A = 3.6E^{(-0.56)}, \text{ where}$$

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

E = Heat input to the combustion unit in millions of BTUs per hour.

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

The combined VOC emissions from Source ID's 033, 035, 039, 737, 745, 746, and 747 shall not exceed 12.3 tons in any 12 consecutive month period.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99.]

NO_x emissions from this boiler, shall not exceed any of the following:

- (a) 0.20 lbs/MMBtu, on a daily basis when firing on natural gas;
- (b) 0.20 lbs/MMBtu, on a daily basis when firing on #2 fuel oil; and
- (c) 82.0 tons in any 12 consecutive month period, which is based on the design capacity of this boiler.

Fuel Restriction(s).**# 004 [25 Pa. Code §123.22]****Combustion units**

The maximum sulfur content in commercial fuel oil used in this source shall not exceed 0.0015% by weight, except as specified in 25 Pa. Code § 123.22(e)(2)(ii) and (iii).

[Compliance with this streamlined permit condition ensures compliance with 25 Pa. Code § 123.22(e)(1).]

005 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

Only Natural gas, No. 2 fuel oil, or diesel fuel shall be burned in this boiler.

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.****# 006 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable tests for the analysis of commercial fuel oil to demonstrate compliance with the sulfur limitation for this boiler:

- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).
- (2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).
- (3) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The testing requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained each time a fuel oil delivery is made to demonstrate compliance with the sulfur limitation for this boiler.

(c) In lieu of fuel oil analysis or fuel oil receipts with each delivery, the permittee shall receive annually from the fuel oil supplier, a certification that all of the fuel oil delivered to the facility indicates the sulfur content is not in excess of 0.05%, by weight, except as specified in 25 Pa. Code § 123.22(e)(2)(ii) and (iii).

(d) If the permittee changes fuel oil supplier during the course of the calendar year, the above certifications shall be required from each new fuel oil supplier.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.100(a)(4).]

The permittee shall conduct a Department-approved emissions source test for NO_x emissions one time in each 5-year calendar period.

For the purpose of this condition, a 5-year calendar period is defined as beginning with the calendar year the latest stack test is performed and ending on December 31, five years later.

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

[additional authority for this permit condition is also derived from 25 Pa. Code § 129.100(d).]

The permittee shall monitor the fuel type and hours of operation daily for use in demonstrating compliance with the VOC and NO_x emission limits for this boiler.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.100(d).]

The permittee shall record the fuel type and hours of operation daily for use in demonstrating compliance with the VOC and NO_x emission limits for this boiler.

Emission calculations and records shall be maintained as follows:

- (a) NO_x - monthly (lb/MMBtu) and on a 12 consecutive month basis; and
- (b) VOC - monthly and on a 12 consecutive month basis.

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

The permittee shall retain receipts, or test results, of the percentage sulfur in the fuel oil for use in demonstrating compliance with the sulfur limitation for this boiler.

**SECTION D. Source Level Requirements****# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]****SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

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

The permittee shall maintain the following records:

- (a) a copy of each notification and report submitted to comply with the Area Source Boiler MACT (6J) and all documentation supporting any Initial Notification and Notification of Compliance Status that you submitted.
- (b) conformance with the work practices and management practices required by 40 CFR § 63.11214 and as specified in (b)(1) and (b)(2) below:
 - (1) records must identify the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; and
 - (2) records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.
- (c) the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment;
- (d) actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
- (e) the information identified below for each required inspection or monitoring:
 - (1) the date, place, and time of the monitoring event;
 - (2) person conducting the monitoring;
 - (3) technique or method used;
 - (4) operating conditions during the activity;
 - (5) results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation; and
 - (6) maintenance or corrective action taken (if applicable).

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

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

Your records must be in a form suitable and readily available for expeditious review. These records shall be kept onsite for at least two (2) years after the date of each recorded action. The records may be kept off site for the remaining three (3) years.

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

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

By March 1 of the year after the tuneup has been completed, the permittee must prepare, and submit to the Department and the US EPA upon request, a compliance certification report for the previous calendar year containing the information below:

- (a) company name and address.
- (b) statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements 40 CFR 63, Subpart JJJJJJ. Your notification must include the following certification(s) of compliance and be signed by a responsible official:
 - (1) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."

**SECTION D. Source Level Requirements**

(2) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."

(c) Unless requested by the Department, the permittee is not required to submit this report, but shall retain the record for a minimum of five (5) years.

(d) The permittee must submit the report by March 15 if the source experiences any deviations from the applicable requirements during the reporting period. The report shall include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

V. REPORTING REQUIREMENTS.**# 014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11214]****SUBPART JJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?**

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

The permittee shall conduct a tune-up of the boiler biennially, which shall include the following:

- (a) inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shut down, but you must inspect each burner at least once every 36 months);
- (b) inspect the flame pattern and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (c) inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly;
- (d) optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
- (e) measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made);
- (f) maintain onsite and submit, if requested by the Administrator, biennial report containing the following information.
 - (1) the concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler;
 - (2) a description of any corrective actions taken as a part of the tune-up of the boiler; and
 - (3) the type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.
- (g) if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

VI. WORK PRACTICE REQUIREMENTS.**# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee shall use a source specific factor determined by stack testing, for use in demonstrating compliance with the particulate matter emission limit for this boiler.
- (b) The permittee shall perform monthly calculations using stack test data (if available), or an AP-42 emission factor, with the hours of operation for use in demonstrating compliance with the NOx and VOC ton/yr emission limits for this boiler.
- (c) The permittee shall perform a one-time calculation using stack test results, with a worst case operating scenario (higher heating value), for use in demonstrating compliance with the NOx lbs/MMBtu limit for this boiler.
- (d) The permittee shall make the above calculations available to the Department upon request.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.97(d).]



SECTION D. Source Level Requirements

The permittee shall operate and maintain this boiler and air pollution control devices in accordance with good operating and maintenance practices. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11223]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

How do I demonstrate continuous compliance with the work practice and management practice standards?

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

The permittee shall conduct a biennial performance tune-up and retain records of the tune-up.

Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 041

Source Name: BABCOCK WILCOX BOILER 7

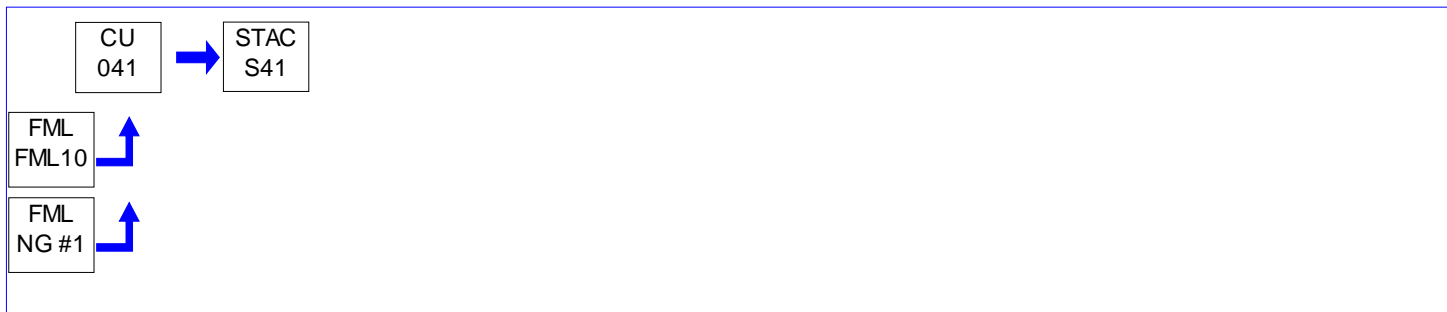
Source Capacity/Throughput: 168.800 MMBTU/HR

1,098.000 Gal/HR

#2 Oil

168.000 MCF/HR

Natural Gas

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

Particulate matter emissions shall not exceed the rate determined by the following formula:

$$A = 3.6E^{-0.56}, \text{ where}$$

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

E = Heat input to the combustion unit in millions of BTUs per hour.

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

Hourly emissions shall not exceed the following:

- (a) PM - 0.84 lb/hr (natural gas), and 13.11 lb/hr (#2 fuel oil);
- (b) SO_x - 1.68 lb/hr (natural gas), and 48.55 lb/hr (#2 fuel oil);
- (c) CO - 6.89 lb/hr (natural gas), and 6.64 lb/hr (#2 fuel oil);
- (d) VOC - 0.19 lb/hr (natural gas), and 7.94 lb/hr (#2 fuel oil); and
- (e) PM-10 - 0.84 lb/hr (natural gas), and 13.1 lb/hr (#2 fuel oil).

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

Emissions shall not exceed any of the following limits, and are measured on a 12 consecutive month period:

- (a) PM - 8.1 tons;
- (b) SO_x - 24.2 tons;
- (c) NO_x - 39.6 tons;
- (d) CO - 30.1 ton;
- (e) VOC - 3.7 tons; and
- (f) PM-10 - 8.1 tons.

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.112(g)(1)(i-ii) and 129.115(b)(4).]

(a) The operation of this boiler shall not result in emissions of Nitrogen Oxides (NO_x) in excess of the following:

- (1) 0.10 lb/MMBtu heat input when firing on natural gas; and
- (2) 0.12 lb/MMBtu heat input when firing on fuel oil.

**SECTION D. Source Level Requirements**

(b) The above emissions shall be calculated and recorded using a daily average.

[Compliance with this streamlined permit condition ensures compliance with 40 CFR §§ 60.44b(a)(4) and 60.46b(a).]

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The operation of this boiler shall not result in visible emissions in excess of 20% opacity at any six-minute average per hour, except for one 6-minute period per hour of not more than 27% opacity in accordance with 40 CFR §§ 60.43b(f) and 60.46b(a), or the visible emission limitation of Condition #005, in Section C, of this permit, whichever is more stringent.

Fuel Restriction(s).

006 [25 Pa. Code §123.22]

Combustion units

The maximum sulfur content in commercial fuel oil used in this source shall not exceed 0.0015% by weight, except as specified in 25 Pa. Code § 123.22(e)(2)(ii) and (iii).

[Compliance with this streamlined permit condition ensures compliance with the NSPS Requirement of 40 CFR 60.42b(j) to operate on very low sulfur fuel (less than or equal to 0.5% sulfur, by weight), 25 Pa. Code § 123.22(e)(1), and CP-46-0005, Condition 19.C.1.]

007 [25 Pa. Code §127.512]

Operating permit terms and conditions.

Only natural gas, No. 2 fuel oil, or diesel fuel shall be used to fire this boiler.

Throughput Restriction(s).

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The firing rate to this boiler shall be limited to the following specified fuel input:

- (a) Natural gas - 1,473 MMCF/yr, and 4.036 MMCF/day; and
- (b) No. 2 fuel oil/diesel fuel - 844,330 gal/yr, and 28,144 gal/day.

II. TESTING REQUIREMENTS.

009 [25 Pa. Code §139.16]

Sulfur in fuel oil.

(a) The following are applicable for the analysis of commercial fuel oil to demonstrate compliance with the sulfur limitation for this boiler:

- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).
- (2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).
- (3) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained each time a fuel oil delivery is made to demonstrate compliance with the sulfur limitation for this boiler.

(c) In lieu of fuel oil analysis or fuel oil receipts with each delivery, the permittee shall receive annually from the fuel oil supplier, a certification that all of the fuel oil delivered to the facility indicates the sulfur content is not in excess of 0.05%, by weight, except as specified in 25 Pa. Code § 123.22(e)(2)(ii) and (iii).

(d) If the permittee changes fuel oil supplier during the course of the calendar year, the above certifications shall be required from each new fuel oil supplier.

**SECTION D. Source Level Requirements**

**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.46b]
Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.**

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

The permittee shall, upon request, determine compliance with the 0.2 lb/MMBtu NOx standard through the use of a 30-day performance test.

III. MONITORING REQUIREMENTS.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code, Chapter 139, and 40 CFR § 60.48b(e)(2).]

The permittee shall adhere to the monitoring requirements of 25 Pa. Code, Chapter 139 to demonstrate compliance with the NOx and opacity restrictions. The Department's Continuous Source Monitoring Manual shall be used as a reference.

012 [25 Pa. Code §139.101]

General requirements.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(b)(4).]

(a) In addition to NOx, either oxygen or carbon dioxide shall be monitored to provide data to permit conversion of monitoring system data, when applicable, to the standard of pounds of NOx (expressed as nitrogen dioxide) per million Btus of heat input. This conversion shall be performed by using the "F" Factor as specified in the manual referenced in 25 Pa. Code § 139.102(3) (relating to references). The Department may approve other methods of conversion to units of pounds of pollutant per million Btus of heat input.

(b) Department approved continuous emission monitoring systems installed under the requirements of this section shall also meet the minimum data availability requirements required by the continuous opacity monitoring systems for this source.

(c) This condition assists in the demonstration of compliance with the NOx emission limit for this boiler.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Fuel type, and throughput, shall be monitored on a daily basis for use in demonstrating compliance with the fuel throughput limits and the tons/12 consecutive month emission limits, for this boiler.

014 [25 Pa. Code §139.103]

Opacity monitoring requirements.

Opacity measurements shall be converted to represent plume opacity as described in the Department's Continuous Source Monitoring Manual. The conversion method shall be approved by the Department.

Opacity monitoring systems shall meet at least one of the following minimum data availability requirements unless other data availability requirements are stipulated elsewhere in this permit for a particular process:

- (a) at least 90% of the hours in each calendar month shall be valid hours as set forth in the Department's Continuous Source Monitoring Manual; and
- (b) at least 95% of the hours in each calendar quarter shall be valid hours as set forth in the quality assurance section of the Department's Continuous Source Monitoring Manual.

This condition assists in the demonstration of compliance with the opacity restriction for this boiler.

**# 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48b]
Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Emission monitoring for particulate matter and nitrogen oxides.**

**SECTION D. Source Level Requirements**

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.441 and 139.101.]

The permittee shall maintain, and operate a continuous monitoring system for measuring the opacity and NO_x of emissions discharged to the atmosphere and record the output of the system.

When NO_x emission data are not obtained because of continuous monitoring system breakdowns, the repairs, calibration checks, zero and span adjustments, and emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

IV. RECORDKEEPING REQUIREMENTS.**# 016 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The hours of operation shall be recorded on a daily basis and the fuel type and fuel firing rate recorded on an hourly basis for use in demonstrating compliance with the fuel throughput limits for this boiler.

017 [25 Pa. Code §127.511]**Monitoring and related recordkeeping and reporting requirements.**

The permittee shall comply with the SO_x standards by maintaining fuel receipts from the fuel supplier in accordance with 40 CFR Sections 60.42b(j), 60.45b(j), and 60.49b(r).

018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units****Reporting and recordkeeping requirements.**

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

The permittee shall record the following information for each steam generating unit operating day to demonstrate compliance with the NO_x emission limit for this boiler:

- (a) Calendar date.
- (b) The average hourly NO_x emission rate, (lbs/MMBtu heat input) measured or predicted.
- (c) The 30-day average NO_x emission rates (lb/MMBtu heat input) shall be calculated at the end of each steam generating unit operating day from the measured or predicted hourly NO_x emission rates, for the preceeding thirty (30) steam generating unit operating days.
- (d) Identification of the steam generating unit operating days when the 30-day calculated average NO_x emission rate is in excess of the NO_x emission rate of 0.2 lbs/MMBtu, the reason for such occurrences and the corrective action taken.
- (e) Identification for the days when data was not taken, the reason for such occurrences and the corrective action taken.
- (f) Identification of the times when the emission data have been excluded from the calculation of the average emission rates and the reason for excluding the data.
- (g) Identification of the "F" factor used, the method of determination, and the fuel type combusted.
- (h) Identification of the times when the pollutant concentration exceeded the full span of the CEMs.
- (i) Description of any modification to the continuous monitoring system that could affect its ability to comply with Performance Specification 2, as found in 40 CFR 60, Appendix B.
- (j) The results of the daily CEM drift tests, CEM calibration test and the quarterly accuracy assessments.

019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units****Reporting and recordkeeping requirements.**

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

The permittee shall maintain copies of the continuous records of the NO_x and opacity measurements to demonstrate compliance with the emission limits for this boiler.

**SECTION D. Source Level Requirements****# 020 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall comply with the recordkeeping requirements established in 25 Pa. Code, Chapter 139, Subchapter C, the recordkeeping requirements in the latest version of the Department's Continuous Source Monitoring Manual, as applicable, and the recordkeeping requirements established in 40 CFR 60, Subpart Db.

021 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.**

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

The permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for distillate oil and natural gas for each six-month period. The annual capacity factor is determined on a 12-month rolling average basis with a new capacity factor calculated at the end of each calendar month.

022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

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

The permittee shall maintain the following records:

(a) a copy of each notification and report submitted to comply with the Area Source Boiler MACT (6J) and all documentation supporting any Initial Notification and Notification of Compliance Status that you submitted.

(b) conformance with the work practices and management practices required by 40 CFR § 63.11214 and as specified in (b)(1) and (b)(2) below:

(1) records must identify the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; and

(2) records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.

(c) the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment;

(d) actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(e) the information identified below for each required inspection or monitoring:

(1) the date, place, and time of the monitoring event;

(2) person conducting the monitoring;

(3) technique or method used;

(4) operating conditions during the activity;

(5) results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation; and

(6) maintenance or corrective action taken (if applicable).

023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

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

Your records must be in a form suitable and readily available for expeditious review. These records shall be kept onsite for at least two (2) years after the date of each recorded action. The records may be kept off site for the remaining three (3) years.

**SECTION D. Source Level Requirements****# 024 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]****SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

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

By March 1 of the year after the tuneup has been completed, the permittee must prepare, and submit to the Department and the US EPA upon request, a compliance certification report for the previous calendar year containing the information below:

(a) company name and address.
 (b) statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements 40 CFR 63, Subpart JJJJJJ. Your notification must include the following certification(s) of compliance and be signed by a responsible official:

(1) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."

(2) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."

(c) Unless requested by the Department, the permittee is not required to submit this report, but shall retain the record for a minimum of five (5) years.

(d) The permittee must submit the report by March 15 if the source experiences any deviations from the applicable requirements during the reporting period. The report shall include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

V. REPORTING REQUIREMENTS.**# 025 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]****Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.**

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

The permittee shall submit excessive emission reports to the Department and the EPA Administrator for any excess emissions which occurred during a six-month period. These reports are to be postmarked by the thirtieth (30) day following the end of each six-month period.

If there are no excess emissions during the six-month period, the permittee shall submit a report stating that no excess emissions occurred during the six-month period.

026 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.**

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

The permittee shall submit both the NOx summary emission report form and the excess emission report, described in 40 CFR § 60.7(c), to the Department and the EPA Administrator to demonstrate compliance with the NOx emission limit for this boiler if one, or both, of the following conditions are true:

- (a) The total duration of excess emissions are 1% or greater of the total operating time.
- (b) The total CEMS downtime is 5% or greater of the total operating time.

These reports are to be postmarked by the 30th day following the end of each 6-month period.

(c) The reports shall include the following:

- (1) Calendar date.

**SECTION D. Source Level Requirements**

- (2) The average hourly NO_x emission rate, expressed in lb/MMBtu heat input (measured or predicted).
 - (3) Identification of the days when the average rate exceeded the allowable rate, along with the reason for the occurrence and the corrective action taken.
 - (4) Identification for the days when data was not taken, the reason for such occurrences and the corrective action taken.
 - (5) Identification of the times when the emission data have been excluded from the calculation of the average emission rates and the reason for excluding the data.
 - (6) Identification of the "F" factor used, the method of determination, and the fuel type combusted.
 - (7) Identification of the times when the pollutant concentration exceeded the full span of the CEMs.
 - (8) Description of any modification to the continuous monitoring system that could affect its ability to comply with Performance Specification 2, as found in 40 CFR 60, Appendix B.
 - (9) The results of the quarterly accuracy assessments.
- (d) The following information will not be reported, but shall be maintained on site for review:
- (1) The 30-day average NO_x emission rates.
 - (2) The results of the daily CEM drift tests and calibration tests.

027 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

- (a) The permittee shall submit quarterly reports of continuous emission monitoring to the Department in accordance with the requirements established in 25 Pa. Code, Chapter 139, Subchapter C, the reporting requirements in the latest version of the Department's Continuous Source Monitoring Manual, as applicable, and the reporting requirements established in 40 CFR 60, Subpart Db.
- (b) The report is due within thirty (30) days after the end of each calendar quarter and shall cover all periods of operation, including startup, shutdown, and malfunction.
- (c) Failure to submit the required CEM reports within the time period specified in this condition shall constitute violations of this permit, unless approved in advance by the Department in writing.

028 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.**

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

Bi-annual reports shall be submitted to the EPA Administrator and the Department certifying that only very low sulfur oil (less than or equal to 0.5%, by weight), was combusted in this boiler in the preceding six-month period.

029 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11214]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?**

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

The permittee shall conduct a tune-up of the boiler biennially, which shall include the following:

- (a) inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shut down, but you must inspect each burner at least once every 36 months);
- (b) inspect the flame pattern and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (c) inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly;
- (d) optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
- (e) measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as

**SECTION D. Source Level Requirements**

it is the same basis before and after the adjustments are made);

(f) maintain onsite and submit, if requested by the Administrator, biennial report containing the following information.

- (1) the concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler;
- (2) a description of any corrective actions taken as a part of the tune-up of the boiler; and
- (3) the type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.

(g) if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

VI. WORK PRACTICE REQUIREMENTS.**# 030 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

NOx and opacity emissions monitoring and recording is required on a one (1) minute basis. Fuel type and firing rate are required to be monitored and recorded on an hourly basis.

031 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) The permittee shall use a source specific factor determined by stack testing, for use in demonstrating compliance with the particulate matter emissions for this boiler.

(b) The permittee shall use a source specific factor determined by stack testing, with the fuel throughput for use in demonstrating compliance with the 12 month emission limits for this boiler. The NOx emission factor is determined by the NOx CEMs.

(c) For use in demonstrating compliance with the lbs/hr emission limits, the permittee shall maintain on file, stack test results of the hourly emission rates.

(d) The calculations and/or stack test results shall be made available to the Department upon request.

032 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.44b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Standard for nitrogen oxides.**

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

Compliance with the Nitrogen Oxides (expressed as NO₂) emission limit shall be determined on a 30-day rolling average basis.

033 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.46b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.**

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

During periods when performance tests are not requested, NOx emissions data collected pursuant to 40 CFR §§ 60.48b(g)(1) or (g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NOx emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NOx emission data for the preceding 30 steam generating unit operating days.

034 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Emission monitoring for particulate matter and nitrogen oxides.**

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

The continuous monitoring systems shall be operated and data recorded during all periods of operation of this boiler except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span

**SECTION D. Source Level Requirements**

adjustments.

**# 035 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48b]
Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Emission monitoring for particulate matter and nitrogen oxides.**

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

The 1-hour average NO_x emission rates measured by the continuous NO_x monitor shall be expressed in lb/MMBtu heat input and shall be used to calculate the average emission rates. The 1-hour averages shall be calculated using the data points required under 40 CFR § 60.13(h). At least four (4) data points must be used to calculate each 1-hour average.

**# 036 [25 Pa. Code §127.441]
Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.112(d) and 129.115(f).]

The permittee shall operate and maintain this boiler and air pollution control devices in accordance with good operating and maintenance practices. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

**# 037 [25 Pa. Code §127.441]
Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code, Chapter 139.]

The CEM system and components, as previously approved by the Department, must be operated and maintained in accordance with the quality assurance, recordkeeping and reporting requirements established in 25 Pa. Code Chapter 139, Subchapter C, and the QA requirements in the latest revision of the Department's Continuous Source Monitoring Manual, as applicable.

**# 038 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11223]
SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
How do I demonstrate continuous compliance with the work practice and management practice standards?**

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

The permittee shall conduct a biennial performance tune-up and retain records of the tune-up.

Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.

VII. ADDITIONAL REQUIREMENTS.

**# 039 [25 Pa. Code §127.441]
Operating permit terms and conditions.**

(a) The permittee shall perform the emission monitoring analysis procedures or test methods required under an applicable requirement including procedures and methods under Sections 11(a)(3) (42 USCA §§ 7414 (a)(3) or 504(b) (42 USCA §§ 7661(c)(b)) of the Clean Air Act.

(b) Unless otherwise required by this permit, the permittee shall comply with applicable monitoring, QA, recordkeeping, and reporting requirements of the Air Pollution Control Act, 25 Pa. Code, subpart C, Article III, including Chapter 139. The permittee shall also comply with the applicable requirements related to monitoring, QA, recordkeeping and reporting requirements of 40 CFR 60, Subpart Db, including §§ 114(a)(3) and 504(b) and regulations adopted there under, unless otherwise required by this permit.

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

**SECTION D. Source Level Requirements**

Source ID: 042

Source Name: ABCO BOILER 8

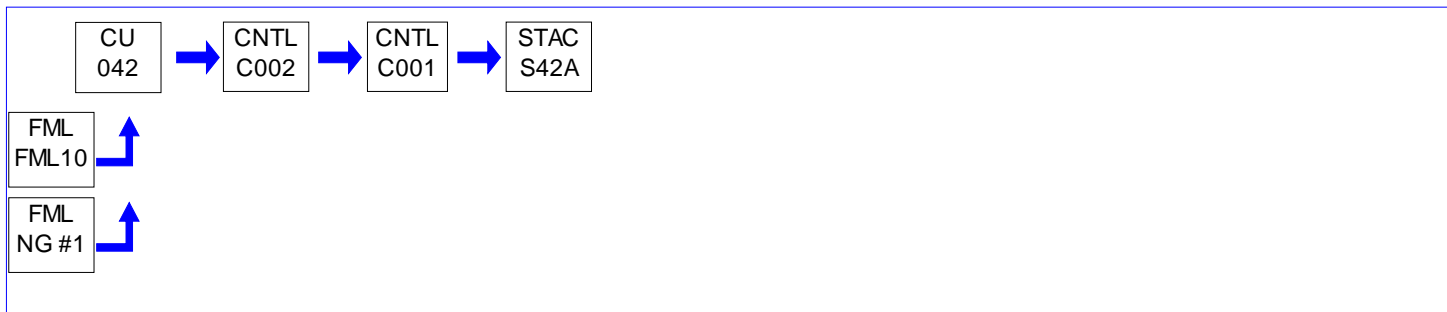
Source Capacity/Throughput: 249.000 MMBTU/HR

1,804.000 Gal/HR

#2 Oil

241.750 MCF/HR

Natural Gas

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

[Additional authority with the short-term limits in (a), below, is derived from 40 CFR § 60.44b(a) and 25 Pa. Code §§ 129.112(g)(1)(i-ii) and 129.115(b)(4).]

The following emission limits apply at all times:

- (a) NO_x - 0.012 lbs/MMBtu on a daily average when firing natural gas, 0.1 lbs/MMBtu on a daily average when firing No. 2 fuel oil, and 32.9 tons in any 12 consecutive month period;
- (b) VOC - 0.01 lbs/MMBtu on a daily average when firing natural gas, 0.011 lbs/MMBtu on a daily average when firing No. 2 fuel oil, and 3.1 tons in any 12 consecutive month period;
- (c) CO - 0.37 lbs/MMBtu on a daily average when firing natural gas, 0.38 lbs/MMBtu on a daily average when firing No. 2 fuel oil, and 55.4 tons in any 12 consecutive month period;
- (d) PM - 0.01 lbs/MMBtu on a daily average when firing natural gas, 0.06 lbs/MMBtu on a daily average when firing No. 2 fuel oil, and 10.6 tons in any 12 consecutive month period;
- (e) PM₁₀ - 0.01 lbs/MMBtu on a daily average when firing natural gas, 0.06 lbs/MMBtu on a daily average when firing No. 2 fuel oil, and 10.6 tons in any 12 consecutive month period; and
- (f) SO₂ - 16.9 tons in any 12 consecutive month period.

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

The permittee shall comply with the visible emission provisions contained in 40 CFR § 60.43b(f) or 25 Pa. Code § 123.41, whichever is more stringent.

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

Ammonia slip from the SCR system shall not exceed 10 ppm.

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

- (a) The permittee shall combust only natural gas or No. 2 fuel oil in this source.
- (b) The sulfur content of the No. 2 fuel oil combusted in this boiler shall not, at any time, exceed 0.0015%, by weight. Additionally, the No. 2 fuel oil shall not, at any time, contain reclaimed or waste oil or other waste materials.

[Compliance with this permit condition assures compliance with 25 Pa. Code § 123.22(e)(2) and 40 CFR §§ 60.42b(j) and 45b.]

**SECTION D. Source Level Requirements****Throughput Restriction(s).****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The amount of No. 2 fuel oil combusted in this source shall not exceed 3,250,000 gallons in any 12 consecutive month period.

Control Device Efficiency Restriction(s).**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

NOx emissions from this boiler shall be controlled by the use of low NOx burners and a selective catalytic reduction system.

II. TESTING REQUIREMENTS.**# 007 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable tests for the analysis of commercial fuel oil to demonstrate compliance with the sulfur limitation for this boiler:

- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).
- (2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).
- (3) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The testing requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained each time a fuel oil delivery is made to demonstrate compliance with the sulfur limitation for this boiler.

(c) In lieu of fuel oil analysis or fuel oil receipts with each delivery, the permittee shall receive annually from the fuel oil supplier, a certification that all of the fuel oil delivered to the facility indicates that the sulfur content is not in excess of 0.05%, by weight, except as specified in 25 Pa. Code § 123.22(e)(2)(ii) and (iii).

(d) If the permittee changes fuel oil supplier during the course of the calendar year, the above certifications shall be required from each new fuel oil supplier.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(b)(4).]

(a) The permittee shall operate and maintain Department certified continuous monitors for NOx, O2, and opacity for this source.

(b) The above certified continuous monitoring systems shall be operated and maintained in accordance with the requirements of Chapter 139 of the Rules and Regulations of the Department, to determine compliance with the applicable emission limits and shall meet the following data availability standards for NOx, opacity and oxygen:

- (1) at least 90% of the hours in each calendar month shall be valid hours as set forth the quality assurance section of the Department's Continuous Source Monitoring Manual; or,
- (2) at least 95% of the hours in each calendar quarter shall be valid hours as set forth in the quality assurance section of the Department's Continuous Source Monitoring Manual.

(d) Additionally, a continuous monitor shall be operated and maintained for temperature.

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

Continuous monitoring shall be conducted at the following locations for:

- (a) Temperature - monitored prior to the inlet of the SCR system;
- (b) Oxygen - monitored downstream of the air pollution control equipment;
- (c) NOx - monitored downstream of the air pollution control equipment; and
- (d) Opacity - monitored downstream of the air pollution control equipment.

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

The amount of reagent injected to the SCR unit shall be continuously monitored.

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

Fuel oil usage for this boiler shall be monitored by a fuel meter or equivalent.

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

The amount of No. 2 fuel oil combusted in this source shall be recorded on a daily basis and on a 12 consecutive month basis.

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

The permittee shall comply with the recordkeeping requirements established in 25 Pa. Code, Chapter 139, Subchapter C, the recordkeeping requirements in the latest version of the Department's Continuous Source Monitoring Manual, and the recordkeeping requirements established in 40 CFR Part 60, Subpart Db.

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

Sufficient data shall be recorded, so that compliance with the conditions with this source can be determined. At a minimum, the following shall be retained for a minimum of five (5) years:

- (a) all air pollution control system performance evaluations and records of calibration checks, adjustments, and maintenance performed on all equipment for this source;
- (b) manufacturer's specifications for this source shall be kept on-site;
- (c) manufacturer's specifications for all CEMS for this source;
- (d) all stack test results;
- (e) monthly and 12 consecutive month records of the fuel usage data;
- (f) malfunction information, including the date, time, cause, and corrective action taken;
- (g) monthly and 12 consecutive month calculations of emissions from this source using the most recent stack test data or other more relevant data; and,
- (h) preventative maintenance performed on this source, as well as a record of its preventative maintenance schedule.

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

The permittee shall comply with the SOx standards by maintaining fuel receipts from the fuel supplier in accordance with 40 CFR Sections 60.42b(j), 60.45b(j), and 60.49b(r).

**SECTION D. Source Level Requirements**

016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]
Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Reporting and recordkeeping requirements.

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

The permittee shall record the following information for each steam generating unit operating day to demonstrate compliance with the NOx emission limit for this boiler:

- (a) calendar date;
- (b) the average hourly NOx emission rate, (lbs/MMBtu heat input) measured or predicted;
- (c) the 30-day average NOx emission rates (lb/MMBtu heat input) shall be calculated at the end of each steam generating unit operating day from the measured or predicted hourly NOx emission rates, for the preceeding thirty (30) steam generating unit operating days;
- (d) identification of the steam generating unit operating days when the 30-day calculated average NOx emission rate is in excess of the NOx emission rate of 0.2 lbs/MMBtu, the reason for such occurrences and the corrective action taken;
- (e) identification for the days when data was not taken, the reason for such occurrences and the corrective action taken;
- (f) identification of the times when the emission data have been excluded from the calculation of the average emission rates and the reason for excluding the data;
- (g) identification of the "F" factor used, the method of determination, and the fuel type combusted;
- (h) identification of the times when the pollutant concentration exceeded the full span of the CEMs;
- (i) description of any modification to the continuous monitoring system that could affect its ability to comply with Performance Specification 2, as found in 40 CFR 60, Appendix B; and
- (j) the results of the daily CEM drift tests, CEM calibration test, and the quarterly accuracy assessments.

017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]
SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
What are my notification, reporting, and recordkeeping requirements?

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

The permittee shall maintain the following records:

- (a) a copy of each notification and report submitted to comply with the Area Source Boiler MACT (6J) and all documentation supporting any Initial Notification and Notification of Compliance Status that you submitted.
- (b) conformance with the work practices and management practices required by 40 CFR § 63.11214 and as specified in (b)(1) and (b)(2) below:
 - (1) records must identify the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; and
 - (2) records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.
- (c) the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment;
- (d) actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
- (e) the information identified below for each required inspection or monitoring:
 - (1) the date, place, and time of the monitoring event;
 - (2) person conducting the monitoring;
 - (3) technique or method used;
 - (4) operating conditions during the activity;
 - (5) results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation; and
 - (6) maintenance or corrective action taken (if applicable).

**SECTION D. Source Level Requirements****# 018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]****SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

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

Your records must be in a form suitable and readily available for expeditious review. These records shall be kept onsite for at least two (2) years after the date of each recorded action. The records may be kept off site for the remaining three (3) years.

019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

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

By March 1 of the year after the tuneup has been completed, the permittee must prepare, and submit to the Department and the US EPA upon request, a compliance certification report for the previous calendar year containing the information below:

(a) company name and address.

(b) statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements 40 CFR 63, Subpart JJJJJJ. Your notification must include the following certification(s) of compliance and be signed by a responsible official:

(1) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."

(2) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."

(c) Unless requested by the Department, the permittee is not required to submit this report, but shall retain the record for a minimum of five (5) years.

(d) The permittee must submit the report by March 15 if the source experiences any deviations from the applicable requirements during the reporting period. The report shall include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

V. REPORTING REQUIREMENTS.**# 020 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall submit quarterly reports of continuous emission monitoring to the Department in accordance with the requirements established in 25 Pa. Code, Chapter 139, Subchapter C, the reporting requirements in the latest version of the Department's Continuous Source Monitoring Manual, as applicable, and the reporting requirements established in 40 CFR 60, Subpart Db.

(b) The report is due within thirty (30) days after the end of each calendar quarter and shall cover all periods of operation, including startup, shutdown, and malfunction.

(c) Failure to submit the required CEM reports within the time period specified in this condition shall constitute violations of this permit, unless approved in advance by the Department in writing.

021 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall, upon Department request, provide fuel analyses, or fuel samples, of the fuel used in this source.

022 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Reporting and recordkeeping requirements.**

**SECTION D. Source Level Requirements**

The permittee who elects to combust only very low sulfur oil as defined under 40 CFR § 60.42b(j)(2) shall obtain and maintain on-site fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil as defined in 40 CFR § 60.41b. Semiannual reports shall be submitted to the Administrator and the Department certifying that only very low sulfur oil was combusted in this source during the preceding 6-month period.

023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11214]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?**

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

The permittee shall conduct a tune-up of the boiler biennially, which shall include the following:

- (a) inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shut down, but you must inspect each burner at least once every 36 months);
- (b) inspect the flame pattern and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (c) inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly;
- (d) optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
- (e) measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made);
- (f) maintain onsite and submit, if requested by the Administrator, biennial report containing the following information.
 - (1) the concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler;
 - (2) a description of any corrective actions taken as a part of the tune-up of the boiler; and
 - (3) the type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.
- (g) if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

VI. WORK PRACTICE REQUIREMENTS.**# 024 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The following standards for the selective catalytic reduction units (SCR) shall be adhered to:

- (a) a magnehelic gauge, or equivalent, shall be used to monitor the pressure drop across the catalyst bed;
- (b) a CEM shall be used to monitor the temperature of the exhaust into the SCR catalyst chamber;
- (c) equipment (a rotameter or equivalent, as approved by the Department) shall be provided so that the flow rate of reagent to the SCR can be measured;
- (d) the SCR system shall be operated and maintained in accordance with manufacturer's specifications and good air pollution control practices; and
- (e) the minimum inlet temperature prior to turning on the ammonium hydroxide feed to the SCR system shall:
 - (1) 392°F, while combusting natural gas; and,
 - (2) 574°F, while combusting No. 2 fuel oil.

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

This source is considered to be in start-up mode or shutting down mode when the following conditions occur only during

**SECTION D. Source Level Requirements**

start-up from a non-operating mode or shut-down from an operating mode:

- (a) the boiler operating pressure is less than 100 psig; or
- (b) the temperature of the exhaust from the boiler to the SCR is less than the minimum temperature required for the SCR to operate; or
- (c) the boiler's steam flow rate is less than 20,000 lbs/hr when combusting natural gas, and 40,000 lbs/hr when combusting No. 2 fuel oil.

026 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code, Chapter 139.]

The CEM system and components, as previously approved by the Department, must be operated and maintained in accordance with the quality assurance, recordkeeping and reporting requirements established in 25 Pa. Code Chapter 139, Subchapter C, and the QA requirements in the latest version of the Department's Continuous Source Monitoring Manual.

027 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.112(d) and 129.115(f).]

(a) The permittee shall operate and maintain this boiler and air pollution control devices in accordance with good operating and maintenance practices. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

(b) This source shall be properly maintained in accordance with the company's preventative maintenance program.

028 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For the purpose of determining compliance with the conditions for this source, the oxygen content as monitored downstream of the air pollution control equipment shall be used wherever the oxygen content is required to be adjusted.

029 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11223]

SUBPART JJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

How do I demonstrate continuous compliance with the work practice and management practice standards?

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

The permittee shall conduct a biennial performance tune-up and retain records of the tune-up.

Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.

VII. ADDITIONAL REQUIREMENTS.

030 [25 Pa. Code §127.411]

Content of applications.

This source consists of a Type D, water-tube boiler, manufactured by ABCO with a rated heat input capacity of 249 MMBtu/hr.

031 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall perform the emission monitoring analysis procedures or test methods required under an applicable requirement including procedures and methods under Sections 11(a)(3) (42 USCA §§ 7414 (a)(3) or 504(b) (42 USCA §§ 7661(c)(b)) of the Clean Air Act.

(b) Unless otherwise required by this permit, the permittee shall comply with applicable monitoring, QA, recordkeeping, and reporting requirements of the Air Pollution Control Act, 25 Pa. Code, subpart C, Article III, including Chapter 139. The permittee shall also comply with the applicable requirements related to monitoring, QA, recordkeeping and reporting requirements of 40 CFR 60, Subpart Db, including §§ 114(a)(3) and 504(b) and regulations adopted there under, unless

**SECTION D. Source Level Requirements**

otherwise required by this permit.

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

**SECTION D. Source Level Requirements**

Source ID: 045

Source Name: BOILER 10

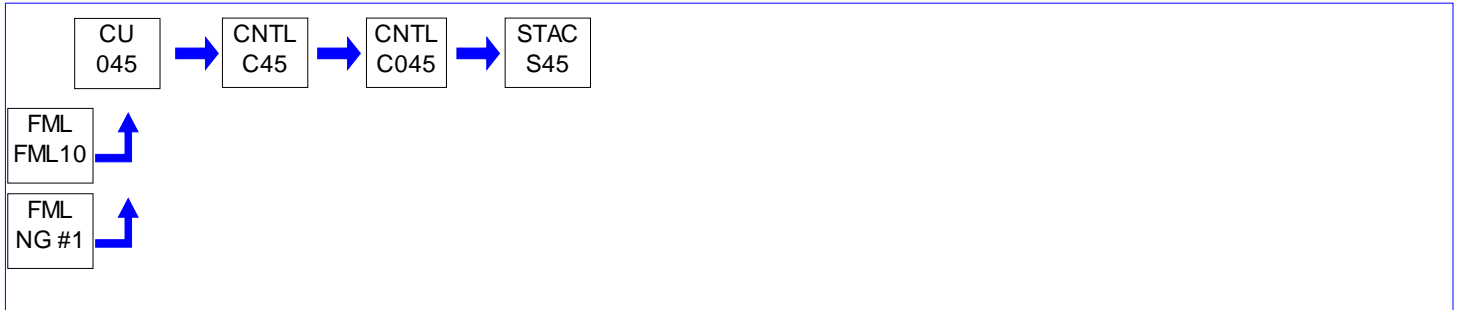
Source Capacity/Throughput: 249.000 MMBTU/HR

241.750 MCF/HR

Natural Gas

1,804.000 Gal/HR

#2 Oil

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

Ammonia slip from the SCR system shall not exceed 10 ppm.

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

The following emission limits apply at all times, except during start-up and shutdown when the short-term emission limitations do not apply. Emissions from the start-up and shutdown shall be included in the 12 consecutive month totals:

(a) CO - 0.37 lbs/MMBtu on a daily average when firing natural gas, 0.38 lbs/MMBtu on a daily average when firing #2 fuel oil, and 55.4 tons in any 12 consecutive month period;

(b) NO_x - 0.012 lbs/MMBtu on a daily average when firing natural gas, 0.10 lbs/MMBtu on a daily average when firing #2 fuel oil, and 32.9 tons in any 12 consecutive month period;

(c) PM-10 - 0.01 lbs/MMBtu on a daily average when firing natural gas, 0.06 lbs/MMBtu on a daily average when firing #2 fuel oil, and 10.6 tons in any 12-consecutive month period;

(d) SO_x - 16.9 tons in any 12 consecutive month period;

(e) VOC - 0.01 lbs/MMBtu on a daily average when firing natural gas, 0.011 lbs/MMBtu on a daily average when firing #2 fuel oil, and 3.1 tons in any 12 consecutive month period; and,

(f) PM (Total Suspended Particulates) - 0.01 lbs/MMBtu on a daily average when firing natural gas, 0.06 lbs/MMBtu on a daily average when firing #2 fuel oil, and 10.6 tons in any 12-consecutive month period.

[Compliance with (b), above, ensures compliance with 40 CFR § 60.44b(a).]

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.112(g)(1)(i-ii) and 129.115(b)(4).]

(a) The operation of this boiler shall not result in emissions of Nitrogen Oxides (NO_x) in excess of the following:

- (1) 0.10 lb/MMBtu heat input when firing on natural gas; and
- (2) 0.12 lb/MMBtu heat input when firing on fuel oil.

(b) The above emissions shall be calculated and recorded using a daily average.

**SECTION D. Source Level Requirements****# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]
Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Reporting and recordkeeping requirements.**

This source shall comply with the provisions of 40 CFR § 60.43b(f) or 25 Pa. Code § 123.41, whichever is more stringent.

Fuel Restriction(s).**# 005 [25 Pa. Code §127.441]
Operating permit terms and conditions.**

- (a) The permittee shall combust only natural gas or No. 2 fuel oil in this source.
- (b) The permittee shall limit the amount of No. 2 fuel oil combusted in this source to 3,250,000 gallons or less, in any 12 consecutive month period.
- (c) The sulfur content of the No. 2 fuel oil combusted in this source shall not, at any time, exceed 0.0015%, by weight. Additionally, the No. 2 fuel oil shall not, at any time, contain reclaimed, waste oil, or other waste materials.

[Compliance with the sulfur content, above, ensures compliance with 25 Pa. Code § 123.22(e)(2) and 40 CFR § 60.42b(k)(1).]

Control Device Efficiency Restriction(s).**# 006 [25 Pa. Code §127.441]
Operating permit terms and conditions.**

- (a) NO_x emissions from this source shall be controlled by the use of low NO_x burners and selective catalytic reduction (SCR) system.
- (b) CO emissions from this source shall be controlled by a steam injection system only when firing natural gas.

II. TESTING REQUIREMENTS.**# 007 [25 Pa. Code §139.16]
Sulfur in fuel oil.**

- (a) The following are applicable tests for the analysis of commercial fuel oil to demonstrate compliance with the sulfur limitation for this boiler:
 - (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).
 - (2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).
 - (3) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).
- (b) The testing requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained each time a fuel oil delivery is made to demonstrate compliance with the sulfur limitation for this boiler.
- (c) In lieu of fuel oil analysis or fuel oil receipts with each delivery, the permittee shall receive annually from the fuel oil supplier, a certification that all of the fuel oil delivered to the facility indicates the sulfur content is not in excess of 0.05%, by weight, except as specified in 25 Pa. Code § 123.22(e)(2)(ii) and (iii).
- (d) If the permittee changes fuel oil supplier during the course of the calendar year, the above certifications shall be required from each new fuel oil supplier.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(b)(4).]

**SECTION D. Source Level Requirements**

- (a) The permittee shall install a fuel meter, or equivalent on the fuel oil supply line.
- (b) The permittee shall operate and maintain certified continuous emission monitors for nitrogen oxides, oxygen, and opacity on this source. The permittee shall also install, operate and maintain a continuous monitor for temperature.
- (c) The continuous emission monitoring system for the parameters above must be approved by the Department. The permittee shall adhere to the monitoring requirements of 25 Pa. Code, Chapter 139 to demonstrate compliance with the NO_x, oxygen, and opacity restrictions. The Department's Continuous Source Monitoring Manual shall be used as a reference.
- (d) The continuous emission monitoring system shall be maintained and operated to achieve the following data availability requirements for NO_x, Opacity, and Oxygen:
- (1) at least 90% of the hours in each calendar month shall be valid hours as set forth the quality assurance section of the Department's Continuous Source Monitoring Manual; or
 - (2) at least 95% of the hours in each calendar quarter shall be valid hours as set forth in the quality assurance section of the Department's Continuous Source Monitoring Manual.
- (e) Continuous monitoring shall be conducted at the locations approved by the Department for the following:
- (1) temperature shall be monitored prior to the inlet of the SCR system;
 - (2) oxygen shall be monitored downstream of the air pollution control equipment;
 - (3) nitrogen oxides shall be monitored downstream of the air pollution control equipment; and
 - (4) opacity shall be monitored downstream of the air pollution control equipment.
- (f) The continuous monitors shall be operated in such a manner as to determine compliance with the applicable limits for this source.
- (g) For the purpose of determining compliance with the emission limits, the oxygen content, as monitored downstream of the air pollution control equipment, shall be used wherever the oxygen content is required to be adjusted.
- (h) The permittee shall continuously monitor the amount of reagent being injected for the SCR units.

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

- (a) Regarding the Boiler No. 10 Hypermix ring, the permittee shall record the Hypermix FCV position data and the correlating boiler load electronically on a continuous basis, with a minimum data availability of 95% during normal operation (i.e. everything except boiler tuning and maintenance activities) on a quarterly basis.
- (b) At the end of each calendar quarter, the permittee shall generate a data availability report within two weeks to demonstrate compliance with the 95 percent data availability requirement.
- (c) The Hypermix FCV position data and the correlating boiler load shall be maintained for five years and made available to DEP upon request.

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

- (a) Sufficient data shall be recorded, so that compliance with the conditions with this source can be determined.
- (b) The following shall be maintained on-site for a minimum of five (5) years:
- (1) air pollution control system performance evaluations and records of calibration checks, adjustments, and maintenance performed on this boiler and its control devices;
 - (2) a copy of the manufacturer's specifications for the boiler on-site;
 - (3) a copy of the manufacturer's specifications for all required CEMs;

**SECTION D. Source Level Requirements**

- (4) a copy of all the required stack tests;
- (5) daily and 12 consecutive month records of the fuel monitoring data;
- (6) date(s), time, and cause of any malfunction and the action taken to correct the malfunction;
- (7) monthly and 12 consecutive month records of the emissions from this source; and
- (8) a record of the preventive maintenance schedule, as well as the actual preventive maintenance performed.

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

The permittee shall comply with the recordkeeping requirements established in 25 Pa. Code, Chapter 139, Subchapter C, the recordkeeping requirements in the latest version of the Department's Continuous Source Monitoring Manual, as applicable, and the recordkeeping requirements established in 40 CFR 60, Subpart Db.

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

The permittee shall comply with the SOx standards by maintaining fuel receipts from the fuel supplier in accordance with 40 CFR Sections 60.42b(j), 60.45b(j), and 60.49b(r).

013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.**

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

The permittee shall record the following information for each steam generating unit operating day to demonstrate compliance with the NOx emission limit for this boiler:

- (a) calendar date;
- (b) the average hourly NOx emission rate, (lbs/MMBtu heat input) measured or predicted;
- (c) the 30-day average NOx emission rates (lb/MMBtu heat input) shall be calculated at the end of each steam generating unit operating day from the measured or predicted hourly NOx emission rates, for the preceeding thirty (30) steam generating unit operating days;
- (d) identification of the steam generating unit operating days when the 30-day calculated average NOx emission rate is in excess of the NOx emission rate of 0.2 lbs/MMBtu, the reason for such occurrences and the corrective action taken;
- (e) identification for the days when data was not taken, the reason for such occurrences and the corrective action taken;
- (f) identification of the times when the emission data have been excluded from the calculation of the average emission rates and the reason for excluding the data;
- (g) identification of the "F" factor used, the method of determination, and the fuel type combusted;
- (h) identification of the times when the pollutant concentration exceeded the full span of the CEMs;
- (i) description of any modification to the continuous monitoring system that could affect its ability to comply with Performance Specification 2, as found in 40 CFR 60, Appendix B; and
- (j) the results of the daily CEM drift tests, CEM calibration test, and the quarterly accuracy assessments.

014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.**

The company shall keep all records that are required under 40 C.F.R. Part 60, Subpart Db.

015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

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

The permittee shall maintain the following records:

- (a) a copy of each notification and report submitted to comply with the Area Source Boiler MACT (6J) and all documentation supporting any Initial Notification and Notification of Compliance Status that you submitted.

**SECTION D. Source Level Requirements**

(b) conformance with the work practices and management practices required by 40 CFR § 63.11214 and as specified in (b)(1) and (b)(2) below:

- (1) records must identify the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; and
- (2) records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.

(c) the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment;

(d) actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(e) the information identified below for each required inspection or monitoring:

- (1) the date, place, and time of the monitoring event;
- (2) person conducting the monitoring;
- (3) technique or method used;
- (4) operating conditions during the activity;
- (5) results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation; and
- (6) maintenance or corrective action taken (if applicable).

016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

What are my notification, reporting, and recordkeeping requirements?

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

Your records must be in a form suitable and readily available for expeditious review. These records shall be kept onsite for at least two (2) years after the date of each recorded action. The records may be kept off site for the remaining three (3) years.

017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

What are my notification, reporting, and recordkeeping requirements?

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

By March 1 of the year after the tuneup has been completed, the permittee must prepare, and submit to the Department and the US EPA upon request, a compliance certification report for the previous calendar year containing the information below:

- (a) company name and address.
- (b) statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements 40 CFR 63, Subpart JJJJJJ. Your notification must include the following certification(s) of compliance and be signed by a responsible official:
 - (1) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."
 - (2) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."

(c) Unless requested by the Department, the permittee is not required to submit this report, but shall retain the record for a minimum of five (5) years.

(d) The permittee must submit the report by March 15 if the source experiences any deviations from the applicable requirements during the reporting period. The report shall include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

**SECTION D. Source Level Requirements****V. REPORTING REQUIREMENTS.****# 018 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall, upon Department request, provide fuel analyses or fuel samples of the fuel used in this boiler.

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

(a) The permittee shall submit quarterly reports of continuous emission monitoring to the Department in accordance with the requirements established in 25 Pa. Code, Chapter 139, Subchapter C, the reporting requirements in the latest version of the Department's Continuous Source Monitoring Manual, as applicable, and the reporting requirements established in 40 CFR 60, Subpart Db.

(b) The report is due within thirty (30) days after the end of each calendar quarter and shall cover all periods of operation, including startup, shutdown, and malfunction.

(c) Failure to submit the required CEM reports within the time period specified in this condition shall constitute violations of this permit, unless approved in advance by the Department in writing.

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

This source is subject to Subpart Db of the Standards of Performance for New Stationary Sources (NSPS). 40 CFR § 60.4 requires submission of copies of all requests, reports, applications, submittals, and other communications, except the PADEP CEMS quarterly reports, to both the EPA and the Department. The EPA copies shall be forwarded to:

Office of Air Enforcement and Compliance Assistance (3AP20)
Air Protection Division
US EPA, Region III
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2029

021 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units****Reporting and recordkeeping requirements.**

The permittee shall obtain and maintain on-site fuel receipts from the fuel supplier certifying that the oil meets the definition of distillate oil as defined in 40 CFR § 60.41b. Semi annual reports shall be submitted to the Administrator and the Department certifying that only very low sulfur oil was combusted in this source during the preceding 6-month period.

022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11214]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?**

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

The permittee shall conduct a tune-up of the boiler biennially, which shall include the following:

- (a) inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shut down, but you must inspect each burner at least once every 36 months);
- (b) inspect the flame pattern and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (c) inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly;
- (d) optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
- (e) measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as

**SECTION D. Source Level Requirements**

it is the same basis before and after the adjustments are made);

(f) maintain onsite and submit, if requested by the Administrator, biennial report containing the following information.

- (1) the concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler;
- (2) a description of any corrective actions taken as a part of the tune-up of the boiler; and
- (3) the type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.

(g) if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

VI. WORK PRACTICE REQUIREMENTS.**# 023 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code, Chapter 139]

The CEM system and components, as previously approved by the Department, must be operated and maintained in accordance with the quality assurance, recordkeeping and reporting requirements established in 25 Pa. Code Chapter 139, Subchapter C, and the QA requirements in the latest version of the Department's Continuous Source Monitoring Manual, as applicable.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.112(d) and 129.115(f).]

The permittee shall operate and maintain this boiler and air pollution control devices in accordance with good operating and maintenance practices. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

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

(a) The permittee shall properly maintain the boiler in accordance with the company's preventive maintenance program.

(b) This source is considered to be in start-up mode or shutting down mode when any of the following conditions occur only during start-up from a non-operating mode or shut-down from an operating mode:

- (1) the boiler operating pressure is less than 100 psig; or
- (2) the temperature of the exhaust from the boiler to the SCR system is less than the minimum temperature required for the SCR to operate; or
- (3) the boiler's steam flow rate is less than 20,000 pounds per hour when combusting natural gas and 40,000 pounds per hour when combusting No. 2 fuel oil.

(c) The following conditions apply to the operation of the selective catalytic reduction (SCR) unit:

(1) The company shall maintain a magnehelic gauge, or equivalent, to monitor the pressure drop across the catalytic bed;

(2) The company shall operate and maintain a continuous temperature monitor of the exhaust into the SCR catalytic chamber;

(3) Equipment (a rotameter or equivalent, as approved by the Department) shall be provided so that the flow rate of reagent to the SCR can be measured;

(4) The permittee shall operate and maintain the SCR system in accordance with the manufacturer's specifications and good air pollution control practices; and,

(5) The minimum inlet temperature prior to turning on the ammonium hydroxide feed to the SCR system shall be 540° F when combusting No. 2 fuel oil, and it shall be 392° F when combusting natural gas.

**SECTION D. Source Level Requirements**

(d) The permittee shall maintain a 'hypermix' ring in Boiler No. 10 to inject steam into the combustion chamber. The 'hypermix' ring shall be maintained in accordance with the manufacturer's specifications. The following conditions apply to the steam injection system:

- (1) The steam injection system shall be operated at all times when natural gas is being combusted in the boiler; and,
- (2) The permittee shall monitor the Hypermix Flow Control Valve (FCV) position when steam is being injected. The Hypermix FCV position shall be used to verify the operation of the Hypermix. The minimum Hypermix FCV position shall be maintained at or above 5% during normal operation (i.e. everything except boiler tuning and maintenance activities). The Hypermix FCV position shall be set at a position consistent with settings (boiler load versus hypermix FCV position) established during the most recent tuning for Boiler 10.

026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11223]**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****How do I demonstrate continuous compliance with the work practice and management practice standards?**

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

The permittee shall conduct a biennial performance tune-up and retain records of the tune-up.

Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.

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

(a) The permittee shall perform the emission monitoring analysis procedures or test methods required under an applicable requirement including procedures and methods under Sections 11(a)(3) (42 USCA §§ 7414 (a)(3) or 504(b) (42 USCA §§ 7661(c)(b)) of the Clean Air Act.

(b) Unless otherwise required by this permit, the permittee shall comply with applicable monitoring, QA, recordkeeping, and reporting requirements of the Air Pollution Control Act, 25 Pa. Code, subpart C, Article III, including Chapter 139. The permittee shall also comply with the applicable requirements related to monitoring, QA, recordkeeping and reporting requirements of 40 CFR 60, Subpart Db, including §§ 114(a)(3) and 504(b) and regulations adopted there under, unless otherwise required by this permit.

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

This source is a Type D water tube boiler, manufactured by Alstom, Model No. 38VP2180L/54, with a rated heat input capacity of 249 MMBtu/hr.

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

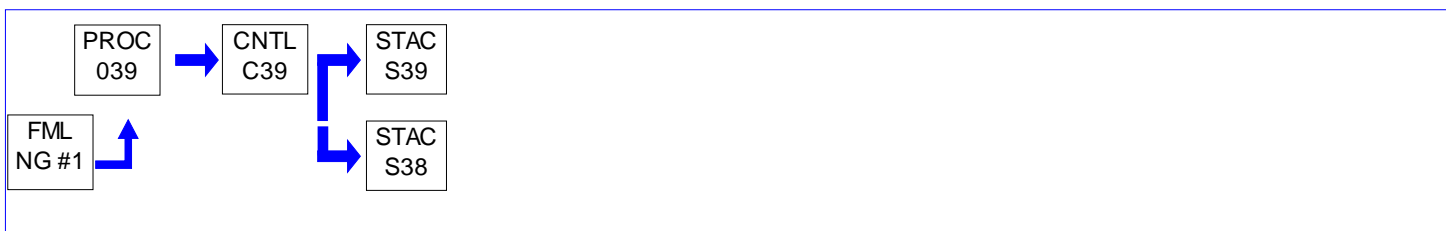
**SECTION D. Source Level Requirements**

Source ID: 039

Source Name: COGEN II GAS TURBINE

Source Capacity/Throughput: 366.000 MMBTU/HR

391.440 MCF/HR Natural Gas

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

Particulate matter emissions from this turbine shall not be in excess of 0.04 gr/dscf.

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

The emissions from this Gas Turbine shall not exceed any of the following limits in any 12 consecutive month period:

(a) Particulate Matter - 63.0 tons;

(b) NO_x - 128.23 tons;

(c) CO - 391.3 tons;

(d) SO_x - 23.5 tons;

(e) The VOC emissions from this source, aggregated with the VOC emission in Source ID's: 033, 035, 737, 745, 746, and 747 shall not exceed 12.3 tons;

(f) VOC - 1.97 tons; and

(g) PM_{2.5} - 17.35 tons.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.112(g)(2)(ii)(A).]

The operation of this gas turbine shall not result in NO_x emissions in excess of 25 ppm, on a daily average basis, corrected to 15% oxygen when combusting natural gas.

[Compliance with this streamlined permit condition assures compliance with 40 CFR § 60.332(d).]

004 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. § Code 145.74(b)(2).]

The permittee shall comply with requirements of 40 CFR § 75.62, except that the monitoring plan is only required to include the information required by 40 CFR 75, Subpart H.

005 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. § Code 145.74.]

**SECTION D. Source Level Requirements**

The NOx authorized account representative shall submit an application to the Department within forty-five (45) days after completing all initial certification or recertification tests required under 25 Pa. Code § 145.71 (relating to initial certification and recertification procedures) including the information required under 40 CFR 75, Subpart H.

**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.333]
Subpart GG - Standards of Performance for Stationary Gas Turbines
Standard for sulfur dioxide.**

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

SOx emissions shall not exceed 150 ppmv (corrected to 15% oxygen), on a dry basis.

[Compliance with this streamlined permit condition ensures compliance with 25 Pa. Code 123.21.]

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.112(g)(2)(ii)(B).]

VOC emissions from this source shall not exceed 5 ppmvd, as propane, at 15% oxygen.

Fuel Restriction(s).

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

Only natural gas shall be used in the operation of this turbine for use in demonstrating compliance with the particulate matter, NOx, SOx, and 12 consecutive month emission limits.

Operation Hours Restriction(s).

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

This unit shall not operate more than 7,700 hours in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

**# 010 [25 Pa. Code §129.115]
Written notification, compliance demonstration and recordkeeping and reporting requirements**

(a) The permittee shall conduct a Department-approved emissions source test for VOC emissions one time in each 5-year calendar period.

(b) For the purpose of this condition, a 5-year calendar period is defined as beginning with the calendar year the latest stack test is performed and ending on December 31, five years later.

III. MONITORING REQUIREMENTS.

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.334]
Subpart GG - Standards of Performance for Stationary Gas Turbines
Monitoring of operations.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.441 and 129.115(b)(1).]

(a) The continuous monitoring system shall monitor and record the fuel consumption and type, and the water to fuel ratio being fired in the turbine, or the NOx emissions from the Department approved CEMs, for use in demonstrating compliance with the NOx and 12-month emissions limits for this gas turbine.

(b) The permittee shall monitor the sulfur content and the nitrogen content of the natural gas being fired on the turbine on a monthly basis to assist in demonstrating compliance with the NOx emission limit for this gas turbine.

**SECTION D. Source Level Requirements**

(c) If the natural gas meets the definition of natural gas as found in 40 CFR § 60.331(u), the sulfur content of the natural gas does not need to be monitored. If the permittee does not claim an allowance for fuel bound nitrogen, nitrogen content of the fuel combusted in the turbine does not need to be monitored.

(d) This monitoring frequency shall be used in lieu of 40 CFR § 63.334(b)(2).

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the operating hours for this unit on a monthly, and a 12 consecutive month, basis.

IV. RECORDKEEPING REQUIREMENTS.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.335.]

(a) The permittee shall obtain and retain, on-site, from the pipeline natural gas supplier, on a monthly basis, a record of the percentage of sulfur (by weight) of the natural gas using the supplier analytical method, only if the natural gas does not meet the definition of natural gas as found in 40 CFR § 60.331(u). Nitrogen content is only required if the permittee claims an allowance for fuel bound nitrogen.

(b) This recordkeeping frequency shall be used in lieu of 40 CFR § 60.334(b)(2).

(c) This is required for use in demonstrating compliance with the NO_x emission limit for this gas turbine.

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall perform a one-time calculation by using the source specific factor of 0.00486 gr/dscf when firing on #2 fuel oil (or 0.00216 gr/dscf when firing on natural gas) as determined by stack testing, with a worst-case scenario (exhaust flow rate), for use in demonstrating compliance with the particulate matter emission limits for this gas turbine.

(b) The permittee shall perform a calculation by using a source specific emission factor determined by the most recent stack test, with fuel throughput for use in demonstrating compliance with the 12 consecutive month emission limits for NO_x and CO for this gas turbine. The NO_x factor shall be determined by NO_x CEMs and the CO factor shall be from the most recent stack test.

(c) The permittee shall perform a calculation by using a source specific emission factor determined by the most recent stack test with the fuel throughput for use in demonstrating compliance with the 12 consecutive month emission limits for PM, SO_x, and VOC for this gas turbine.

(d) Monthly and 12-consecutive month records of the PM, SO_x, and VOC emissions shall be retained on site.

(e) The above calculations shall be made available to the Department upon request.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record on a monthly basis, the emissions of nitrogen oxides and carbon monoxide for use in demonstrating compliance with the emission limits for NO_x (tons/12 months), and CO.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record the operating hours for this unit on a monthly, and a 12 consecutive month, basis.

**SECTION D. Source Level Requirements****V. REPORTING REQUIREMENTS.****# 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.334]****Subpart GG- Standards of Performance for Stationary Gas Turbines****Monitoring of operations.**

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

All requests, reports, applications, submittals, and other communication, except the PADEP CEMS quarterly reports, shall be forwarded to both the EPA and the Department. The EPA copies shall be forwarded to:

Office of Air Enforcement and Compliance Assistance (3AP20)
Air Protection Division
US EPA, Region III
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2029

018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.334]**Subpart GG- Standards of Performance for Stationary Gas Turbines****Monitoring of operations.**

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.441 and 129.115(f).]

The permittee shall submit excess emission reports semiannually to the EPA Administrator and the Department for this gas turbine. These reports are required whenever any 1-hour period during which the average actual water-to-fuel ratio (as measured by the continuous monitoring system) falls below required water-to-fuel ratio (as measured by the continuous monitoring system) limits, or the NO_x ppm value is greater than 150 ppm, or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test.

Each report shall include:

- (a) The average water-to-fuel ratio or NO_x CEM report,
- (b) The average fuel consumption,
- (c) Ambient conditions,
- (d) Gas turbine load,
- (e) Nitrogen content of the fuel during the periods of excess emissions,
- (f) The graphs or figures developed under the test methods and procedures of 40 CFR § 60.335(a).

Subpart (f), above will not be reported, but will be retained on-site for review.

This condition is required for use in demonstrating compliance with the NO_x emission limit for this gas turbine.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.112(c) and 129.115(f).]

The permittee shall operate and maintain this source and air pollution control device(s) in accordance with good operating and maintenance practices. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

VII. ADDITIONAL REQUIREMENTS.**# 020 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

The NO_x Budget limits shall adhere to the EPA's CSAPR program (a federally implemented program).

**SECTION D. Source Level Requirements****# 021 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. §§ Code 145.1 - 145.90.]

The emission limitations, monitoring and all other requirements of the NOx Budget Trading Program established in 25 Pa. Code §§ 145.1-145.90 are hereby incorporated by reference.

022 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. § Code 145.10.]

(a) Except as provided under 25 Pa. Code § 145.11 (relating to alternate NOx authorized account representative), each NOx budget source, including all NOx budget units at the source, shall have one, and only one, NOx authorized account representative, with regard to all matters under the NOx Budget Trading Program concerning the source or any NOx budget unit at the source.

(b) Each submission under the NOx Budget Trading Program shall be submitted, signed and certified by the NOx authorized account representative for each NOx budget source on behalf of which the submission is made.

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

[Additional authority for this permit condition is also derived from 25 Pa. § Code 145.6.]

The emissions measurements recorded and reported in accordance with 25 Pa. Code §§ 145.70-145.76 shall be used to determine compliance by the unit with the NOx budget emissions limitation under 25 Pa. Code § 145.6(c).

024 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. § Code 145.6.]

The permittee of each NOx budget source and each NOx budget unit at the source shall hold NOx allowances available for compliance deductions under 25 Pa. Code § 145.54 (relating to compliance), as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with 25 Pa. Code §§ 145.70-145.76 (relating to recordkeeping and reporting requirements) plus any amount necessary to account for actual heat input under 25 Pa. Code § 145.42(e) (relating to NOx allowance allocation) for the control period or to account for excess emissions for a prior control period under 25 Pa. Code § 145.54(d) or to account for withdrawal from the NOx budget trading program, or a change in regulatory status, of a NOx budget opt-in unit under 25 Pa. Code §§ 145.86 and 145.87 (relating to withdrawal from NOx Budget Trading Program; and opt-in source change in regulatory status).

025 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. § Code 145.6.]

The permittee of a NOx budget unit that has excess emissions in any control period shall surrender the NOx allowances required for deduction under 25 Pa. Code § 145.54(d)(1)(relating to compliance).

026 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. § Code 145.6.]

Unless otherwise provided, the permittee of the NOx budget source and each NOx budget unit at the source shall maintain at a central location and provided upon request by the Department or the NOx budget administrator all documents required under 25 Pa. Code § 145.6(d) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of the 5 years, in writing by the Department or the Administrator.

**SECTION D. Source Level Requirements****# 027 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. § Code 145.74.]

(a) The authorized account representative shall submit to the Department and to the NOx Budget Administrator a quarterly emissions report in accordance with the requirements of 25 Pa. Code § 145.74(d).

(b) The NOx authorized account representative shall submit to the Department and the NOx Budget Administrator a compliance certification in support of each quarterly report required under 25 Pa. Code § 145.74(d) based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the units emissions are correctly and fully monitored.

028 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. § Code 145.30.]

For each control period in which one or more NOx budget units at a source are subject to the NOx budget emissions limitation, the NOx authorized account representative of the source shall submit to the Department and the NOx Budget Administrator by November 30 of that year, a compliance certification report for the source covering all of the units.

029 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. § Code 145.90.]

NOx budget units may create, transfer and use emission reduction credits ("ERCs") in accordance with Chapter 127 and 25 Pa. Code § 145.90. ERCs may not be used to satisfy NOx allowance requirements.

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

**SECTION D. Source Level Requirements**

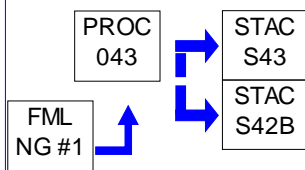
Source ID: 043

Source Name: COGEN III GAS TURBINE

Source Capacity/Throughput: 424.000 MMBTU/HR

333.000 MCF/HR

Natural Gas

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

Air contaminant emissions shall not exceed any of the following (where the ppmvd and lbs/MMBtu are calculated as daily averages):

- (a) NO_x - 9 ppmvd at 15% oxygen and 79.1 tons in any 12 consecutive month period;
- (b) VOC - 0.004 lbs/MMBtu, 5 ppmvd (as propane at 15% oxygen), and 9.6 tons in any 12 consecutive month period;
- (c) CO - 67 ppmvd at 15% oxygen and 160.7 tons in any 12 consecutive month period;
- (d) PM - 5 lbs/hr (hourly average) and 22.0 tons in any 12 consecutive month period;
- (e) PM₁₀ - 10 lbs/hr (hourly average) and 43.9 tons in any 12 consecutive month period; and
- (f) SO₂ - 0.006 lb/MMBtu and 14.4 tons in any 12 consecutive month period.

NO_x emissions shall be controlled by the use of dry low NO_x combustor technology.

[Compliance with (a), above assures compliance with 40 CFR § 60.332(a)(2) and 25 Pa.Code § 129.112(g)(2)(ii)(A).]

[Compliance with (b), above assures compliance with 25 Pa.Code § 129.112(g)(2)(ii)(B).]

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

During isochronous operations or during electrical distribution disturbances caused by the utility service, this turbine's emissions of NO_x shall be limited to 30 ppm, corrected to 15% oxygen, calculated as a 30-day average. The emissions due to the isochronous operations or electrical distribution disturbances shall be included in the 12 consecutive month emission total.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.333]**Subpart GG - Standards of Performance for Stationary Gas Turbines****Standard for sulfur dioxide.**

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

SO_x emissions shall not exceed 150 ppmv (corrected to 15% oxygen), on a dry basis.

[Compliance with this streamlined permit condition ensures compliance with 25 Pa. Code 123.21.]

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

This turbine shall only be operated on natural gas.

[Compliance with this fuel type assures compliance with 40 CFR 60.333(a) and (b).]

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.****# 005 [25 Pa. Code §129.115]****Written notification, compliance demonstration and recordkeeping and reporting requirements**

- (a) The permittee shall conduct a Department-approved emissions source test for VOC emissions one time in each 5-year calendar period to demonstrate compliance with the short-term VOC emission limits.
- (b) For the purpose of this condition, a 5-year calendar period is defined as beginning with the calendar year the latest stack test is performed and ending on December 31, five years later.

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

- (a) The permittee shall adhere to the monitoring requirements of 25 Pa. Code, Chapter 139 to demonstrate compliance with the NOx and oxygen restrictions. The latest version of the Department's Continuous Source Monitoring Manual shall be used. The data availability standards for NOx and oxygen shall be met to determined compliance with the applicable emission limits:
- (1) at least 90% of the hours in each calendar month shall be valid hours as set forth the quality assurance section of the Department's Continuous Source Monitoring Manual; or
 - (2) at least 95% of the hours in each calendar quarter shall be valid hours as set forth in the quality assurance section of the Department's Continuous Source Monitoring Manual.

(b) The permittee shall operate and maintain a continuous monitor for temperature for this source.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115.]

Department approved continuous monitoring shall be conducted at the following locations for:

- (a) Oxygen - monitored downstream of the air pollution control equipment; and
- (b) NOx - monitored downstream of the air pollution control equipment.

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.334]**Subpart GG - Standards of Performance for Stationary Gas Turbines****Monitoring of operations.**

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

The continuous monitoring system shall monitor and record the fuel consumption and the water to fuel ratio being fired in the turbine, or the NOx emissions from the Department approved CEMs, for use in demonstrating compliance with the NOx and 12-month emissions limits for this gas turbine.

The permittee shall monitor the sulfur content and the nitrogen content of the natural gas being fired in the turbine on a monthly basis to assist in demonstrating compliance with the NOx emission limit for this gas turbine.

If the natural gas meets the definition of natural gas as found in 40 CFR § 60.331(u), the sulfur content of the natural gas does not need to be monitored. If the permittee does not claim an allowance for fuel bound nitrogen, nitrogen content of the fuel combusted in the turbine does not need to be monitored.

This monitoring frequency shall be used in lieu of 40 CFR § 60.334(b)(2).

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

Sufficient data shall be recorded, so that compliance with the conditions with this source can be determined. At a minimum,

**SECTION D. Source Level Requirements**

the following shall be retained for a minimum of five (5) years:

- (a) all air pollution control system performance evaluations and records of calibration checks, adjustments, and maintenance performed on all equipment for this source;
- (b) manufacturer's specifications for this source shall be kept on-site;
- (c) manufacturer's specifications for all CEMS for this source;
- (d) all stack test results;
- (e) monthly and 12 consecutive month records of the fuel usage data;
- (f) malfunction information, including the date, time, cause, and corrective action taken;
- (g) monthly and 12 consecutive month calculations of emissions from this source using the most recent stack test data or other more relevant data; and
- (h) preventative maintenance performed on this source, as well as a record of its preventative maintenance schedule.

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

The permittee shall keep a record of all occurrences of isochronous operation or electrical disturbances. The record shall include the date and duration of the above.

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

The permittee shall comply with the recordkeeping requirements established in 25 Pa. Code, Chapter 139, Subchapter C, the recordkeeping requirements in the latest version of the Department's Continuous Source Monitoring Manual, and the recordkeeping requirements established in 40 CFR 60, Subpart GG.

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

The permittee shall submit quarterly reports of continuous emission monitoring to the Department in accordance with the requirements established in 25 Pa. Code, Chapter 139, Subchapter C, the reporting requirements in the latest version of the Department's Continuous Source Monitoring Manual, and the reporting requirements established in 40 CFR 60, Subpart GG.

The report is due within thirty (30) days after the end of each calendar quarter and shall cover all periods of operation, including startup, shutdown, and malfunction.

Failure to submit the required CEM reports within the time period specified in this condition shall constitute violations of this permit, unless approved in advance by the Department in writing.

013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.334]**Subpart GG - Standards of Performance for Stationary Gas Turbines****Monitoring of operations.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.441 and 129.115(f).]

The permittee shall submit excess emission reports semiannually to the EPA Administrator and the Department for this gas turbine. These reports are required whenever any 1-hour period during which the average actual water-to-fuel ratio (as measured by the continuous monitoring system) falls below required water-to-fuel ratio (as measured by the continuous monitoring system) limits, or the NO_x ppm value is greater than 150 ppm, or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test.

Each report shall include:

- (a) The average water-to-fuel ratio or NO_x CEM report,
- (b) The average fuel consumption,

**SECTION D. Source Level Requirements**

- (c) Ambient conditions,
- (d) Gas turbine load,
- (e) Nitrogen content of the fuel during the periods of excess emissions,
- (f) The graphs or figures developed under the test methods and procedures of 40 CFR § 60.335(a).

Subcondition (f), above, will not be reported, but will be retained on-site for review.

This condition is required for use in demonstrating compliance with the NOx emission limit for this gas turbine.

014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.334]**Subpart GG - Standards of Performance for Stationary Gas Turbines
Monitoring of operations.**

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

All requests, reports, applications, submittals, and other communication, except the PADEP CEMs quarterly reports, shall be forwarded to both the EPA and the Department. The EPA copies shall be forwarded to:

Office of Air Enforcement and Compliance Assistance (3AP20)
Air Protection Division
US EPA, Region III
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2029

VI. WORK PRACTICE REQUIREMENTS.**# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Start-up and shutdown of the combustion turbine is defined as the following (where each start-up and shutdown shall not exceed one (1) hour in duration):

- (a) when the turbine is operating at less than 50% of its rated capacity and the inlet temperature is less than 59°F; or
- (b) when the turbine is operating at less than 75% of its rated capacity and the inlet temperature is above 59°F.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code, Chapter 139.]

The CEM system and components, as previously approved by the Department, must be operated and maintained in accordance with the quality assurance, recordkeeping and reporting requirements established in 25 Pa. Code Chapter 139, Subchapter C, and the QA requirements in the latest version of the Department's Continuous Source Monitoring Manual, as appropriate.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.112(d) and 129.115(f).]

(a) The permittee shall operate and maintain this source in accordance with good operating and maintenance practices. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

(b) This source shall be properly maintained in accordance with the company's preventative maintenance program.

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

For the purpose of determining compliance with the conditions for this source, the oxygen content as monitored downstream of the air pollution control equipment shall be used wherever the oxygen content is required to be adjusted.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 019 [25 Pa. Code §127.411]****Content of applications.**

This source consists of a combustion turbine, manufactured by General Electric, Model Frame 6, with a rated capacity of 47,500 kVa. This turbine will exhaust to an unfired heat recovery steam generator.

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

[Additional authority for this permit condition is also derived from 25 Pa. §§ Code 145.1 - 145.90.]

The emission limitations, monitoring and all other requirements of the NOx Budget Trading Program established in 25 Pa. Code §§ 145.1-145.90 are hereby incorporated by reference.

021 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) The permittee shall perform the emission monitoring analysis procedures or test methods required under an applicable requirement including procedures and methods under Sections 11(a)(3) (42 USCA §§ 7414 (a)(3) or 504(b) (42 USCA §§ 7661(c)(b)) of the Clean Air Act.

(b) Unless otherwise required by this permit, the permittee shall comply with applicable monitoring, QA, recordkeeping, and reporting requirements of the Air Pollution Control Act, 25 Pa. Code, subpart C, Article III, including Chapter 139. The permittee shall also comply with the applicable requirements related to monitoring, QA, recordkeeping and reporting requirements of 40 CFR 60, Subpart GG, including §§ 114(a)(3) and 504(b) and regulations adopted there under, unless otherwise required by this permit.

022 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

The NOx Budget limits shall adhere to the EPA's CSAPR program (a federally implemented program).

023 [25 Pa. Code §145.10.]**Authorization and responsibilities of the NOx authorized account representative.**

(a) Except as provided under 25 Pa. Code § 145.11 (relating to alternate NOx authorized account representative), each NOx budget source, including all NOx budget units at the source, shall have one, and only one, NOx authorized account representative, with regard to all matters under the NOx Budget Trading Program concerning the source or any NOx budget unit at the source.

(b) Each submission under the NOx Budget Trading Program shall be submitted, signed and certified by the NOx authorized account representative for each NOx budget source on behalf of which the submission is made.

024 [25 Pa. Code §145.30.]**Compliance certification report.**

For each control period in which one or more NOx budget units at a source are subject to the NOx budget emissions limitation, the NOx authorized account representative of the source shall submit to the Department and the NOx Budget Administrator by November 30 of that year, a compliance certification report for the source covering all of the units.

025 [25 Pa. Code §145.6]**Standard requirements.**

The emissions measurements recorded and reported in accordance with 25 Pa. Code §§ 145.70-145.76 shall be used to determine compliance by the unit with the NOx budget emissions limitation under 25 Pa. Code § 145.6(c).

026 [25 Pa. Code §145.6]**Standard requirements.**

The permittee of each NOx budget source and each NOx budget unit at the source shall hold NOx allowances available for compliance deductions under 25 Pa. Code § 145.54 (relating to compliance), as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with 25 Pa. Code §§ 145.70-145.76 (relating to recordkeeping and reporting requirements) plus any amount necessary to account for actual heat input under 25 Pa. Code § 145.42(e) (relating to NOx allowance allocation) for the control period or to account for excess emissions for a prior control period under 25 Pa.

**SECTION D. Source Level Requirements**

Code § 145.54(d) or to account for withdrawal from the NOx budget trading program, or a change in regulatory status, of a NOx budget opt-in unit under 25 Pa. Code §§ 145.86 and 145.87 (relating to withdrawal from NOx Budget Trading Program; and opt-in source change in regulatory status).

027 [25 Pa. Code §145.6]**Standard requirements.**

The permittee of a NOx budget unit that has excess emissions in any control period shall surrender the NOx allowances required for deduction under 25 Pa. Code § 145.54(d)(1) (relating to compliance).

028 [25 Pa. Code §145.6]**Standard requirements.**

Unless otherwise provided, the permittee of the NOx budget source and each NOx budget unit at the source shall maintain at a central location and provided upon request by the Department or the NOx budget administrator all documents required under 25 Pa. Code § 145.6(d) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of the 5 years, in writing by the Department or the Administrator.

029 [25 Pa. Code §145.74.]**Recordkeeping and reporting.**

The permittee of a unit that is not subject to an acid rain emissions limitation shall comply with requirements of 40 CFR § 75.62, except that the monitoring plan is only required to include the information required by 40 CFR 75, Subpart H.

030 [25 Pa. Code §145.74.]**Recordkeeping and reporting.**

The NOx authorized account representative shall submit an application to the Department within 45 days after completing all initial certification or recertification tests required under 25 Pa. Code § 145.71 (relating to initial certification and recertification procedures) including the information required under 40 CFR 75, Subpart H.

031 [25 Pa. Code §145.74.]**Recordkeeping and reporting.**

- (a) The authorized account representative shall submit to the Department and to the NOx Budget Administrator a quarterly emissions report in accordance with the requirements of 25 Pa. Code § 145.74(d).
- (b) The NOx authorized account representative shall submit to the Department and the NOx Budget Administrator a compliance certification in support of each quarterly report required under 25 Pa. Code § 145.74(d) based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the units emissions are correctly and fully monitored.

032 [25 Pa. Code §145.90.]**Emission reduction credit provisions.**

NOx budget units may create, transfer and use emission reduction credits ("ERCs") in accordance with Chapter 127 and 25 Pa. Code § 145.90. ERCs may not be used to satisfy NOx allowance requirements.

*** Permit Shield in Effect. ***

**SECTION D. Source Level Requirements**

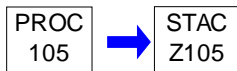
Source ID: 105

Source Name: BIOLOGICAL MANUFACTURING

Source Capacity/Throughput:

N/A

SOLVENT

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99(c)]

(a) VOC area emissions from the disinfecting operations shall not exceed 28.32 tons in any 12 consecutive month period.

(b) The disinfecting operations subject to this VOC limit are located in the following buildings: 28, 29, 60, 65, and 76.

II. TESTING REQUIREMENTS.

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.100(d)]

The permittee shall monitor solvent purchases (or mass balance) for disinfecting operations on a monthly basis to assure compliance with the VOC emission limit applicable to this source category.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99(d)]

The permittee shall maintain monthly and 12-consecutive month records of the following for the disinfection operations:

- (a) VOC emission factors (based on the VOC content and density of disinfectant used, as provided by the supplier); and
- (b) Total amount of each type of disinfectant.

V. REPORTING REQUIREMENTS.

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99(d)]

**SECTION D. Source Level Requirements**

Monthly solvent purchase records (or mass balance) and source-specific emission factors shall be used to calculate the VOC emissions from the disinfecting operations and demonstrate compliance with the area VOC emission limit for this source.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.99(d).]

At a minimum, the following work practices shall be followed:

- (a) Good housekeeping procedures for the storage, use, and disposal of solvents;
- (b) Employee training detailing good work practices to control solvent usage for minimizing emissions;
- (c) Periodic inspection of production and cleaning activities; and
- (d) Solvent containers shall be closed when not in use.

VII. ADDITIONAL REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source consists of area emissions that are generated during aseptic disinfection procedures using a solvent-based solution.

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

**SECTION D. Source Level Requirements**

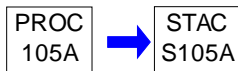
Source ID: 105A

Source Name: SHELL FREEZERS (B28, B62, & B66)

Source Capacity/Throughput:

N/A

SOLVENT

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for the annual limit in paragraph (b), below, is derived from 25 Pa. Code § 129.112(c)(2).]

- (a) VOC source emissions from the six (6) shell freezers shall not exceed 5.3 tons in any 12 consecutive month period.
- (b) Individually, VOC emissions from each shell freezer shall remain below 2.7 tons in any 12 consecutive month period.
- (c) The shell freezers subject to this VOC limit are located in the following buildings, two in each building: 28, 62, and 66.

Control Device Efficiency Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.112(c).]

VOC emissions from the shell freezers shall be controlled by the following:

- (a) Shell freezers are equipped with liquid nitrogen cooling coils; and,
- (b) Access doors fitted with gaskets to seal the vessel.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor shell freezer usage for shell freezer operations on a monthly basis to assure compliance with the VOC emission limit applicable to this source category.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

The permittee shall maintain monthly and 12-consecutive month records of shell freezer usage.

V. REPORTING REQUIREMENTS.

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

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

(a) Monthly shell freezer usage records and source-specific emission factors, or, monthly shell freezer usage records and process-specific emission factors shall be used to calculate the VOC emissions for use in demonstrating compliance with the point VOC emission limit for this source.

(b) The parameters used for the source specific emission factors shall be verified once during the life of this operating permit. These shall include, but not be limited to:

- (1) Number of sources;
- (2) Air flow; and
- (3) Seal integrity.

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

Exhaust fans shall pull alcohol vapors from the shell freezer(s) when the access door(s) are open.

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.112(c) and 129.115(f).]

(a) The permittee shall operate and maintain this source in accordance with good operating and maintenance practices. At a minimum, the following work practices shall be followed:

- (1) Good housekeeping procedures for the storage, use, and disposal of solvents;
- (2) Employee training detailing good work practices to control solvent usage for minimizing emissions;
- (3) Periodic inspection of production and cleaning activities; and
- (4) Solvent containers shall be closed when not in use.

(b) Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

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

This source consists of six (6) shell freezers that are custom-made tank-like refrigeration units which contain a cooled denature alcohol bath.

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

**SECTION D. Source Level Requirements**

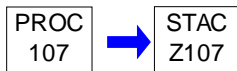
Source ID: 107

Source Name: BUILDING 12

Source Capacity/Throughput:

N/A

SOLVENT

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99(c).]

VOC emissions from the disinfecting operations shall not exceed 30.6 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.100(d).]

The permittee shall monitor solvent purchases (or mass balance) for disinfecting operations on a monthly basis for use in calculating compliance with the VOC emission limit.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.100(d).]

The permittee shall maintain monthly and 12 consecutive month records from the disinfection operations of the following:

- (a) VOC emission factors (based on the VOC content and density of disinfectant used, as provided by the supplier); and
- (b) total amount of each type of disinfectant used.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99(d).]

Monthly solvent purchase records (or mass balance) and source-specific emission factors shall be used to calculate the VOC emissions from the disinfecting operations and to demonstrate compliance with the area VOC emission limit for this

**SECTION D. Source Level Requirements**

source.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99(d).]

At a minimum, the following work practices shall be followed:

- (a) good housekeeping procedures for the use (dispensing only the amount needed), and disposal of solvents and solvent laden wipes into closed, non-absorbent, and non-leaking containers;
- (b) employee training detailing good work practices to control solvent usage for minimizing emissions;
- (c) periodic inspection of production and cleaning activities;
- (d) ordering cleaners and disinfectants only from company approved vendors; and
- (e) containers with solvent shall be closed or covered when not in use.

VII. ADDITIONAL REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source consists of area emissions that are generated during aseptic disinfection procedures using a solvent-based solution.

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

**SECTION D. Source Level Requirements**

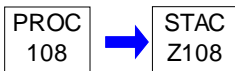
Source ID: 108

Source Name: BUILDING 66

Source Capacity/Throughput:

N/A

SOLVENT

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99(c).]

Emissions from the disinfecting operations shall not exceed 11.9 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.100(d).]

The permittee shall monitor solvent purchases (or mass balance) for disinfecting operations on a monthly basis for use in calculating compliance with the VOC emission limit.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.100.]

The permittee shall maintain monthly and 12 consecutive month records from disinfection operations of the:

- (a) VOC emission factors (based on the VOC content and density of disinfectant used, as provided by the supplier); and
- (b) total amount of each type of disinfectant used.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99(d).]

At a minimum, the following work practices shall be followed:

**SECTION D. Source Level Requirements**

- (a) good housekeeping procedures for the use (dispensing only the amount needed), and disposal of solvents and solvent laden wipes into closed, non-absorbent, and non-leaking containers;
- (b) employee training detailing good work practices to control solvent usage for minimizing emissions;
- (c) periodic inspection of production and cleaning activities;
- (d) ordering cleaners and disinfectants only from company approved vendors; and
- (e) containers with solvent shall be closed or covered when not in use.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99(d).]

Monthly solvent purchase records (or mass balance) and source-specific emission factors shall be used to calculate the VOC emissions from the disinfecting operations and demonstrate compliance with the area VOC emission limit for this source.

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

This source consists of area emissions that are generated during aseptic disinfection procedures using a solvent-based solution.

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

**SECTION D. Source Level Requirements**

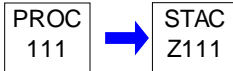
Source ID: 111

Source Name: BUILDING 62

Source Capacity/Throughput:

N/A

SOLVENT

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99(c).]

VOC emissions from disinfection operations shall not exceed 7.08 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.100(c).]

The permittee shall monitor solvent purchases (or mass balances) for disinfecting operations on a monthly basis for use in calculating compliance with the VOC emission limit for this source.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.100(d).]

The permittee shall maintain the following monthly and 12 consecutive month records of the disinfection operations:

- (a) VOC emission factors (based on the VOC content and density of disinfectant used, as provided by the supplier);
- (b) total amount of each type of disinfectant used; and
- (c) monthly and 12-consecutive month VOC emissions.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99(c).]

Monthly solvent purchase records (or mass balance) and source-specific emission factors shall be used to calculate the

**SECTION D. Source Level Requirements**

VOC emissions from the disinfecting operations and to demonstrate compliance with the area VOC emission limit for this source.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99(c).]

At a minimum, the following work practices shall be followed:

- (a) good housekeeping procedures for the use (dispensing only the amount needed), and disposal of solvents and solvent laden wipes into closed, non-absorbent, and non-leaking containers;
- (b) employee training detailing good work practices to control solvent usage for minimizing emissions;
- (c) periodic inspection of production and cleaning activities;
- (d) ordering cleaners and disinfectants only from company approved vendors; and
- (e) containers with solvent shall be closed or covered when not in use.

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

This source consists of Building 62 area emissions that are generated during aseptic disinfection procedures using a solvent-based solution.

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

**SECTION D. Source Level Requirements**

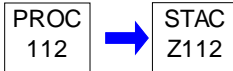
Source ID: 112

Source Name: BUILDING 38 DISINFECTION OPERATIONS

Source Capacity/Throughput:

N/A

SOLVENT

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

VOC emissions from the disinfecting operations in building 38 shall not exceed 5.90 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

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

The permittee shall monitor solvent purchases (or mass balance) for disinfecting operations on a monthly basis for use in calculating compliance with the VOC emission limit for this source.

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

The permittee shall maintain the following monthly and 12 consecutive month records of the disinfection operations:

- (a) VOC emission factors (based on the VOC content and density of disinfectant used, as provided by the supplier);
- (b) total amount of each type of disinfectant used; and
- (c) monthly and 12-consecutive month VOC emissions.

V. REPORTING REQUIREMENTS.

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

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

Monthly solvent purchase records (or mass balance) and source-specific emission factors shall be used to calculate the VOC emissions from the disinfecting operations and to demonstrate compliance with the area VOC emission limit for this source.

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

At a minimum, the following work practices shall be followed:

- (a) good housekeeping procedures for the use (dispensing only the amount needed), and disposal of solvents and solvent

**SECTION D. Source Level Requirements**

laden wipes into closed, non-absorbent, and non-leaking containers;
(b) employee training detailing good work practices to control solvent usage for minimizing emissions;
(c) periodic inspection of production and cleaning activities;
(d) ordering cleaners and disinfectants only from company approved vendors; and
(e) containers with solvent shall be closed or covered when not in use.

VII. ADDITIONAL REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source consists of Building 38 area emissions that are generated during aseptic disinfection procedures using a solvent-based solution.

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

**SECTION D. Source Level Requirements**

Source ID: 150 Source Name: EMERGENCY GENERATORS (INSTALLED BTW 1997 AND 1999)
 Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: SG1

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.**# 001 [25 Pa. Code §127.411]****Content of applications.**

This source group consists of the following generators:

Bldg 36A-1 - This is a 100-kW 4SLB natural gas-fired emergency generator with a Ford engine, Model LSG-8751-6005-A, rated approximately 154 bhp (1.5 MMBtu/hr).

Bldg 92-1 - This is a 35-kW 4SLB natural gas-fired emergency generator with a Ford engine, Model CSG-649I-6005-A, rated approximately 54 bhp (0.5 MMBtu/hr).

**SECTION D. Source Level Requirements**

Bldg 62-3 - This is a 150-kW 4SLB natural gas-fired emergency generator with a Cummins engine, Model GTA8.3G2, rated 240 bhp (2.0 MMBtu/hr).

Bldg 14-1 - This is a 150-kW 4SLB natural gas-fired emergency generator with a Cummins engine, Model GTA8.3G2, rated 230 bhp (1.7 MMBtu/hr).

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

**SECTION D. Source Level Requirements**

Source ID: 152

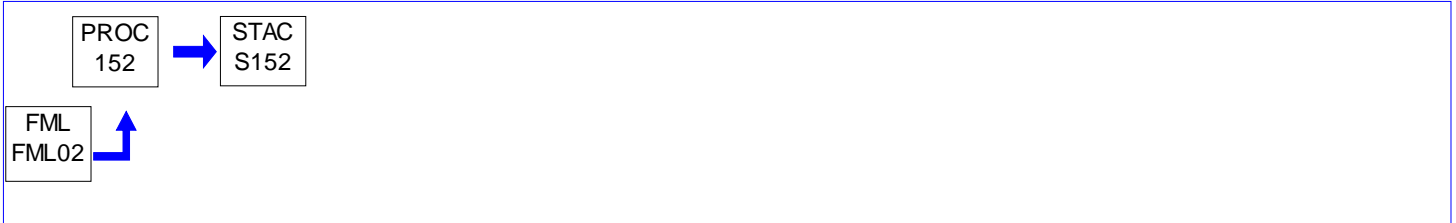
Source Name: BLDG 28-2 DIESEL EMERG GEN

Source Capacity/Throughput:

N/A

Diesel Fuel

Conditions for this source occur in the following groups: SG5

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

Aggregate NOx emissions from Sources 152, 153, 750A, and 761 shall not exceed any of the following:

- (a) 100 lbs/hr;
- (b) 1000 lbs/day;
- (c) 6.6 tons in any 12-consecutive month period; and
- (d) 2.75 tons during the ozone season.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]**Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal co**

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

Emissions from this engine shall not exceed the following:

- (a) Nitrogen Oxides (NOx) + Non-methane Hydrocarbons (NMHC) - 6.4 g/kW-hr;
- (b) Carbon Monoxide (CO) - 3.5 g/kW-hr; and
- (c) Particulate Matter (PM) - 0.20 g/kW-hr.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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



SECTION D. Source Level Requirements

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 153

Source Name: EXEMPT NG GENERATORS (NSPS JJJJ)

Source Capacity/Throughput:

N/A

Natural Gas

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

Aggregate NOx emissions from Sources 152, 153, 750A, and 761 shall not exceed any of the following:

- (a) 100 lbs/hr;
- (b) 1000 lbs/day;
- (c) 6.6 tons in any 12-consecutive month period; and
- (d) 2.75 tons during the ozone season.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]**Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?**

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

Emissions from the B69-3 engine (rated 530 bhp) and the B75C-2 engine (177 bhp) shall not exceed the following, per each engine:

- (a) NOx - 2.0 g/hp-hr;
- (b) CO - 4.0 g/hp-hr; and,
- (c) VOC - 1.0 g/hp-hr.

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

The operating time shall not exceed any of the following in any 12-consecutive month period:

- (a) B69-3 - 300 hours; and
- (b) B75C-2 (B75C-1 replacement) - 100 hours.

II. TESTING REQUIREMENTS.

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

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

The operating time for each engine shall be continuously monitored using a time totalizing meter or other Department approved equivalent.

**SECTION D. Source Level Requirements**

**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

The permittee shall monitor the following information:

- (a) hours spent for emergency operation, including what classified the operation as an emergency*;
- (b) hours spent for non-emergency operation;** and
- (c) hours spent for maintenance and readiness checks (note - 100 hours are permissible per year; but the permittee can petition for additional hours).

* Operation for emergency demand response is not allowed.

** Operation for non-emergency purposes up to fifty (50) hours per year is allowed, but such operation is to be counted toward the 100 hour limit in (c), above. The fifty (50) hours per year cannot be used for peak shaving or to generate income by supplying power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

IV. RECORDKEEPING REQUIREMENTS.

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

The permittee shall record the following on a monthly, and 12-consecutive month, basis:

- (a) operating time; and,
- (b) NOx emissions aggregated from Sources 152, 153, 750A, and 761.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

**# 007 [25 Pa. Code §127.411]
Content of applications.**

This source consists of the following individual natural gas fired emergency generators:

- B69-3 is a 350-kW Cummins generator, Model KTA19G, rated 530 bhp (4.75 MMBtu/hr); and,
- B75C-2 is a 100-kW Ford generator, Model 6.8LT, rated 177 bhp (1.13 MMBtu/hr).

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

**SECTION D. Source Level Requirements**

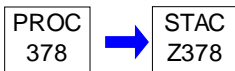
Source ID: 378

Source Name: MISC VOC SOURCES

Source Capacity/Throughput:

N/A

SOLVENTS

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

[Additional authority for the annual limit, below, is derived from 25 Pa. Code § 129.112(c)(2).]

The VOC emissions from each of the sources listed in this group shall not exceed 3.0 lb/hr, 15 lb/day, or 2.7 tons in any 12 consecutive month period, whichever is more stringent.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

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

The permittee shall perform calculations as necessary for use in demonstrating compliance with the VOC emission limits applicable to each process or operation identified under Source ID 378.

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

The following items, if applicable, but not limited to, shall be recorded and used to calculate hourly, daily, and monthly VOC emission rates for demonstrating compliance with the hourly, daily, and monthly emission limits applicable to each process or operation identified under Source ID 378:

- (a) annual solvent usage for cleanup;
- (b) number of batches of product manufactured;
- (c) hours of operation;
- (d) maximum VOC content of the products;
- (e) fuel throughput; and,
- (f) raw material usage.

V. REPORTING REQUIREMENTS.

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

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.112(c)(2) and 129.115(f).]

The permittee shall operate and maintain the sources reflected under Source ID 378 in accordance with good operating and maintenance practices. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

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

The following listed sources comprise the de minimis VOC source, in addition to Source IDs 384, 385, and 777:

Source	Location
Pharmaceutical Testing Lab	Bldg 38, WP Pharmaceutical Testing Lab
Paint and Carpentry Shops	Bldg 1, Maintenance Department
Q/C Labs - Biological	Site, WP Quality Operations
Q/C labs - Pharmacological	Site, WP Quality Operations
Material Supply Sample	Bldg 62, WP Quality Operations
Diesel Fuel Tank/Pump (5,000 gal)	B13A
Two Diesel Fuel Tanks (396,600 gal, each)	B2
Cooling Towers (7)	B2, B8, B11, B45, B52, B54, and B80
Filter Testing	B28

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

**SECTION D. Source Level Requirements**

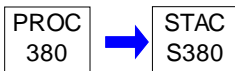
Source ID: 380

Source Name: 4 SHELL FREEZERS BLDG 12/12A

Source Capacity/Throughput:

N/A

LAB SAMPLES

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

(a) The permittee shall limit the emissions of volatile organic compounds (VOC) from the four (4) shell freezers in Buildings 12/12A to 7.20 tons per year, calculated as a 12-month rolling sum.

(b) The permittee shall limit the emissions of hazardous air pollutants (HAPs) from the four (4) shell freezers to 0.36 tons per year, calculated as a 12-month rolling sum.

II. TESTING REQUIREMENTS.

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

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

The permittee shall inspect the access door gaskets of the shell freezer monthly to ensure that the access door gaskets are in good condition.

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

(a) Sufficient data shall be recorded so that compliance with the conditions in this Title V Operating Permit can be determined. Records shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

(b) The permittee shall, on a monthly basis, record gasket door inspections and the amounts of denatured alcohol that has been added to the shell freezer.

(c) The permittee shall on a monthly, and on a 12-consecutive month, basis, keep a record of the emissions from the shell freezer in order to demonstrate compliance with emission limitations of VOC and HAP of this Title V Operating Permit.

V. REPORTING REQUIREMENTS.

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

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

(a) The permittee shall operate access doors that are fitted with gaskets that will seal the freezer during periods when the

**SECTION D. Source Level Requirements**

permittee is not loading or unloading cell culture cylinders.

(b) The permittee shall use liquid nitrogen as the refrigerant of the denatured alcohol.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.112(c)(2) and 129.115(f).]

The permittee shall operate and maintain the sources reflected under Source ID 380 in accordance with good operating and maintenance practices. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

VII. ADDITIONAL REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source consists of four (4) shell freezers that are custom-made tank-like refrigeration units which contain a cooled denature alcohol bath.

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

**SECTION D. Source Level Requirements**

Source ID: 381

Source Name: BLDG 12-1 NG EMERG GEN

Source Capacity/Throughput: 5.800 MMBTU/HR

5,600.000 CF/HR

Natural Gas

Conditions for this source occur in the following groups: SG1

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions from the generator shall not exceed the following limits:

- (a) Nitrogen oxides (NO_x): 0.47 tons per year calculated as a 12-month rolling sum;
- (b) Carbon monoxide (CO): 0.44 tons per year calculated as a 12-month rolling sum; and
- (c) Volatile organic compounds (VOC): 0.19 tons per year calculated as a 12-month rolling sum.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

002 [25 Pa. Code §127.411]

Content of applications.

This source consists of a 495-kW natural gas-fired generator with a Caterpillar engine, Model 3412, rated 705 bhp.



SECTION D. Source Level Requirements

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

**SECTION D. Source Level Requirements**

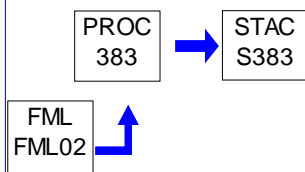
Source ID: 383

Source Name: REFRIGERATED TRAILER IC ENGINES

Source Capacity/Throughput:

N/A

Diesel Fuel

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [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:

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

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

[Additional authority for this permit condition is also derived from 40 CFR § 60.4205 and 40 CFR Part 60, Subpart III, Table 2.]

Emissions from each engine shall not exceed the following:

- (a) NMHC plus NO_x - 7.5 g/kW-hr;
- (b) CO - 5.5 g/kW-hr; and
- (c) PM - 0.3 g/kW-hr.

[Compliance with (c), above, assures compliance with 25 Pa. Code § 123.13(c)(1)(i).]

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

[Additional authority for this permit condition is also derived from 40 CFR §§ 60.4207 and 80.510(b).]

Fuel characteristics for these engines shall meet the following minimum characteristics:

- (a) sulfur content of 15 ppm maximum; and
- (b) minimum cetane index of 40, or a maximum aromatic content of 35%, by volume.

[Compliance with (a), above, assures compliance with 25 Pa. Code § 123.21.]

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

The operating time of these engines shall not exceed 200 hours per unit or an aggregate of 8,000 hours in any 12 consecutive month period.

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

[Additional authority for this permit condition is also derived from 40 CFR § 60.4211.]

The permittee shall operate each of these engines in accordance with 40 CFR § 60.4211(f).

II. TESTING REQUIREMENTS.

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

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

Using a time totalizing meter or Department approved equivalent, the operating time for each engine shall be continuously monitored.

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

(a) The permittee shall record the following on a monthly and on a 12 consecutive month basis:

- (1) the operating time for each engine and the aggregate run time for all engines;
- (2) aggregate NOx emissions; and
- (3) aggregate VOC emissions.

(b) This log shall also indicate the amount of hours each engine was operated for maintenance and readiness tests, and for non-emergency situations.

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

[Additional authority for this permit condition is also derived from 40 CFR §§ 60.4207 and 80.510(b).]

Fuel delivery records indicating the respective minimum or maximum fuel characteristics required by this source shall be received with each delivery. In lieu of fuel oil analysis or fuel oil receipts with each delivery, the permittee shall receive annually from the fuel oil supplier, a certification that all of the fuel oil delivered to the facility indicates the following minimum or maximum specifications, as applicable:

- (a) sulfur content to not exceed 15 ppm; and
- (b) cetane index or aromatic content as follows:
 - (1) cetane index - minimum of 40; or
 - (2) aromatic content - maximum of 35% by volume.

If the permittee changes the fuel oil supplier during the course of a calendar year, the above certifications shall be required from each new fuel oil supplier.

V. REPORTING REQUIREMENTS.

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

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

Additional authority for this permit condition is also derived from 40 CFR § 60.4211(a).]

The permittee shall:

- (a) operate and maintain these engines and control devices according to the manufacturer's emission-related written instructions;
- (b) change only those emission-related settings that are permitted by the manufacturer; and
- (c) meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply to Merck.

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

(a) This sources consists of thirty-six (36) individual thin-walled tractor trailers, six (6) installed post 2014 under plan approval number 46-0005AP and thirty (30) installed prior to 2014. Each trailer is equipped with its own diesel-fired compressor for refrigeration purposes. Normal operation is to operate each of these refrigeration units on electrical power, but during electrical emergency situations, the diesel engines will run.

(b) The 6 tractor trailers purchased post 2014 have 35 hp backup engines and the 30 tractor trailers purchased prior to 2014 have 34 hp backup engines.

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

**SECTION D. Source Level Requirements**

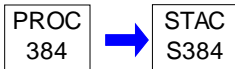
Source ID: 384

Source Name: BIOLOGICAL PROCESSES

Source Capacity/Throughput:

N/A

SOLVENTS

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

[Additional authority for the annual limit, below, is derived from 25 Pa. Code § 129.112(c)(2).]

The VOC emissions from each biological process shall not exceed 3.0 lb/hr, 15 lb/day, or 2.7 tons in any 12 consecutive month period, whichever is more stringent.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

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

The permittee shall perform calculations as necessary for use in demonstrating compliance with each VOC emission limit applicable to each biological process reflected under Source ID 384.

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

The following items, if applicable, but not limited to, shall be recorded and used to calculate hourly, daily, and monthly VOC emission rates for demonstrating compliance with the hourly, daily, and monthly emission limits applicable to each biological process reflected under Source ID 384:

- (a) annual solvent usage for cleanup;
- (b) number of batches of product manufactured;
- (c) hours of operation;
- (d) maximum VOC content of the products;
- (e) fuel throughput; and
- (f) raw material usage.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11496]**SUBPART VVVVVV - National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources****What are the standards and compliance requirements for process vents?**

(a) The permittee shall determine the sum of metal HAP emissions from all metal HAP process vents within a CMPU subject to this subpart, except you are not required to determine the annual emissions if you determine your total metal HAP usage in the process unit is less than 400 lb/yr.

**SECTION D. Source Level Requirements**

(b) If the current estimate is that total uncontrolled metal HAP emissions from a CMPU subject to 40 CFR 63, Subpart VVVVV are less than 400 lb/yr, then records must be kept of either the number of batches operated per month (batch vents) or the process operating hours (continuous vents). Before making any process or operational change that affects HAPs emissions you must reevaluate the total metal HAP emissions. If projected emissions increase to 400 lb/yr or more, then the permittee must be in compliance with one of the options for metal HAP process vents in 40 CFR 63, Subpart VVVVV, Table 4, upon initiating operation under the new operating conditions. The permittee must keep records of all recalculated emissions determinations.

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11501]**SUBPART VVVVVV - National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources****What are the notification, recordkeeping, and reporting requirements, and how may I assert an affirmative defense for violation of emission standards during malfunction?**

The permittee shall comply with the following requirements:

- (a) records of management practice inspections, repairs, and reasons for any delay of repair, as specified in 40 CFR § 63.11495(a)(5);
- (b) records of small heat exchange system inspections, demonstrations of indications of leaks that do not constitute leaks, repairs, and reasons for any delay in repair as specified in 40 CFR § 63.11495(b);
- (c) if batch process vent emissions are less than 10,000 lb/yr for a CMPU, records of batch process vent emission calculations, as specified in 40 CFR § 63.11496(a)(1), the number of batches operated each month, as specified in 40 CFR § 63.11496(a)(3), and any updated emissions calculations, as specified in 40 CFR § 63.11496(a)(3). Alternatively, keep records of the worst-case processes or organic HAP usage, as specified in 40 CFR § 63.11496(a)(2) and (4), respectively; and
- (d) records of all Total Resource Effectiveness (TRE) calculations for continuous process vents as specified in 40 CFR § 63.11496(b)(2).

V. REPORTING REQUIREMENTS.**# 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11501]****SUBPART VVVVVV - National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources****What are the notification, recordkeeping, and reporting requirements, and how may I assert an affirmative defense for violation of emission standards during malfunction?**

The permittee shall submit semiannual compliance reports that contain the information specified below. The semi-annual compliance report shall be completed as part of the permittee's Title V semi-annual deviation report. This report is required only for semiannual periods during which you experienced any of the following events:

- (a) the permittee shall clearly identify any deviation from the requirements of 40 CFR 63, Subpart VVVVV;
- (b) the permittee shall include the information specified in 40 CFR § 63.104(f)(2) each time you invoke the delay of repair provisions for a heat exchange system with a cooling water flow rate equal to or greater than 8,000 gal/min;
- (c) the permittee shall provide information on the date the leak was identified, the reason for the delay in repair, and the date the leak was repaired for each delay of leak repair beyond fifteen (15) days for any process equipment, and each delay of leak repair beyond forty-five (45) days for any heat exchange system with a cooling water flow rate less than 8,000 gal/min;
- (d) the permittee shall report each process change that affects a compliance determination and submit a new certification of compliance with the applicable requirements in accordance with the procedures specified in 40 CFR § 63.11501(b).
- (e) if you comply with the alternative standard, as specified in Table 2 or Table 3 of 40 CFR 63, Subpart VVVVV, report the information required in 40 CFR § 63.1258(b)(5); and
- (f) the permittee shall report any changes in the overlapping provisions with which you comply.

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.112(c)(2) and 129.115(f).]

**SECTION D. Source Level Requirements**

The permittee shall operate and maintain the sources reflected under Source ID 384 in accordance with good operating and maintenance practices. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11495]**SUBPART VVVVVV - National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources****What are the management practices and other requirements?**

For the Biological Process subject to this subpart the permittee shall:

- (a) conduct inspections of process vessels and equipment for each CMPU in organic HAP service or metal HAP service at least quarterly to demonstrate compliance with these requirements and to determine that the process vessels and equipment are sound and free of leaks. For these inspections, detection methods incorporating sight, sound, or smell are acceptable. The inspection must include direct and proximal (thorough) inspection of all areas of potential leak within the CMPU. Indications of a leak identified using such method constitutes a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. Alternatively, Method 21 of 40 CFR part 60, appendix A-7, with a leak definition of 500 parts per million by volume (ppmv), may be used for detection of leaks or to determine if the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period. Inspections must be conducted while the subject CMPU is operating. No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in organic HAP service or metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.
- (b) repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this condition, a leak will be considered "repaired" if a condition specified in (b)(1), (2), or (3), below is met.
- (1) the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or
 - (2) no bubbles are observed at potential leak sites during a leak check using soap solution, or
 - (3) the system will hold a test pressure.
- (c) keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.

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

Source 384 consists of the following biological processes:

- (a) Those that are not subject to 40 CFR Part 63, Subpart 6V:
- (1) Bldg 38/38A;
 - (2) Bldg 60/60A; and,
 - (3) Bldg 65 [fermentation (phenol) and purification (ethanol)].
- (b) Those that are subject to 40 CFR Part 63, Subpart 6V:
- (1) Bldg 28 (Chloroform);
 - (2) Bldg 38; and,
 - (3) Bldg 60/60A.

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

**SECTION D. Source Level Requirements**

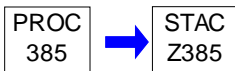
Source ID: 385

Source Name: GAS FUEL TANK/PUMP (5,000 GAL)

Source Capacity/Throughput:

N/A

GASOLINE

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The VOC emissions from the Gas Fuel Tank/Pump shall remain below 1.0 ton per 12-month rolling period.

Throughput Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The monthly throughput of gasoline from this source shall be less than 10,000 gallons.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall record fuel throughput on a monthly basis.

(b) The permittee shall calculate and record emissions of VOC on a monthly basis and as a 12-month rolling sum.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11125]

Subpart CCCCC - National Emission Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities**What are my recordkeeping requirements?**

The permittee shall maintain the following records:

(a) Records of the occurrence and duration of each malfunction of operation of the Gas Fuel Tank/Pump.

(b) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. § 63.11115(a), including corrective actions to restore malfunctioning equipment to its normal or usual manner of operation.

V. REPORTING REQUIREMENTS.

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11126]

Subpart CCCCC - National Emission Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities**What are my reporting requirements?**

**SECTION D. Source Level Requirements**

The permittee shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 C.F.R. § 63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

VI. WORK PRACTICE REQUIREMENTS.**# 006 [25 Pa. Code §129.57]****Storage tanks less than or equal to 40,000 gallons capacity containing VOCs**

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

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11116]**Subpart CCCCCC - National Emission Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.**

[Additional authority for this permit condition is derived from 40 CFR § 63.11115]

This condition applies to any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and offroad, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

(a) The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- (1) Minimize gasoline spills;
- (2) Clean up spills as expeditiously as practicable;
- (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
- (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

(b) The permittee operate and maintain each affected tank in a manner consistent with safety and good air pollution control practices for minimizing emissions.

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

The Gasoline Fuel Tank/Pump is located near Building 13A.

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

**SECTION D. Source Level Requirements**

Source ID: 732

Source Name: BLDG 81 NG PEAK GENS (81-1, 81-2)

Source Capacity/Throughput: 14.300 MMBTU/HR

13.884 MCF/HR Natural Gas

Conditions for this source occur in the following groups: SG2

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Air contaminant emissions from each generator shall not exceed the following levels:

- (a) Nitrogen Oxides (NO_x) - 3.0 g/bhp-hr and 1.0 tons in any 12 consecutive month period;
- (b) Carbon Monoxide (CO) - 2.6 tons in any 12 consecutive month period; and
- (c) Volatile Organic Compounds (VOC) - 0.65 tons in any 12 consecutive month period.

[Compliance with the 12-month limit in (a), above, ensures compliance with 25 Pa.Code § 129.112(c)(1).]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 002 [25 Pa. Code §127.411]****Content of applications.**

This source consists of two (2) identical 4SLB natural gas-fired peak generators with Caterpillar engines, Model 3516, and rated 1,818 bhp (1,300 kW), each.

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

**SECTION D. Source Level Requirements**

Source ID: 733

Source Name: M-5 MOBILE DIESEL GENERATOR

Source Capacity/Throughput: 14.600 MMBTU/HR

104.000 Gal/HR

Diesel Fuel

Conditions for this source occur in the following groups: SG3

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions shall be calculated on a monthly basis and shall not exceed any of the following for this generator:

- (a) Nitrogen Oxides (NO_x) - 30.4 lbs/hr and 8.0 tons in any 12 consecutive month period;
- (b) Carbon Monoxide (CO) - 3.1 lbs/hr and 0.62 tons in any 12 consecutive month period; and
- (c) Volatile Organic Compounds (VOC) - 0.2 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

002 [25 Pa. Code §127.411]

Content of applications.

This source consists of a 1,500-kW diesel-fired generator with a Caterpillar engine, Model 3512, rated approximately 2,234



SECTION D. Source Level Requirements

bhp.

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

**SECTION D. Source Level Requirements**

Source ID: 734

Source Name: M-6 MOBILE DIESEL GENERATOR

Source Capacity/Throughput: 7.700 MMBTU/HR

55.000 Gal/HR

Diesel Fuel

Conditions for this source occur in the following groups: SG3

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

Emissions shall be calculated on a monthly basis and shall not exceed any of the following for this generator:

- (a) Nitrogen Oxides (NO_x) - 15.2 lbs/hr and 3.5 tons in any 12 consecutive month period.
- (b) Carbon Monoxide (CO) - 3.24 lbs/hr and 0.65 tons in any 12 consecutive month period.
- (c) Volatile Organic Compounds (VOC) - 0.12 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.112(c)(2) and 129.115(f).]

- (a) The permittee shall operate and maintain this generator in accordance with Merck's established generator preventive maintenance program and consistent with good operating and maintenance practices, as well as good air pollution control practices.

**SECTION D. Source Level Requirements**

(b) Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

VII. ADDITIONAL REQUIREMENTS.

003 [25 Pa. Code §127.411]

Content of applications.

This source consists of a 750-kW diesel-fired generator with a Caterpillar engine, Model 3412, rated approximately 1,117 bhp.

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

**SECTION D. Source Level Requirements**

Source ID: 735

Source Name: BLDG 44-E NG EMERG GEN

Source Capacity/Throughput: 5.000 MMBTU/HR

4,825.000 CF/HR

Natural Gas

Conditions for this source occur in the following groups: SG1

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions shall be calculated on a monthly basis and shall not exceed any of the following for this generator:

- (a) NO_x - 0.64 tons in any 12 consecutive month period;
- (b) CO - 0.85 tons in any 12 consecutive month period; and
- (c) VOC - 0.09 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

002 [25 Pa. Code §127.411]

Content of applications.

This source consists of a 500-kW 4SRB natural gas-fired generator with a Cummins engine, Model GTA28, rated 770 bhp.



SECTION D. Source Level Requirements

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

**SECTION D. Source Level Requirements**

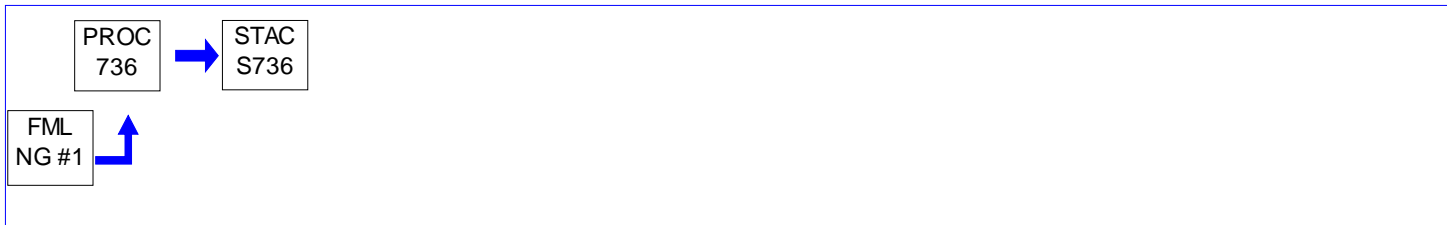
Source ID: 736

Source Name: BLDG 82-1 NG EMERG GEN

Source Capacity/Throughput: 1.900 MMBTU/HR

1.880 MCF/HR Natural Gas

Conditions for this source occur in the following groups: SG1

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

NOx emissions shall not exceed 250 lbs in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

002 [25 Pa. Code §127.411]

Content of applications.

This source consists of a 150-kW 4SRB natural gas-fired generator with a Caterpillar engine, Model 3406, rated 231 bhp.

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

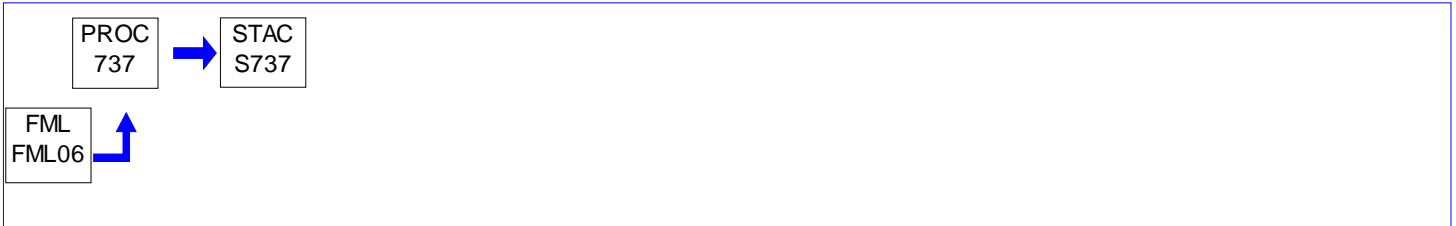
**SECTION D. Source Level Requirements**

Source ID: 737

Source Name: BLDG 33-1 DIESEL EMERG GEN

Source Capacity/Throughput:	26.500	MMBTU/HR	
	189.000	Gal/HR	#2 OIL
	189.000	Gal/HR	Diesel Fuel

Conditions for this source occur in the following groups: SG1

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The VOC emissions from the following sources, aggregated with the VOC emissions from Source ID's 033, 035, and 039, shall not exceed 12.3 tons in any 12 consecutive month period: Source IDs 737, 745, 746, and 747.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

002 [25 Pa. Code §127.411]

Content of applications.

Bldg 33-1 - This is a 2,860-kW diesel-fired emergency generator with a General Motors engine, Model 20-645-E4, rated approximately 4,260 bhp.



SECTION D. Source Level Requirements

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

**SECTION D. Source Level Requirements**

Source ID: 738

Source Name: BLDG 24-2 NG EMERG GEN

Source Capacity/Throughput: 5.200 MMBTU/HR

5.000 MCF/HR Natural Gas

Conditions for this source occur in the following groups: SG1

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Air emissions from this source shall not exceed the following in any 12 consecutive month period:

- (a) NO_x - 0.77 tons;
- (b) CO - 0.64 tons; and
- (c) VOC - 0.19 tons.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

002 [25 Pa. Code §127.411]

Content of applications.

Bldg 24-2 - This is a 500-kW 4SLB natural gas-fired emergency generator with a Caterpillar engine, Model 3412, rated 705



SECTION D. Source Level Requirements

bhp.

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

**SECTION D. Source Level Requirements**

Source ID: 745

Source Name: NO. 2 FUEL OIL GENERATORS

Source Capacity/Throughput:

N/A

#2 Oil

N/A

Diesel Fuel

Conditions for this source occur in the following groups: SG1

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The VOC emissions from the following sources, aggregated with the VOC emissions from Source ID's 033, 035, and 039, shall not exceed 12.3 tons in any 12 consecutive month period: Source IDs 737, 745, 746, and 747.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

002 [25 Pa. Code §127.411]

Content of applications.

This source group consists of the following generators:

B1-1 - This is a 150-kW diesel-fired emergency generator with a John Deere engine, Model 6076AF010, rated 250 bhp (1.5 MMBtu/hr).

**SECTION D. Source Level Requirements**

B33-2 - This is an 80-kW diesel-fired emergency generator with a John Deere engine, Model 6059TF001, rated approximately 123 bhp (0.9 MMBtu/hr).

B37-1 - This is a 125-kW diesel-fired emergency generator with a Allis Chalmers engine, Model 685T, rated approximately 193 bhp (1.3 MMBtu/hr).

B39-1 - This is a 250-kW diesel-fired emergency generator with a Cummins engine, Model NT-855 G/5, rated 330 bhp (2.5 MMBtu/hr).

B45-1 - This is a 565-kW diesel-fired emergency generator with a Detroit Diesel engine, Model 81237405, rated 830 bhp (6.3 MMBtu/hr).

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

**SECTION D. Source Level Requirements**

Source ID: 746

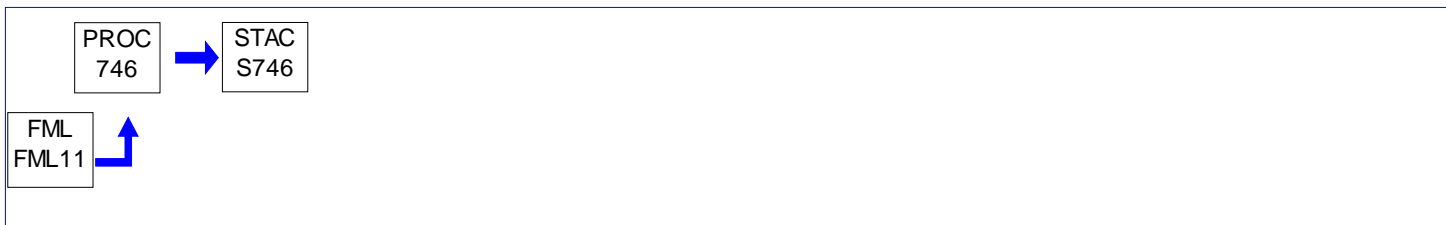
Source Name: PROPANE GENERATORS

Source Capacity/Throughput:

N/A

Propane

Conditions for this source occur in the following groups: SG1

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

The VOC emissions from the following sources, aggregated with the VOC emissions from Source ID's 033, 035, and 039, shall not exceed 12.3 tons in any 12 consecutive month period: Source IDs 737, 745, 746, and 747.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.**# 002 [25 Pa. Code §127.411]****Content of applications.**

This source group consists of the following generators:

B2-1 - This is a 12.5-kW 4SLB propane-fired emergency generator with an Onan engine, Model JC, rated approximately 19 bhp (0.2 MMBtu/hr).

**SECTION D. Source Level Requirements**

B20-1 - This is a 20-kW 4SLB propane-fired emergency generator with a Hercules engine, Model G1600, rated 53 bhp (0.9 MMBtu/hr).

B35-2 - This is a 35-kW 4SLB propane-fired emergency generator with a Ford engine, Model CSG-649I-6005-A, rated approximately 54 bhp (0.5 MMBtu/hr).

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

**SECTION D. Source Level Requirements**

Source ID: 747

Source Name: NATURAL GAS GENERATORS

Source Capacity/Throughput:

N/A

Natural Gas

Conditions for this source occur in the following groups: SG1

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The VOC emissions from the following sources, aggregated with the VOC emissions from Source ID's 033, 035, and 039, shall not exceed 12.3 tons in any 12 consecutive month period: Source IDs 737, 745, 746, and 747.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

002 [25 Pa. Code §127.411]

Content of applications.

This source group consists of the following generators:

B28-1 - This is a 75-kW 4SLB natural gas-fired emergency generator with an International Harvest engine, Model V549H, rated 150 bhp (0.9 MMBtu/hr).

**SECTION D. Source Level Requirements**

B44-3 - This is a 164-kW 4SLB natural gas-fired emergency generator with a Cummins engine , Model G855, rated 220 bhp (1.8 MMBtu/hr).

B53A-1 - This is a 250-kW 4SLB natural gas-fired emergency generator with a Cummins engine, Model GTA855B, rated 379 bhp (3.6 MMBtu/hr).

B65-1 - This is a 225-kW 4SLB natural gas-fired emergency generator with a Cummins engine, Model GV12-5251PG, rated approximately 347 bhp (2.5 MMBtu/hr).

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

**SECTION D. Source Level Requirements**

Source ID: 748

Source Name: BLDG 17-1 NG PEAK GEN

Source Capacity/Throughput: 12.800 MMBTU/HR

12.465 MCF/HR Natural Gas

Conditions for this source occur in the following groups: SG2

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Air emissions shall not exceed any of the following:

- (a) Nitrogen Oxides (NO_x) - 3.0 g/bhp-hr, 6.5 lbs/hr and 2.6 tons in any 12 consecutive month period;
- (b) Carbon Monoxide (CO) - 0.37 tons in any 12 consecutive month period; and
- (c) Volatile Organic Compounds (VOC) - 0.99 lbs/hr and 0.4 tons in any 12 consecutive month period.

[Compliance with the 12-month limit in (a), above, ensures compliance with 25 Pa.Code § 129.112(c)(1).]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 002 [25 Pa. Code §127.411]****Content of applications.**

Bldg 17-1 - This is a 1,040-kW 4SLB natural gas-fired peak generator with a Caterpillar engine, Model G3516-SITA, rated 1,462 bhp.

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

**SECTION D. Source Level Requirements**

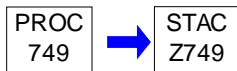
Source ID: 749

Source Name: VOC STORAGE TANKS

Source Capacity/Throughput:

N/A

SOLVENT

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

[Additional authority for the annual limit, below, is derived from 25 Pa. Code § 129.112(c)(2).]

The aggregate VOC emissions from the tanks identified herein Source 749 shall not exceed 3.0 lb/hr, 15.0 lb/day, and 2.7 tons in any 12 consecutive month period, whichever is more stringent.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

To demonstrate compliance with the VOC emission limit, worst-case calculations based on raw material throughputs and using the TankESP program or Tanks 4.0 (or other Department approved method) shall be performed and reviewed on an annual basis.

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.112(c)(2) and 129.115(f).]

The permittee shall operate and maintain the sources reflected under Source ID 749 in accordance with good operating and maintenance practices. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.



SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

004 [25 Pa. Code §127.503]

Application information.

This source consists of the following individual storage tanks:

Tank	Location	Capacity (gal)	Contents
TA-210	B38	1,500	Ethanol
TA-212	B38	500	Ethanol
TA-213	B38	7,000	Solvent Waste
TA-214	B38	7,000	Phenol Waste

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

**SECTION D. Source Level Requirements**

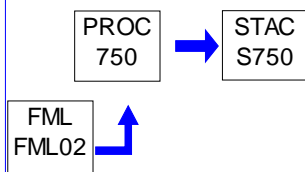
Source ID: 750

Source Name: BLDG 81 GODWIN PUMP

Source Capacity/Throughput:

N/A

Diesel Fuel

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Only diesel fuel shall be used to operate this pump.

Operation Hours Restriction(s).

002 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The operational time for this pump shall not exceed 800 hours in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The hours of operation for the pump shall be monitored monthly.

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?**

The permittee shall monitor the following information:

- (a) hours spent for emergency operation, including the reason for the emergency*;
- (b) hours spent for non-emergency operation**; and,
- (c) hours spent for maintenance and readiness checks.

* Operation for emergency demand response is not allowed.

** Operation for non-emergency purposes up to fifty (50) hours per 12 consecutive month period, but such operation is counted toward the 100 hours per 12 consecutive month period for maintenance and testing purposes. The fifty (50) hours cannot be used for peak shaving or to generate income by supplying power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 005 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

The hours of operation for the pump shall be recorded monthly and used for use in demonstrating compliance with the hours of operation limit.

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

The permittee shall maintain documentation that the engine meets the tiered emissions standards found in 40 CFR Part 89 for the model year and power rating of the engine.

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

The permittee shall retain receipts of the percentage of sulfur in the diesel fuel for use in demonstrating compliance with the sulfur limitations for this source.

008 [25 Pa. Code §139.16]**Sulfur in fuel oil.**

(a) The permittee shall receive a delivery receipt from the supplier, showing the percent sulfur in the fuel, each time a fuel oil delivery is made.

(b) In lieu of a fuel oil receipt with each delivery, the permittee may receive annually from the fuel oil supplier, a certification that all of the fuel oil delivered to the facility indicates a minimum percent sulfur, by weight. If the permittee changes fuel oil supplier during the course of the calendar year, the above certifications shall be required from each new fuel oil supplier.

009 [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?**

The following records shall be kept for a minimum of five (5) years:

(a) a copy of each notification and report that submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR § 63.10(b)(2)(xiv);

(b) records of the occurrence, duration, and corrective action of each malfunction of operation (i.e., control and monitoring equipment);

(c) records of maintenance on the engines in accordance with Merck's established generator preventive maintenance program;

(d) records of the hours of operation for both emergency and non-emergency purposes, including what was classified as an emergency operation; and,

(e) records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR § 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.

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

The permittee shall 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. If the engine is operating during an emergency and it is not possible to shut down the engine in order to perform the scheduled management practice, or if performing the management practice poses an unacceptable risk, the management practice can be delayed until the emergency is over or the unacceptable risk has abated. The management practice should be performed as soon as practicable after the

**SECTION D. Source Level Requirements**

emergency has ended or the unacceptable risk under federal, state, or local law has abated.

VI. WORK PRACTICE REQUIREMENTS.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall not remove, render inoperative, or bypass a device or element of the engine's design.

012 [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?

The permittee shall:

- (a) maintain a non-resettable hour meter on this unit;
- (b) operate and maintain the engine and any other treatment device, in accordance with Merck's established generator preventive maintenance program providing for operation and maintenance of the engine consistent with good air pollution control practices;
- (c) minimize the engines 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 thirty (30) minutes;
- (d) Except during periods of startup, the permittee must meet the following requirements:
 - (1) change oil and filter every 500 hours of operation or annually, whichever comes first*;
 - (2) inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
 - (3) inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

* The permittee has the option of utilizing an oil analysis program as outlined in Table 2c of 40 CFR Part 63, Subpart ZZZZ, and in 40 CFR § 63.6625(i).

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

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

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

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

- (a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 CFR § 63.6640(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 CFR § 63.6640(f), the engine will not be considered an emergency engine under 40 CFR Part 63, Subpart ZZZZ, and must meet all requirements for non-emergency engines.

VII. ADDITIONAL REQUIREMENTS.

014 [25 Pa. Code §127.503]

Application information.

This source consists of one 6" Godwin pump (Bldg 81 Stationary Water Utilities Pump), Model CD150, serial number 0436498-09, rated for 62 hp.



SECTION D. Source Level Requirements

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

**SECTION D. Source Level Requirements**

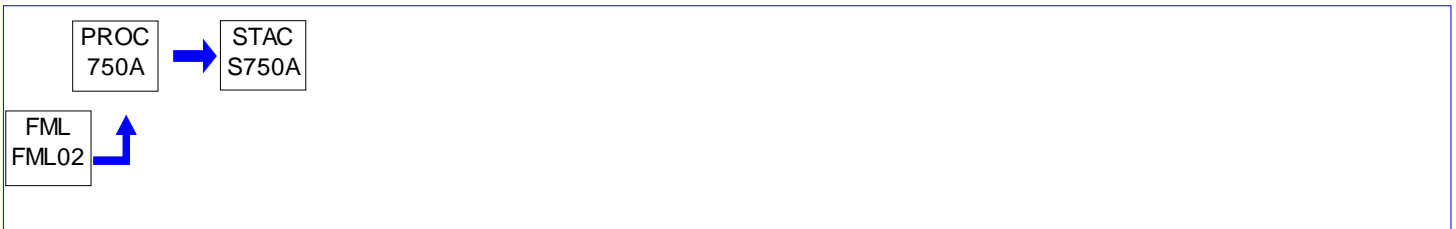
Source ID: 750A

Source Name: PORTABLE GODWIN PUMPS

Source Capacity/Throughput:

N/A

Diesel Fuel

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

001 [25 Pa. Code §123.21]

General

The permittee may not 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.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Aggregate NO_x emissions from Sources 152, 153, 750A, and 761 shall not exceed any of the following:

- (a) 100 lbs/hr;
- (b) 1000 lbs/day;
- (c) 6.6 tons in any 12-consecutive month period; and
- (d) 2.75 tons during the ozone season.

Fuel Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Only diesel fuel shall be used to operate the pumps in this source.

Operation Hours Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The operational time for each pump shall not exceed 800 hours in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The operating time for each engine shall be continuously monitored using a time totalizing meter or other Department approved equivalent.

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 006 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

- (a) The permittee shall maintain documentation that demonstrates that the engines are Tier 4 compliance for the model year and power rating of each engine.
- (b) The permittee shall retain receipts of the percentage of sulfur in the diesel fuel for use in demonstrating compliance with the sulfur limitations for this source.
- (c) The permittee shall keep records of the specific location of each pump, along with the duration of time, in months, that each pump has been at its specific location.

007 [25 Pa. Code §127.511]**Monitoring and related recordkeeping and reporting requirements.**

The permittee shall record the following on a monthly, and 12-consecutive month, basis:

- (a) Hours of operation for each pump.
- (b) Specific location of each pump.
- (c) Number of months located at the specific location.
- (d) NOx emissions aggregated from Sources 152, 153, 750A, and 761.

008 [25 Pa. Code §139.16]**Sulfur in fuel oil.**

- (a) The permittee shall receive a delivery receipt from the supplier, showing the percent sulfur in the fuel, each time a fuel oil delivery is made.
- (b) In lieu of a fuel oil receipt with each delivery, the permittee may receive annually from the fuel oil supplier, a certification that all of the fuel oil delivered to the facility indicates a minimum percent sulfur, by weight. If the permittee changes fuel oil supplier during the course of the calendar year, the above certifications shall be required from each new fuel oil supplier.

V. REPORTING REQUIREMENTS.

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

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

The portable Godwin pumps shall not remain in any specific location for 12 months or more. The portable Godwin pumps shall be relocate prior to 12 months from the last relocation to avoid being subject to 40 CFR Part 60, Subpart IIII.

VII. ADDITIONAL REQUIREMENTS.**# 010 [25 Pa. Code §127.503]****Application information.**

Source 750A consists of the following Tier 4 EPA Certified sources installed in 2019:

- One 4" Godwin pump, with a Yanmar 3TNV88F engine, rated for 20.4 hp.
- One 6" Godwin pump, with an Isuzu 4LE2X engine, rated for 62 hp.

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

**SECTION D. Source Level Requirements**

Source ID: 751

Source Name: BLDG 29-3 DIESEL EMERG GEN

Source Capacity/Throughput: 17.200 MMBTU/HR

123.000 Gal/HR

Diesel Fuel

Conditions for this source occur in the following groups: SG1

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR § 63.6603.]

Air contaminant emissions shall not exceed any of the following:

- (a) Nitrogen Oxides (NO_x) - 6.9 g/bhp-hr and 8.64 tpy;
- (b) Total Hydrocarbons (THC) - 1.0 g/bhp-hr;
- (c) Volatile Organic Compounds (VOC) - 0.16 tpy;
- (d) Particulate Matter (PM) - 0.4 g/bhp-hr; and,
- (e) PM-2.5 - 0.21 tpy.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 002 [25 Pa. Code §127.411]****Content of applications.**

Bldg 29-3 - This is a 1,825-kW diesel-fired emergency generator with a Caterpillar engine, Model 3516, rated 2,876 bhp.

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

**SECTION D. Source Level Requirements**

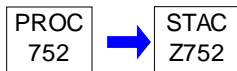
Source ID: 752

Source Name: PARTS CLEANERS

Source Capacity/Throughput:

N/A

SOLVENT

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The VOC emissions from each parts cleaner shall remain below 1.0 ton per 12-month rolling period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate and record emissions of VOC from each parts cleaner on a monthly basis and as a 12-month rolling sum.

003 [25 Pa. Code §129.63]

Degreasing operations

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

(a) The permittee shall maintain for at least five (5) years and shall provide to the Department, on request, the following information:

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

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

004 [25 Pa. Code §129.63]

Degreasing operations

**SECTION D. Source Level Requirements**

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

- (a) waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container;
- (b) flushing of parts using a flexible hose or other flushing device shall be performed only within the cold cleaning machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray;
- (c) sponges, fabric, wood, leather, paper products and other absorbent materials may not be cleaned in the cold cleaning machine;
- (d) air agitated solvent baths may not be used; and,
- (e) spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately.

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

- (a) A person may not use, sell or offer for sale for use in a cold cleaning machine any solvent with a vapor pressure of 1.0 millimeter of mercury (mm Hg) or greater and containing greater than 5% VOC by weight, measured at 20°C (68°F) containing VOCs.
- (b) A person who sells or offers for sale any solvent containing VOCs for use in a cold cleaning machine shall provide, to the purchaser, the following written information:
 - (1) the name and address of the solvent supplier;
 - (2) the type of solvent including the product or vendor identification number; and
 - (3) the vapor pressure of the solvent measured in mm hg at 20°C (68°F).
- (c) Subcondition (a), above, does not apply:
 - (1) to cold cleaning machines used in extreme cleaning service; or
 - (2) if the permittee demonstrates, and the Department approves in writing, that compliance with subcondition (a) will result in unsafe operating conditions; or
 - (3) to immersion cold cleaning machines with a freeboard ratio equal to or greater than 0.75.

006 [25 Pa. Code §129.63]**Degreasing operations**

- (a) Immersion cold cleaning machines shall have a freeboard ratio of 0.50 or greater.
- (b) Immersion cold cleaning machines and remote reservoir cold cleaning machines shall:
 - (1) have a permanent, conspicuous label summarizing the operating requirements for this source. In addition, the label shall include the following discretionary good operating practices:
 - (i) cleaned parts should be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts should be positioned so that solvent drains directly back to the cold cleaning machine;
 - (ii) when a pump-agitated solvent bath is used, the agitator should be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned; and
 - (iii) work area fans should be located and positioned so that they do not blow across the opening of the degreaser unit.
 - (2) be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than 6 inches shall constitute an acceptable cover.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 007 [25 Pa. Code §127.411]****Content of applications.**

This source consists of the following cold cleaning parts washers:

- Building 2 - Safety-Kleen AQ-1 Parts Washer
- Building 4 - Safety-Kleen AQ-1 Parts Washer
- Building 12 - Safety-Kleen Model 34.1 Parts Washer
- Building 29 - Recycling Parts Washer Model 250
- Building 56 - Safety-Kleen AQ-1 Parts Washer
- Building 75 - ChemFree SmartWasher Model 28-1
- Building 78 - Safety-Kleen AQ-1 Parts Washer

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

**SECTION D. Source Level Requirements**

Source ID: 753

Source Name: BLDG 66-1 DIESEL EMERG GEN

Source Capacity/Throughput: 15.200 MMBTU/HR

110.000 Gal/HR #2 Oil

Conditions for this source occur in the following groups: SG5

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Air contaminant emissions shall not exceed any of the following:

- (a) Nitrogen Oxides (NO_x) - 4.48 g/HP-hr
- (b) Volatile Organic Compounds (VOC) - 0.29 g/HP-hr;
- (c) Carbon Monoxide (CO) - 1.42 g/HP-hr; and,
- (d) Particulate Matter (PM) and PM-10 - 0.12 g/HP-hr.

[Compliance with (d), above, assures compliance with 25 Pa. Code 123.13(c)(1)(iii) and 40 CFR Part 60, Subpart III.]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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



SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 754

Source Name: BLDG 70A-1 DIESEL PEAK GEN

Source Capacity/Throughput:

9.864 MMBTU/HR

72.000 Gal/HR

Diesel Fuel

Conditions for this source occur in the following groups: SG4

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

**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4203]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
How long must my engines meet the emission standards if I am a stationary CI internal combustion engine manufacture**

[Additional authority for this condition is derived from 40 CFR § 60.4201 and 25 Pa. Code § 127.441.]

Air contaminant emission rates shall not exceed any of the following:

- (a) Nitrogen Oxides (NO_x) - 6.29 g/kW-hr;
- (b) Volatile Organic Compounds (VOC)* - 0.11 g/kW-hr;
- (c) Carbon Monoxide (CO) - 3.50 g/kW-hr; and
- (d) Particulate Matter (PM) and PM-10 - 0.20 g/kW-hr.

*Non-methane Hydrocarbons

[Compliance with this streamlined condition ensures compliance with 25 Pa. Code § 123.13(c)(1)(iii) and 25 Pa. Code § 129.112(c)(1).]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

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

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

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 755

Source Name: BLDG 75B-1 NG EMERG GEN

Source Capacity/Throughput: 2.500 MMBTU/HR

2,394.000 CF/HR

Natural Gas

Conditions for this source occur in the following groups: SG1

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.**# 001 [25 Pa. Code §127.411]****Content of applications.**

Bldg 75B-1 - This is a 190-kW 4SRB natural gas-fired emergency generator with a Caterpillar engine, Model 3406, rated 301 bhp.

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

**SECTION D. Source Level Requirements**

Source ID: 756

Source Name: MISC. SUBPART ZZZZ PROPANE GENS

Source Capacity/Throughput:

N/A

Propane

Conditions for this source occur in the following groups: SG1

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.**# 001 [25 Pa. Code §127.411]****Content of applications.**

This source consists of the following individual propane-fired generators:

Building 5-1 - This is a 60-kW 4SLB propane-fired emergency generator with a Ford engine, Model WSG-1068I-6005-A, rated 120 bhp (0.8 MMBtu/hr).

Building 21-1 - This is a 47-kW 4SLB propane-fired emergency generator with a Ford engine, Model ESG-642I-6005-A, rated 78 bhp (0.6 MMBtu/hr).



SECTION D. Source Level Requirements

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

**SECTION D. Source Level Requirements**

Source ID: 758

Source Name: MISC. SUBPART ZZZZ NG GENS

Source Capacity/Throughput:

N/A

Natural Gas

Conditions for this source occur in the following groups: SG1

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.**# 001 [25 Pa. Code §127.411]****Content of applications.**

This source group consists of the following generators, all of which operate on natural gas:

Building 36-1 - This is a 125-kW 4SLB natural gas-fired emergency generator with a Power Solutions International engine, Model GM-8.1L, rated 198 bhp (1.7 MMBtu/hr).

Building 38-6 - This is an 800-kW 4SRB natural gas-fired emergency generator with a Cummins engine, Model GTA50-G2, rated 1,220 bhp (10.99 MMBtu/hr).

**SECTION D. Source Level Requirements**

Building 10-1 - This is a 150-kW 4SRB natural gas-fired emergency generator with a Caterpillar engine, Model 3406, rated 231 bhp (1.80 MMBtu/hr).

Building 01-3 - This is a 325-kW 4SRB natural gas-fired emergency generator with a Cummins engine, Model GTA-19-G1, rated 490 bhp (4.18 MMBtu/hr).

Building 56-3 - This is a 47-kW 4SLB natural gas-fired emergency generator with a Ford engine, Model ESG642I-60005-A, rated 72 bhp (0.81 MMBtu/hr).

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

**SECTION D. Source Level Requirements**

Source ID: 759

Source Name: BLDG 95-2 DIESEL EMERG GEN

Source Capacity/Throughput:

0.600 MMBTU/HR

4.200 Gal/HR

Diesel Fuel

Conditions for this source occur in the following groups: SG5

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

**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal co**

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

Emissions from this generator shall not exceed the following:

- (a) Nitrogen Oxides (NO_x) + Non-methane Hydrocarbons (NMHC) - 7.5 g/kW-hr;
- (b) Carbon Monoxide (CO) - 5.0 g/kW-hr; and,
- (c) Particulate Matter (PM) - 0.30 g/kW-hr.

Compliance with (c) above assures compliance with 25 Pa. Code 123.13(c)(1)(i).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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



SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

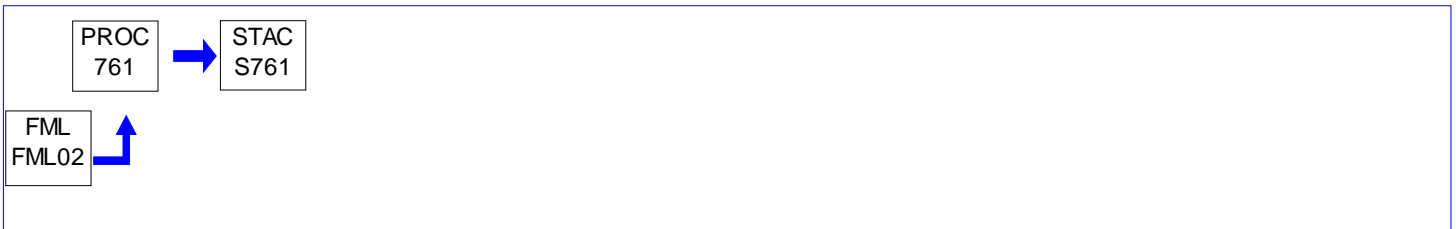
Source ID: 761

Source Name: MOBILE CENTRAL UTILITIES PUMP

Source Capacity/Throughput:

N/A

Diesel Fuel

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Aggregate NOx emissions from Sources 152, 153, 750A, and 761 shall not exceed any of the following:

- (a) 100 lbs/hr;
- (b) 1000 lbs/day;
- (c) 6.6 tons in any 12-consecutive month period; and
- (d) 2.75 tons during the ozone season.

Operation Hours Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The operational time for this pump shall not exceed 1,000 hours in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The hours of operation for this pump shall be monitored monthly.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The hours of operation for this pump shall be recorded monthly and used for use in demonstrating compliance with the hours of operation limit.
- (b) The permittee shall calculate and record NOx emissions aggregated from Sources 152, 153, 750A, and 761.

V. REPORTING REQUIREMENTS.

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

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

[Additional authority is also derived from 40 CFR Part 1068.]

- (a) The permittee shall not remove, render inoperative, or bypass a device or element of the engine design.
- (b) The permittee shall not remove or alter an emission control information label or other required permanent label, except as specified in 40 CFR § 1068.101(b)(7).
- (c) If this engine gets rebuilt, then it shall comply with the requirements in 40 CFR § 1068.120.
- (d) If this engine remains stationary for more than twelve (12) consecutive months, it must comply with either 40 CFR 63, Subpart ZZZZ or 40 CFR 60, Subpart IIII, as appropriate (as defined under the "nonroad" definition (2)(iii) in 40 CFR § 1068.30).

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

This source consists of one (1) Godwin pump powered by a 23.9 BHP/19.19 kW diesel-driven Tier 2 engine (2009 model year).

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

**SECTION D. Source Level Requirements**

Source ID: 763

Source Name: M-8 DIESEL PEAK GEN

Source Capacity/Throughput: 156.000 Gal/HR Diesel Fuel

Conditions for this source occur in the following groups: SG4

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

**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4203]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
How long must my engines meet the emission standards if I am a stationary CI internal combustion engine manufacture**

[Additional authority for this condition is derived from 40 CFR § 60.4201 and 25 Pa. Code § 127.441.]

Air contaminant emission rates shall not exceed any of the following:

- (a) Nitrogen Oxides (NO_x) - 0.67 g/kW-hr;
- (b) Non-methane Hydrocarbons (NMHC) - 0.40 g/kW-hr;
- (c) Carbon Monoxide (CO) - 3.50 g/kW-hr; and
- (d) Particulate Matter (PM) and PM-10 - 0.10 g/kW-hr.

[Compliance with this streamlined condition ensures compliance with 25 Pa. Code § 123.13(c)(1)(iii).]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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



SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 764

Source Name: M-9 DIESEL PEAK GEN

Source Capacity/Throughput: 18.989 MMBTU/HR

156.000 Gal/HR

Diesel Fuel

Conditions for this source occur in the following groups: SG4

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

**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4203]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
How long must my engines meet the emission standards if I am a stationary CI internal combustion engine manufacture**

[Additional authority for this condition is derived from 40 CFR § 60.4201 and 25 Pa. Code § 127.441.]

Air contaminant emission rates shall not exceed any of the following:

- (a) Nitrogen Oxides (NO_x) - 0.67 g/kW-hr;
- (b) Non-methane Hydrocarbons (NMHC) - 0.40 g/kW-hr;
- (c) Carbon Monoxide (CO) - 3.50 g/kW-hr; and
- (d) Particulate Matter (PM) and PM-10 - 0.10 g/kW-hr.
- (e) Ammonia slip – 10 ppm_dv, corrected to 15% O₂

[Compliance with this streamlined condition ensures compliance with 25 Pa. Code § 123.13(c)(1)(iii).]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

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

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

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

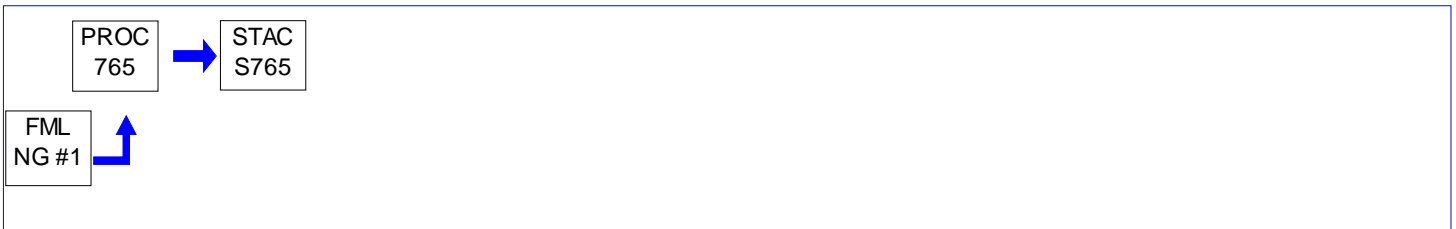
Source ID: 765

Source Name: BLDG 29-4 NG PEAK GEN

Source Capacity/Throughput: 17.510 MMBTU/HR

17.000 MCF/HR

Natural Gas

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Particulate matter emissions from this engine shall not exceed 7.71 E-05 lb/MMBtu (0.035 grams/MMBtu).

[Compliance with this emissions limit assures compliance with 25 Pa. Code § 127.13(c)(1)(i).]

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Visible emissions shall not be equal to or greater than 20% for a period or periods aggregating more than three (3) minutes in any one hour or equal or greater than 60% at any time.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

SOx emissions shall not exceed 5.88 E-4 lb/MMBtu (0.27 grams/MMBtu).

[Compliance with this condition assures compliance with 23 Pa, Code 123.21.]

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions shall not exceed any of the following:

- (a) NOx - 0.50 g/hp-hr;
- (b) VOC - 0.25 g/hp-hr; and
- (c) CO - 0.25 g/hp-hr.

[Compliance with this condition assures compliance with 40 CFR 60, Subpart JJJJ, Table 1.]

Fuel Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Only commercial pipeline quality natural gas shall be fired in this engine.

[Compliance with this condition assures compliance with the particulate matter and sulfur oxide emission limits.]

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

The permittee may operate this engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in this engine that is not certified to the emission standards when using propane, the permittee shall conduct a performance

**SECTION D. Source Level Requirements**

test to demonstrate compliance with the emission standards of 40 CFR § 60.4233.

Operation Hours Restriction(s).

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The total operating time for this engine shall not exceed 500 hours in any 12 consecutive month period.

Control Device Efficiency Restriction(s).

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The pressure drop across the catalyst bed shall be less than 8" water gauge, measured on a 4-hour rolling average basis.

II. TESTING REQUIREMENTS.

009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

- (a) Following the procedures in 40 CFR § 60.4244, the permittee shall conduct an initial performance test within one (1) year of engine startup and conduct subsequent performance testing every 8,760 hours or three (3) years, whichever comes first, thereafter to demonstrate compliance with the NO_x, VOC, and CO emission limits.
- (b) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.
- (c) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.
- (d) 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 Regional Air Quality Manager for approval.
- (e) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

III. MONITORING REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the pressure drop across the catalyst bed when the engine is in operation.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The operating time for this engine shall be monitored by a non-resettable time totalizing meter or other Department approved monitoring method.

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall record the operating time for this engine on a monthly, and a 12 consecutive month, basis.

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

The permittee shall record the monitored pressure drop across the catalyst bed.

014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]**Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice and in accordance with Merck's generator preventative maintenance program.

015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]**Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

The permittee shall retain the following records:

- (a) all notifications required by this subpart and any supporting documentation;
- (b) all maintenance performed on this engine;
- (c) a copy of each performance test; and
- (d) initial notification that includes the following:
 - (1) permittee's name and address;
 - (2) source address;
 - (3) engine information, including make, model, engine family, serial number, model year, maximum engine power and engine displacement;
 - (4) emission control equipment; and
 - (5) fuel type.

016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]**Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

The permittee shall submit the following to the US EPA and DEP:

- (a) all notifications required by this subpart and any supporting documentation;
- (b) a copy of the performance test within sixty (60) days after each test; and
- (c) initial notification that includes the following:
 - (1) permittee's name and address;
 - (2) source address;
 - (3) engine information, including make, model, engine family, serial number, model year, maximum engine power and engine displacement;
 - (4) emission control equipment; and
 - (5) fuel type.

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

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

VI. WORK PRACTICE REQUIREMENTS.

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The oxidation catalyst shall not be bypassed at any time.

VII. ADDITIONAL REQUIREMENTS.

018 [25 Pa. Code §127.411]

Content of applications.

This source consists of a 2014 model year Caterpillar, Model G3516C natural gas-fired, lean burn, four-stroke engine, rated at 2,175 bhp, that operates a 1,550 kW generator. An oxidation catalyst has been installed for the control of CO, VOC, and formaldehyde emissions. The unit is installed for use near Building 29.

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

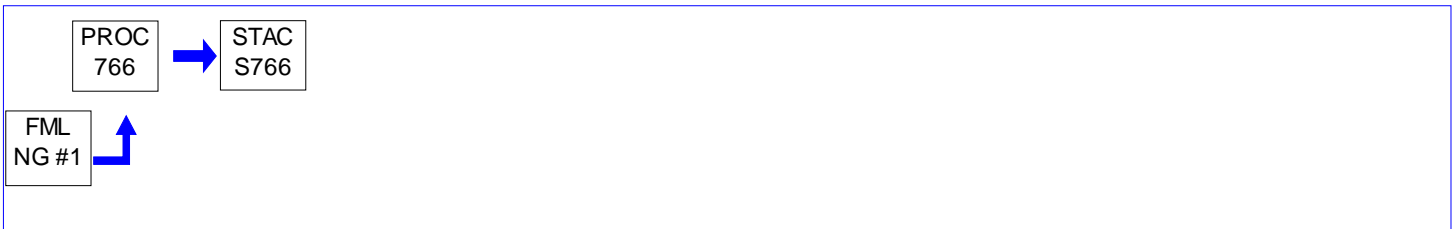
**SECTION D. Source Level Requirements**

Source ID: 766

Source Name: BLDG 62-4 NG PEAK GEN

Source Capacity/Throughput: 15.450 MMBTU/HR

15.000 MCF/HR Natural Gas

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Particulate matter emissions from this engine shall not exceed 7.71 E-05 lb/MMBtu (0.035 grams/MMBtu).

[Compliance with this emissions limit assures compliance with 25 Pa. Code § 127.13(c)(1)(i).]

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Visible emissions shall not be equal to or greater than 20% for a period or periods aggregating more than three (3) minutes in any one hour or equal or greater than 60% at any time.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

SOx emissions shall not exceed 5.88 E-4 lb/MMBtu (0.27 grams/MMBtu).

[Compliance with this condition assures compliance with 23 Pa, Code 123.21.]

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions shall not exceed any of the following:

- (a) NOx - 0.50 g/hp-hr;
- (b) VOC - 0.25 g/hp-hr; and
- (c) CO - 0.25 g/hp-hr.

[Compliance with this condition assures compliance with 40 CFR 60, Subpart JJJJ, Table 1.]

Fuel Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Only commercial pipeline quality natural gas shall be fired in this engine.

[Compliance with this condition assures compliance with the particulate matter and sulfur oxide emission limits.]

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

The permittee may operate this engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in this engine that is not certified to the emission standards when using propane, the permittee shall conduct a performance test to demonstrate compliance with the emission standards of 40 CFR § 60.4233.

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

The total operating time for this engine shall not exceed 500 hours in any 12 consecutive month period.

Control Device Efficiency Restriction(s).**# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The pressure drop across the catalyst bed shall be less than 8" water gauge, measured on a 4-hour rolling average basis.

II. TESTING REQUIREMENTS.**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

Additional authority for this permit condition is also derived from 25 Pa. Code § 127.411.]

- (a) Following the procedures in 40 CFR § 60.4244, the permittee shall conduct an initial performance test within one (1) year of engine startup and conduct subsequent performance testing every 8,760 hours or three (3) years, whichever comes first, thereafter to demonstrate compliance with the NO_x, VOC, and CO emission limits.
- (b) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.
- (c) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.
- (d) 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 Regional Air Quality Manager for approval.
- (e) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

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

The operating time for this engine shall be monitored by a non-resettable time totalizing meter or other Department approved monitoring method.

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

The permittee shall monitor the pressure drop across the catalyst bed when the engine is in operation.

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

The permittee shall record the operating time for this engine on a monthly, and a 12 consecutive month, basis.

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

The permittee shall record the monitored pressure drop across the catalyst bed.

**SECTION D. Source Level Requirements**

**# 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice and in accordance with Merck's generator preventive maintenance program.

**# 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

The permittee shall retain the following records:

- (a) all notifications required by this subpart and any supporting documentation;
- (b) all maintenance performed on this engine;
- (c) a copy of each performance test; and
- (d) initial notification that includes the following:
 - (1) permittee's name and address;
 - (2) source address;
 - (3) engine information, including make, model, engine family, serial number, model year, maximum engine power and engine displacement;
 - (4) emission control equipment; and
 - (5) fuel type.

V. REPORTING REQUIREMENTS.

**# 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

The permittee shall submit the following to the US EPA and DEP:

- (a) all notifications required by this subpart and any supporting documentation;
- (b) a copy of the performance test within sixty (60) days after each test; and
- (c) initial notification that includes the following:
 - (1) permittee's name and address;
 - (2) source address;
 - (3) engine information, including make, model, engine family, serial number, model year, maximum engine power and engine displacement;
 - (4) emission control equipment; and
 - (5) fuel type.

VI. WORK PRACTICE REQUIREMENTS.

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

The oxidation catalyst shall not be bypassed at any time.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 018 [25 Pa. Code §127.411]****Content of applications.**

This source consists of a 2014 model year Caterpillar, Model G3516B natural gas-fired, lean burn, four-stroke engine, rated at 1,818 bhp, that operates a 1,300 kW generator. An oxidation catalyst has been installed for the control of CO, VOC, and formaldehyde emissions. The unit is installed for use near Building 62.

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

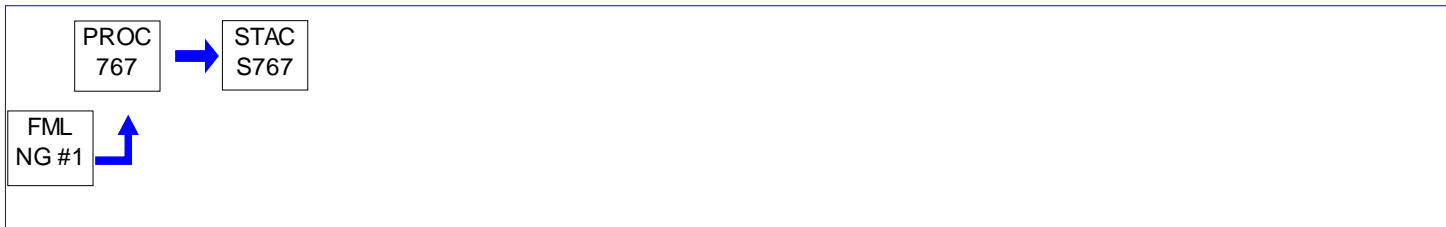
**SECTION D. Source Level Requirements**

Source ID: 767

Source Name: BLDG 38-8 NG EMERG GEN

Source Capacity/Throughput: 7.960 MMBTU/HR

7.729 MCF/HR Natural Gas

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from this engine shall not exceed 0.04 gr/dscf at any time.

002 [25 Pa. Code §123.21]

GeneralNo person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 ppmvd.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?**

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

Emissions from this engine shall not exceed any of the following:

- (a) Nitrogen Oxides (NO_x) - 2.0 g/hp-hr;
- (b) Volatile Organic Compounds (VOC) - 1.0 g/hp-hr; and
- (c) Carbon Monoxide (CO) - 4.0 g/hp-hr.

Fuel Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This engine shall only operate on natural gas.

Operation Hours Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Operating hours for this engine shall not exceed 100 in any 12-consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the operating hours for this engine using a non-resettable meter or Department approved

**SECTION D. Source Level Requirements**

equivalent.

IV. RECORDKEEPING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record the operating time on a monthly, and a 12-consecutive month, basis.

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

The permittee shall retain the following information for a minimum of five (5) years:

- (a) all notifications submitted to comply with 40 CFR 60, Subpart JJJJ and all supporting documentation;
- (b) all maintenance conducted on this engine; and
- (c) all manufacturer's documentation that this engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall:

- (a) operate and maintain this engine in accordance with Merck's established generator preventative maintenance program; and
- (b) keep records of conducted maintenance.

Compliance with this condition assures compliance with 40 CFR § 60.4243(a)(1).

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

This engine must be operated in accordance with 40 CFR § 60.4243(d). Any subsequent revisions to this federal regulation will automatically supersede this permit condition.

VII. ADDITIONAL REQUIREMENTS.

011 [25 Pa. Code §127.411]

Content of applications.

- (a) This source consists of an EPA Certified, 4-stroke, lean-burn, natural gas fired Caterpillar engine, Model Number G3512, Serial number E2P00189. This 1,114 bhp engine powers a 750 kW emergency generator that is used to provide back-up electrical power to Building 38.
- (b) This unit shall not be used for peak shaving purposes or to provide power to the electric grid.



SECTION D. Source Level Requirements

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

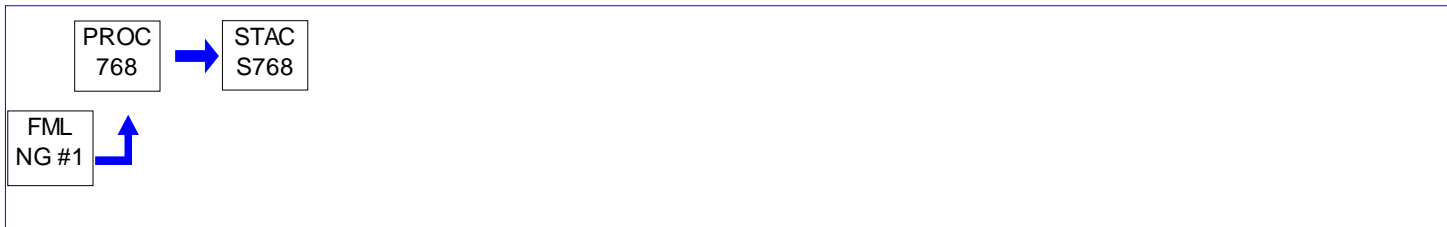
**SECTION D. Source Level Requirements**

Source ID: 768

Source Name: BLDG 46-2 NG EMERG GEN

Source Capacity/Throughput: 8.961 MMBTU/HR

8.700 MCF/HR Natural Gas

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from this engine shall not exceed 0.04 gr/dscf at any time.

002 [25 Pa. Code §123.21]

GeneralNo person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 ppmvd.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?**

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

Emissions from this engine shall not exceed any of the following:

- (a) Nitrogen Oxides (NO_x) - 2.0 g/hp-hr;
- (b) Volatile Organic Compounds (VOC) - 1.0 g/hp-hr; and
- (c) Carbon Monoxide (CO) - 4.0 g/hp-hr.

Fuel Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This engine shall only operate on natural gas.

Operation Hours Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Operating hours for this engine shall not exceed 300 in any 12-consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the operating hours for this engine using a non-resettable meter or Department approved

**SECTION D. Source Level Requirements**

equivalent.

IV. RECORDKEEPING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record the operating time on a monthly, and a 12-consecutive month, basis.

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

The permittee shall retain the following information for a minimum of five (5) years:

- (a) all notifications submitted to comply with 40 CFR 60, Subpart JJJJ and all supporting documentation;
- (b) all maintenance conducted on this engine; and
- (c) all manufacturer's documentation that this engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall:

- (a) operate and maintain this engine in accordance with Merck's established generator preventative maintenance program; and
- (b) keep records of conducted maintenance.

Compliance with this condition assures compliance with 40 CFR § 60.4243(a)(1).

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

This engine must be operated in accordance with 40 CFR § 60.4243(d). Any subsequent revisions to this federal regulation will automatically supersede this permit condition.

VII. ADDITIONAL REQUIREMENTS.

011 [25 Pa. Code §127.411]

Content of applications.

This source consists of an EPA Certified, 4-stroke, lean-burn, natural gas fired Caterpillar engine, Model Number G3512, Serial Number E2700121. This 1,114 bhp engine will power a 750 kW emergency generator that will be used to provide back-up electrical power to Building 46.

This unit shall not be used for peak shaving purposes or to provide power to the electric grid.



SECTION D. Source Level Requirements

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

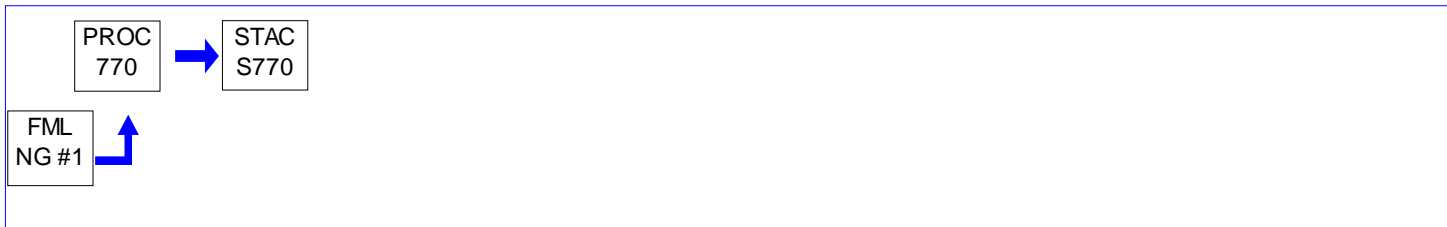
**SECTION D. Source Level Requirements**

Source ID: 770

Source Name: B60-2 NG PEAK GEN (1,300 KW)

Source Capacity/Throughput: 15.017 MMBTU/HR

14.580 MCF/HR Natural Gas

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from this engine shall not exceed 0.04 gr/dscf at any time.

002 [25 Pa. Code §123.21]

GeneralNo person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 ppmvd.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?**

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

Emissions from this engine shall not exceed any of the following:

- (a) Nitrogen Oxides (NO_x) - 1.0 g/hp-hr;
- (b) Volatile Organic Compounds (VOC) - 0.7 g/hp-hr; and
- (c) Carbon Monoxide (CO) - 2.0 g/hp-hr.

Fuel Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This engine shall only operate on natural gas.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**The permittee may operate this source using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations. If propane is used for more than 100 hours per year, the permittee shall conduct a performance test to demonstrate compliance with the short-term emission limits for NO_x, CO, and VOC.**Operation Hours Restriction(s).**

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Operating hours for this engine shall not exceed 500 hours in any 12-consecutive month period.

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.****# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441 and 40 CFR §§ 60.8, 60.4244, and 60.4245]

- (a) Initial performance testing shall occur within one (1) year of engine startup. The permittee shall conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance with the short-term emission limits for NO_x, CO, and VOC.
- (b) Each performance test shall be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR § 60.8, using the stack test methods identified under Table 2 of 40 CFR Part 60, Subpart JJJJ. Each performance test shall consist of three separate test runs, each test run lasting for a minimum of 1 hour.
- (c) Stack testing shall be performed in accordance with the provisions of 25 Pa. Code, Chapter 139.
- (d) To determine compliance with the NO_x, CO, and VOC mass per unit output emission limitations, the permittee shall use the methods described under 40 CFR § 60.4244.
- (e) At least ninety (90) days prior to the test(s), 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.
- (f) At least thirty (30) days prior to the test(s), the Regional Air Quality Manager shall be informed of the date and time of the test.
- (g) Within sixty (60) days after the source test(s), copies of the complete test report, which includes all operating conditions and meets the requirements under Section C (Testing Requirements) of this plan approval, shall be submitted to DEP for approval. Additionally, the permittee shall submit a copy of each performance test to EPA within 60 days after the test has been completed.
- (h) For all source test submissions (notifications, protocols, reports, supplemental information, etc.), the permittee shall submit one paper copy plus one electronic copy to both the AQ Program Manager for the Southeast Regional Office and the PSIMS Administrator in Central Office (mail and email addresses are provided under Section C of this plan approval, under Testing Requirements).
- (i) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

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

The permittee shall monitor the operating hours for this engine using a non-resettable meter or Department approved equivalent.

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

[Additional authority for this permit condition is also derived from 40 CFR § 60.4243]

- (a) The permittee shall record the operating time on a monthly and a 12-consecutive month basis.
- (b) If this source uses propane, the hours of operation while using propane shall be recorded separately, both on a monthly

**SECTION D. Source Level Requirements**

and a 12-consecutive month basis, but also included in the total hours of operation for this source.

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

The permittee shall keep a maintenance plan and records of conducted maintenance for this source.

011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

The permittee shall keep records of the following information:

- (a) All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ, and all documentation supporting any notification.
- (b) Maintenance conducted on the engine.
- (c) Documentation that the engine meets the short-term emission limits for NO_x, CO, and VOC.

V. REPORTING REQUIREMENTS.

012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

The permittee shall submit an initial notification as required in 40 CFR § 60.7(a)(1). The notification shall include the following information:

- (a) Name and address of the owner or operator;
- (b) The address of the affected source;
- (c) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- (d) Emission control equipment; and
- (e) Fuel used.

VI. WORK PRACTICE REQUIREMENTS.

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

[Additional authority for this permit condition is also derived from 40 CFR § 60.4243 and 25 Pa. Code §§ 129.112(c) and 129.115(f).]

The permittee shall maintain and operate the engine in a manner consistent with good air pollution control practice and in accordance with Merck's generator preventative maintenance program. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 014 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

This source consists of a 4-stroke, lean-burn, natural gas fired Caterpillar engine, Model Number G3516B, rated 1,818 bhp. This engine will power a 1,300 kW generator that will be used for backup electrical power for Building 60, maintenance, readiness testing, and peak shaving.

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

**SECTION D. Source Level Requirements**

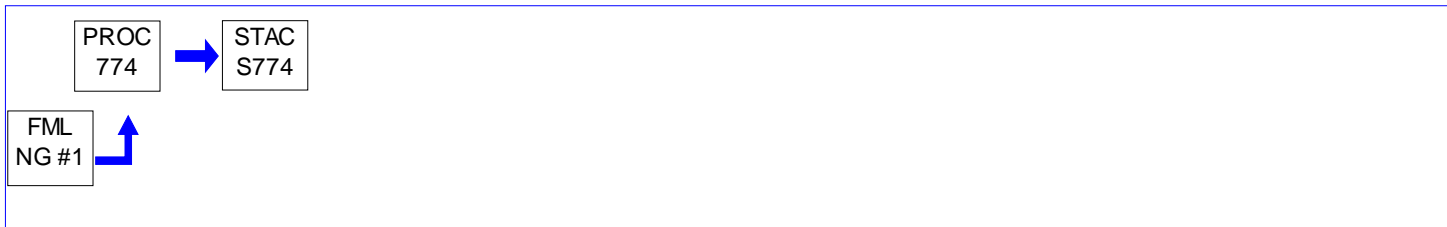
Source ID: 774

Source Name: B16-2 NG EMERG GEN

Source Capacity/Throughput: 8.874 MMBTU/HR

8,700.000 CF/HR

Natural Gas

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from this engine shall not exceed 0.04 gr/dscf at any time.

002 [25 Pa. Code §123.21]

GeneralNo person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 ppmvd.**Fuel Restriction(s).**

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source shall only operate on natural gas.

Operation Hours Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.112(c)(10)]

Operating hours for this source shall not exceed 500 hours in any 12-consecutive month period.

II. TESTING REQUIREMENTS.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

(a) If the permittee does not operate and maintain this source according to the manufacturer's emission-related written instructions, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission limits contained herein this Plan Approval within 1 year of startup.

(b) If performance testing is conducted on this source, performance testing shall be conducted in accordance with 40 CFR § 60.4244.

(c) If performance testing is conducted on this source, the permittee must submit a copy of each performance test as conducted in accordance with 40 CFR § 60.4244 within 60 days after the test has been completed.

**SECTION D. Source Level Requirements****III. MONITORING REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Operating time for this source shall be monitored using a non-resettable hour meter or other Department approved method.

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

(a) The permittee shall keep records of the operation of the engine in emergency and non-emergency service that is recorded through the non-resettable hour meter. The owner shall record the time of operation of the engine and the reason the engine was in operation during that time.

(b) Hours of operation shall be recorded monthly and on a 12-month rolling basis.

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]**Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441 and 40 CFR § 60.4243]

(a) The permittee shall keep records of the following information:

- (1) All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ, and all documentation supporting any notification.
- (2) Maintenance conducted on the engine.
- (3) Documentation that the engine meets the short-term emission limits for NO_x, CO, and VOC.

(b) If the permittee does not operate and maintain this source according to the manufacturer's emission-related written instructions, the permittee must keep a maintenance plan and records of conducted maintenance to demonstrate compliance.

V. REPORTING REQUIREMENTS.**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

If this source is used to supply power as part of a financial arrangement with another entity, as allowed under § 60.4243(d)(3)(i), the permittee shall submit an annual report according to the requirements in paragraphs (a) through (c) of this condition.

(a) The report must contain the following information:

- (1) Company name and address where the engine is located.
- (2) Date of the report and beginning and ending dates of the reporting period.
- (3) Engine site rating and model year.
- (4) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- (5) Hours spent for operation for the purposes specified in 40 CFR § 60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR § 60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

**SECTION D. Source Level Requirements**

(b) 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.

(c) 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 40 CFR § 60.4.

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

[Additional authority for this permit condition is also derived from 40 CFR § 60.4243 and 25 Pa. Code §§ 129.112(c) and 129.115(f).]

The permittee shall maintain and operate the engine in a manner consistent with good air pollution control practice and in accordance with Merck's generator preventative maintenance program. Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]**Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441 and 40 CFR § 60.4231(e)]

This engine shall be certified to meet the following emission rates:

- (a) Nitrogen Oxides (NO_x) - 2.0 g/hp-hr;
- (b) Carbon Monoxide (CO) - 4.0 g/hp-hr; and,
- (c) Volatile Organic Compounds (VOC)* - 1.0 g/hp-hr.

*Formaldehyde emissions are not to be included in determining compliance with the VOC emission limit.

012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]**Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

(b) This source 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 (a), above. Except as provided in paragraph (c) of this condition, 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.

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

- (1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

**SECTION D. Source Level Requirements**

(2) 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.

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

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

(5) 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.

(d) On May 1, 2015, the United States Court of Appeals for the DC Circuit vacated 40 CFR §§ 60.4243(d)(2)(ii) – (iii). Until the vacated conditions are revised, this source may NOT be operated for emergency demand response or for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

VII. ADDITIONAL REQUIREMENTS.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This 750 kW generator is operated by an engine manufactured in October 2021 by Caterpillar, Model No. G3512, rated 1,114 bhp. The serial number for the engine is E2700156.

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

**SECTION D. Source Level Requirements**

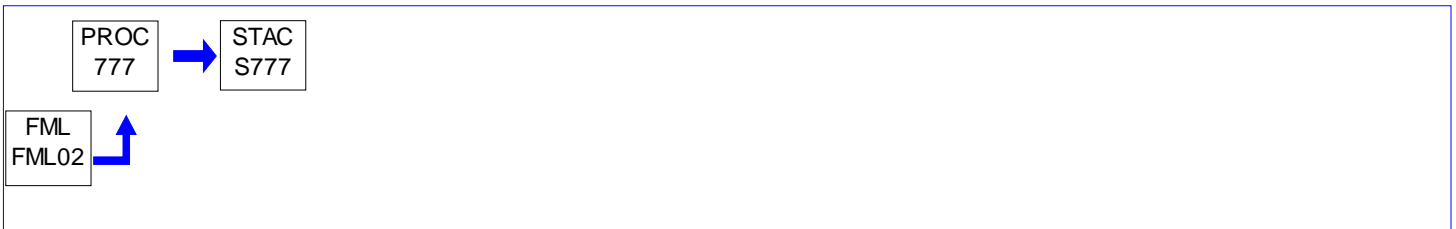
Source ID: 777

Source Name: BLDG 6 FIRE PUMP

Source Capacity/Throughput:

N/A

Diesel Fuel

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) Emissions of NO_x from the fire pump shall remain below 1.0 ton per 12-month rolling period.
- (b) Emissions of VOC from the fire pump shall remain below 1.0 ton per 12-month rolling period.

Operation Hours Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The operating hours for this generator shall be less than 500 hours in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

003 [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?**

The permittee shall monitor the following information:

- (a) hours spent for emergency operation, including the reason for the emergency*;
- (b) hours spent for non-emergency operation**; and
- (c) hours spent for maintenance and readiness checks.

* Operation for emergency demand response is not allowed.

**NOTE. Operation for non-emergency purposes up to fifty (50) hours per 12 consecutive month period, but such operation is counted toward the 100 hours per 12 consecutive month period for maintenance and testing purposes. The fifty (50) hours cannot be used for peak shaving or to generate income by supplying power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall perform calculations as necessary for use in demonstrating compliance with the NO_x and VOC emission limits applicable to this source.

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

- (a) At a minimum, the permittee shall record the hours of operation on a monthly basis and as a 12-month rolling sum.
- (b) If the hours of operation is insufficient for calculating monthly emission rates for demonstrating compliance with the NOx and VOC emission limits, the permittee shall also record monthly fuel usage.

006 [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?**

The following records shall be kept for a minimum of five (5) years:

- (a) a copy of each notification and report that submitted to comply with 40 CFR 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR § 63.10(b)(2)(xiv);
- (b) records of the occurrence, duration, and corrective action of each malfunction of operation (i.e., control and monitoring equipment);
- (c) records of maintenance on the engines in accordance with the maintenance plan or the manufacturer's emission-related written instructions;
- (d) records of the hours of operation for both emergency and non-emergency purposes, including what was classified as an emergency operation; and
- (e) records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR § 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.

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

The permittee shall 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. If an engine is operating during an emergency and it is not possible to shut down the engine in order to perform the scheduled management practice, or if performing the management practice poses an unacceptable risk, the management practice can be delayed until the emergency is over or the unacceptable risk 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.

VI. WORK PRACTICE REQUIREMENTS.**# 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

The permittee shall:

- (a) Maintain a non-resettable hour meter on this unit;
- (b) Operate and maintain the engine and any other treatment device, in accordance with the manufacturer's emissionrelated written instructions, or develop a maintenance plan providing for operation and maintenance of the engine consistent with good air pollution control practices;
- (c) Except during periods of startup, the permittee must meet the following requirements:
 - (1) Change oil and filter every 500 hours of operation or annually, whichever comes first*;
 - (2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
 - (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as

**SECTION D. Source Level Requirements**

necessary.

(d) 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 thirty (30) minutes, after which time the non-startup emission limitations apply.

* The permittee has the option of utilizing an oil analysis program as outlined in Table 2c of 40 CFR 63, Subpart ZZZZ, and in 40 CFR § 63.6625(i).

VII. ADDITIONAL REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) This source is a diesel fire pump located in Bldg 6 (Site Protection & Response) and subject to 40 CFR 63, Subpart ZZZZ.

(b) The diesel fire pump is manufactured by Cummins, Model No. 6BTA5.9-F1, rated at 208 HP. The serial number is 44930627.

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

**SECTION E. Source Group Restrictions.**

Group Name: SG1

Group Description: Engines subject to Subpart ZZZZ

Sources included in this group

ID	Name
150	EMERGENCY GENERATORS (INSTALLED BTW 1997 AND 1999)
381	BLDG 12-1 NG EMERG GEN
735	BLDG 44-E NG EMERG GEN
736	BLDG 82-1 NG EMERG GEN
737	BLDG 33-1 DIESEL EMERG GEN
738	BLDG 24-2 NG EMERG GEN
745	NO. 2 FUEL OIL GENERATORS
746	PROPANE GENERATORS
747	NATURAL GAS GENERATORS
751	BLDG 29-3 DIESEL EMERG GEN
755	BLDG 75B-1 NG EMERG GEN
756	MISC. SUBPART ZZZZ PROPANE GENS
758	MISC. SUBPART ZZZZ NG GENS

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

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from any of the generators listed in the Additional Requirements Section of this Source at any time, in excess of 0.04 gr/dscf, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from any of the generators listed in the Additional Requirements Section for this Source in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 ppmv, dry basis.

Fuel Restriction(s).

003 [25 Pa. Code §127.512]

Operating permit terms and conditions.

Source IDs 150, 381, 735, 736, 738, 747, 755, and 758: Only natural gas shall be used to operate these sources.

Source IDs: 737, 745, 751: Only diesel or #2 fuel oil shall be used to operate these sources.

Source IDs: 746, 756: Only propane shall be used to operate these sources.

[Compliance with this condition ensures compliance with 25 Pa Code § 123.21]

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6604]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**What fuel requirements must I meet if I own or operate an existing stationary CI RICE?**

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

Diesel fuel and No. 2 fuel shall meet the following specification requirements:

- (a) maximum sulfur content of 15 ppmv; and
- (b) minimum cetane index of 40 or a maximum aromatic content of 35%, by volume.

**SECTION E. Source Group Restrictions.****Operation Hours Restriction(s).****# 005 [25 Pa. Code §127.411]****Content of applications.**

[Additional authority for this permit condition is derived 25 Pa. Code § 129.112(c)(10).]

Each of the following generators shall comply with their respective hourly restriction, based on a 12 consecutive month period:

Source ID 150:

Bldg 36-A-1, Ford (1.5 MMBtu/hr) - 100 hours
 Bldg 92-1 Ford (0.5 MMBtu/hr) - 500 hours
 Bldg 62-3 Onan (2.0 MMBtu/hr) - 100 hours
 Bldg 14-1 Cummins (1.7 MMBtu/hr) - 100 hours

Source ID 381, B12-1 - 300 hours
 Source ID 735, B44-E - 500 hours
 Source ID 736, B82-1 - 250 hours
 Source ID 737, B33-1 - 500 hours
 Source ID 738, B24-2 - 500 hours
 Source ID 745, #2 FO Gens - 100 hours per each unit
 Source ID 746, Propane Gens - 100 hours per each unit
 Source ID 747, NG Gens - 100 hours per each unit
 Source ID 751, B29-3 - 390 hours
 Source ID 755, B75B-1 - 250 hours
 Source ID 756, Propane Gens - 100 hours per each unit

Source ID 758:

Bldg 36-1 Cummins (1.6 MMBtu/hr) - 100 hours
 Bldg 38-6 Cummins (11.0 MMBtu/hr) - 400 hours
 Bldg 10-1 Caterpillar (2.0 MMBtu/hr) - 100 hours
 Bldg 01-3 Katolight (4.2 MMBtu/hr) - 250 hours
 Bldg 56-3 Onan (0.6 MMBtu/hr) - 100 hours

II. TESTING REQUIREMENTS.**# 006 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable tests for the analysis of commercial fuel oil to demonstrate compliance with the sulfur limitation for the sources firing diesel or #2 fuel oil:

- (1) the fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).
- (2) test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).
- (3) results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The testing requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained each time a fuel oil delivery is made to demonstrate compliance with the sulfur limitation for these generators.

(c) In lieu of fuel oil analysis or fuel oil receipts with each delivery, the permittee shall receive annually from the fuel oil supplier, a certification that all of the fuel oil delivered to the facility indicates the following minimum or maximum specifications, as applicable:

- (1) sulfur content to not exceed 15 ppm; and
- (2) cetane index or aromatic content as follows:
 - (A) cetane index – minimum of 40; or

**SECTION E. Source Group Restrictions.**

- (B) aromatic content – maximum of 35 volume%.
- (3) If the permittee changes fuel oil supplier during the course of the calendar year, the above certifications shall be required from each new fuel oil supplier.

III. MONITORING REQUIREMENTS.**# 007 [25 Pa. Code §127.411]****Content of applications.**

The permittee shall use a non-resettable hour meter, or Department approved equivalent, to monitor the hours of operation for each generator.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

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

The permittee shall monitor the following information for each generator:

- (a) hours spent for emergency operation, including what classified the operation as an emergency*;
- (b) hours spent for non-emergency operation**; and
- (c) hours spent for maintenance and readiness checks (note - 100 hours are permissible per year; but the permittee can petition for additional hours).

* Operation for emergency demand response is not allowed.

** Operation for non-emergency purposes up to fifty (50) hours per year is allowed, but such operation is to be counted toward the 100 hour limit in (c), above. The fifty (50) hours per year cannot be used for peak shaving or to generate income by supplying power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

IV. RECORDKEEPING REQUIREMENTS.**# 009 [25 Pa. Code §127.411]****Content of applications.**

The permittee shall keep records of the following:

- (a) Operating hours from each generator on a monthly basis and on a 12-consecutive month basis;
- (b) Emissions from those generators with emission limits, on a monthly basis and on a 12-consecutive month basis, such that compliance can be determined with the applicable emission limits;
- (c) The date, cause, and duration of electrical interruptions; and,
- (d) A copy of the manufacturer's specifications for each generator.

010 [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?**

The following records shall be retained:

- (a) A copy of each report submitted;
- (b) Information concerning the occurrence and duration of each malfunction of operation; (i.e., control or monitoring equipment), along with the corrective actions taken related to the malfunction;
- (c) Maintenance performed on the engine in accordance with Merck's established generator preventive maintenance program;
- (d) Operating hours on the engine for both emergency and non-emergency purposes; including what was classified as an emergency operation; and,
- (e) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §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.

**SECTION E. Source Group Restrictions.****V. REPORTING REQUIREMENTS.****# 011 [25 Pa. Code §127.411]****Content of applications.**

The permittee shall 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. If an engine is operating during an emergency and it is not possible to shut down the engine in order to perform the scheduled management practice, or if performing the management practice poses an unacceptable risk, the management practice can be delayed until the emergency is over or the unacceptable risk 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.

VI. WORK PRACTICE REQUIREMENTS.**# 012 [25 Pa. Code §127.411]****Content of applications.**

Source IDs 735 (B44-E) and 736 (B82-1): Only applicable to these sources, the permittee shall operate and maintain a catalytic converter on these sources to control the emissions of NO_x, CO, and VOC.

Source ID 737 (B33-1): Only applicable to this source, equipment (thermocouples or equivalent as approved by the Department) shall be provided so that, at the request of the Department, a minimum exhaust gas temperature drop of 30°F through the aftercooler can be measured.

013 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

The permittee shall perform sufficient calculations to demonstrate compliance with the emission limits for each source, as applicable, and to make these calculations available to the Department upon request.

(a) Compliance with the particulate matter emission limit is calculated by the following equation:

$$(\text{Emission factor}) \times (\text{Heat input}) / (\text{generator exhaust gas}).$$

The emission factor is based on an AP-42 factor or as determined by stack testing.

(b) Compliance with the sulfur limit is calculated by the following equation:

$$(\text{moles of SO}_2 / \text{moles of exhaust gas})$$

The number of moles of SO₂ in the fuel oil and exhaust gas is based on sulfur content in fuel and a combustion formula at stoichiometric conditions.

(c) Compliance with the VOC emission limit is calculated by the following equation:

$$(\text{Emission factor}) \times (\text{Heat input or fuel feed rate}) \times (\text{Hours of oper.})$$

The emission factor is based on a generator vendor factor or as determined by stack testing.

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

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

The permittee shall:

(a) Maintain a non-resettable hour meter on each engine;

(b) Operate and maintain each engine, and any after treatment device, in accordance with Merck's established generator preventive maintenance program providing for operation and maintenance of the engine consistent with good air pollution control practices;

**SECTION E. Source Group Restrictions.**

(c) Minimize each engine's time spent at idle during startup, and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed thirty (30 minutes); and

(d) Perform the following maintenance on each engine:

- (1) Change the oil and filter every 500 hours or annually, whichever comes first. There is also an option to utilize an oil analysis program in order to extend the specified oil change requirement as outlined in 40 CFR § 63.6625(j);
- (2) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary;
- (3) For spark ignition engines (i.e., natural gas or propane fired), inspect the spark plugs every 1,000 hours or annually, whichever comes first; and,
- (4) For compression ignition engines (i.e. diesel or No. 2-fired), inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.

(e) Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

[Compliance with this condition ensures that the following generators comply with 25 Pa. Code §§ 129.112(c) and 129.115(f): Source 745 (B45-1 diesel emergency generator), Source 755, and Source 758 (Bldg 38-6 natural gas emergency generator and Bldg 3-1 natural gas emergency generator).]

015 [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) The permittee shall operate each emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 63.6640(f).

(b) If the permittee does not operate an engine according to the requirements of 40 C.F.R. Section 63.6640(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 63 Subpart ZZZZ and must meet all requirements for nonemergency engines.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION E. Source Group Restrictions.**

Group Name: SG2

Group Description: Peak Engines subject to Subpart ZZZZ

Sources included in this group

ID	Name
732	BLDG 81 NG PEAK GENS (81-1, 81-2)
748	BLDG 17-1 NG PEAK GEN

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 either of these sources at any time, in excess of 0.04 gr/dscf, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

002 [25 Pa. Code §123.21]**General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from either of these sources in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 ppmvd.

003 [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 station**

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

Except during periods of start-up, the CO emissions from these engines shall either:

- (a) not exceed 47 ppmvd at 15% oxygen; or
- (b) be reduced by 93% or more.

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

Only natural gas shall be combusted in these generators.

Operation Hours Restriction(s).**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) Each engine associated with Source ID 732 shall be limited to operating no more than 500 hours in any 12 consecutive month period.

(b) The engine associated with Source ID748 shall be limited to operating no more than 800 hours in any 12 consecutive month period.

II. TESTING REQUIREMENTS.**# 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

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

Each year a compliance demonstration must be conducted that meets the following:

**SECTION E. Source Group Restrictions.**

- (a) must consist of at least one test run;
- (b) each test run must be at least 15 minutes, except that each test conducted using the method in Appendix A of 40 CFR Part 63, Subpart ZZZZ must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement;
- (c) measurement of CO emissions must be done in accordance with Table 4 of 40 CFR Part 63, Subpart ZZZZ;
- (d) measurement of O₂ must be done using one of the O₂ measurement methods in Table 4 of 40 CFR Part 63, Subpart ZZZZ; and
- (e) if results of the annual compliance demonstration show the emissions exceed the CO levels above, the unit must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The unit must be retested within seven (7) days of being restarted and the emissions must meet the CO levels. If the retest shows that the CO emission limits continue to be exceeded, the unit must be shut down again as soon as safely possible and the unit may not operate until testing shows compliance with the CO levels.

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

- (a) A non-resettable hour meter, or Department approved equivalent, shall be used to monitor the hours of operation for each generator.
- (b) The operating hours shall be monitored each operating day.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

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

- (a) The permittee shall install a CPMS to continuously monitor the inlet temperature of the oxidation catalyst so that the inlet temperature (a 4-hour average) can be verified to be greater than or equal to 450°F and less than or equal to 1350°F, except during start-up. Temperature data shall be reduced to 4-hour rolling averages.
- (b) The permittee shall develop a site-specific monitoring plan for the CPMS and implement it in accordance with 40 CFR § 63.6625(b).
- (c) If an oxidation catalyst is not being used on the engine, the permittee must continuously monitor and record the operating parameters (if any) approved by the Administrator.

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

A record of the following shall be retained for each generator:

- (a) the date of electrical interruption;
- (b) the cause of the electrical interruption;
- (c) the duration of the electrical interruption; and,
- (d) air pollution control system performance evaluation and records of calibration checks, adjustments, and maintenance performed on each generator.

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

A copy of the manufacturer's specifications for each generator shall be maintained on-site.

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

- (a) The hours of operation for each generator shall be recorded on a monthly basis to show compliance with the operating hour limit.
- (b) Emissions from each generator shall be calculated on a monthly and on a 12-consecutive month basis and used to demonstrate compliance with each of the emission limits for each generator for NO_x, CO, and VOC emissions each month.

**SECTION E. Source Group Restrictions.****# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

When a malfunction occurs for this source, the permittee shall record the following information:

- (a) date of the malfunction;
- (b) time of the malfunction;
- (c) duration of the malfunction; and
- (d) cause of the malfunction and an corrective action taken.

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

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

The following must be recorded and retained for a minimum of five (5) years:

- (a) a copy of each report and notification submitted;
- (b) the occurrence and duration of each malfunction of the control or monitoring equipment and the corrective action taken;
- (c) maintenance performed on each engine in accordance with Merck's established generator preventive maintenance program;
- (d) performance test, CPMS performance evaluations (if any), and opacity and visible emission observations; and,
- (e) records related to continuous compliance testing and operation of any CEMs, CPMS, or oxidation catalyst.

V. REPORTING REQUIREMENTS.**# 014 [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?**

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

The semiannual compliance report shall be completed as part of the permittee's Title V semi-annual deviation report and shall contain the description of each malfunction, including the number, duration, and causes of deviations from an emission limit or operating limitation, and the corrective action taken. If no deviations occurred during the reporting period, the report must state this as required by 40 CFR § 63.6650.

VI. WORK PRACTICE REQUIREMENTS.**# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.112(c)(2) and 129.115(f).]

- (a) The permittee shall operate and maintain each generator in accordance with Merck's established generator preventive maintenance program and consistent with good operating and maintenance practices, as well as good air pollution control practices.
- (b) Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

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

Source ID 748 (B17-1): Only applicable to this source, emissions of CO and VOC shall be controlled by the use of a catalytic converter.

017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6604]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What fuel requirements must I meet if I own or operate an existing stationary CI RICE?**

[Additional authority for this permit condition is also derived from 40 CFR § 60.6625(h) and 25 Pa. Code § 127.441.]

**SECTION E. Source Group Restrictions.**

The permittee shall minimize each engine's time spent at idle during startup, and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed thirty (30) minutes, after which time the non-startup emission limitations apply.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION E. Source Group Restrictions.**

Group Name: SG3

Group Description: Mobile Diesel Engines

Sources included in this group

ID	Name
733	M-5 MOBILE DIESEL GENERATOR
734	M-6 MOBILE DIESEL GENERATOR

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 these sources at any time, in excess of 0.04 gr/dscf, pursuant to 25 Pa. Code § 123.13 (c)(1)(i).

002 [25 Pa. Code §123.21]**General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from either of these sources in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 ppmvd.

Fuel Restriction(s).**# 003 [25 Pa. Code §127.411]****Content of applications.**

Only diesel/No. 2 fuel oil with a sulfur content less than or equal to 0.2%, by weight, shall be used in the operation of each generator.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code § 123.21.]

Operation Hours Restriction(s).**# 004 [25 Pa. Code §127.411]****Content of applications.**

Source ID 733 (M5): The operating hours for this generator shall not exceed 400 in any 12 consecutive month period.

Source ID 734 (M6): The operating hours for this generator shall not exceed 400 in any 12 consecutive month period.

[Compliance with this permit condition assures compliance with 25 Pa. Code § 129.112(c)(10).]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.**# 005 [25 Pa. Code §127.411]****Content of applications.**

A non-resettable hour meter, or Department approved equivalent, shall be used to monitor the hours of operation for each generator.

IV. RECORDKEEPING REQUIREMENTS.**# 006 [25 Pa. Code §127.411]****Content of applications.**

A record of the following shall be retained:

- (a) the date of electrical interruption;
- (b) the cause of the electrical interruption and,
- (c) the duration of the electrical interruption.

**SECTION E. Source Group Restrictions.****# 007 [25 Pa. Code §127.411]****Content of applications.**

A copy of the manufacturer's specifications for each generator shall be maintained on-site.

008 [25 Pa. Code §127.411]**Content of applications.**

(a) The hours of operation for each generator shall be recorded on a monthly basis.

(b) Emissions from each generator shall be calculated on a monthly and on a 12-consecutive month basis and used to demonstrate compliance with each of the emission limits.

(c) The permittee shall keep records of the specific location of each engine, along with the duration of time, in months, that each engine has been at its specific location.

009 [25 Pa. Code §127.411]**Content of applications.**

The permittee shall maintain documentation that the engines meet the tiered emissions standards found in 40 CFR Part 89 for the model year and power rating of the engines.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 010 [25 Pa. Code §127.411]****Content of applications.**

(a) The generators shall only be used during electrical failures or to perform preventative maintenance. The generators shall not be used to supplement the primary power to the facility.

(b) Preventive maintenance shall be performed in accordance with Merck's established generator preventive maintenance program.

011 [25 Pa. Code §127.411]**Content of applications.**

(a) The permittee shall not remove, render inoperative, or bypass a device or element of the engine's' designs.

(b) If an engine remains stationary for more than twelve (12) consecutive months, then the permittee shall comply with either 40 CFR 63, Subpart ZZZZ or 40 CFR 60, Subpart IIII, as appropriate.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION E. Source Group Restrictions.**

Group Name: SG4

Group Description: Peak Shaving Engines subject to NSPS IIII

Sources included in this group

ID	Name
754	BLDG 70A-1 DIESEL PEAK GEN
763	M-8 DIESEL PEAK GEN
764	M-9 DIESEL PEAK GEN

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 these sources at any time, in excess of 0.04 gr/dscf, pursuant to 25 Pa. Code § 123.13 (c)(1)(i).

002 [25 Pa. Code §123.21]**General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from either of these sources in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 ppmvd.

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

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

Fuel oil specifications shall meet the following:

- (a) sulfur content - not exceed 15 ppm; and
- (b) cetane index - a minimum of 40, or the aromatic content - a maximum of 35% by volume.

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

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

Operating times shall not exceed either of the following in any 12 consecutive month period:

- (a) maintenance checks and readiness tests - 100 hours for each engine; and
- (b) Source ID 754 (B70A-1): total operational time - 499 hours.
Source ID 763 (M8): total operational time - 400 hours.
Source ID 764 (M9): total operational time - 400 hours.

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

(a) The following are applicable tests for the analysis of commercial fuel oil to demonstrate compliance with the sulfur limitation for this source each source:

- (1) the fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the sources shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).
- (2) test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).
- (3) results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion

**SECTION E. Source Group Restrictions.**

units).

(b) The testing requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained each time a fuel oil delivery is made to demonstrate compliance with the sulfur limitation for this generator each generator.

(c) In lieu of fuel oil analysis or fuel oil receipts with each delivery, the permittee shall receive annually from the fuel oil supplier, a certification that all of the fuel oil delivered to the facility indicates the following minimum or maximum specifications, as applicable:

- (1) sulfur content to not exceed 15 ppm; and
- (2) cetane index or aromatic content as follows:
 - (A) cetane index – minimum of 40; or
 - (B) aromatic content – maximum of 35 volume%.
- (3) If the permittee changes fuel oil supplier during the course of the calendar year, the above certifications shall be required from each new fuel oil supplier.

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4204]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

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

Source ID 764 (M9): Applicable only to this source, the owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in 40 CFR § 60.4212.

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

Source ID 764 (M9): Only applicable to this source, if the permittee does not install, configure, operate, and maintain the source according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:

- (a) The permittee must conduct an initial performance test to demonstrate compliance with the applicable Tier 4 emission standards within 1 year of startup, or within 1 year after the engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer.
- (b) The permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with Tier 4 emission standards.

III. MONITORING REQUIREMENTS.

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

Operating times for each source shall be monitored using a non-resettable hour meter or other Department approved method.

IV. RECORDKEEPING REQUIREMENTS.

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

The permittee shall calculate the following monthly and 12 consecutive month operating hours for each source:

- (a) maintenance checks and/or readiness testing; and
- (b) total operating time.

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

[Additional authority for this condition is derived from 40 CFR § 60.4207.]

**SECTION E. Source Group Restrictions.**

- (a) Records shall be retained that indicate the sulfur content and cetane (or aromatic) content of the fuel oil.
 (b) In the event that the above is not received with each fuel delivery, the permittee shall perform such testing to indicate the above.

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

Source ID 764 (M9): Applicable only to this source, if the permittee does not install, configure, operate, and maintain this source according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must:

- (a) Keep a maintenance plan and records of conducted maintenance.
 (b) Maintain records and reports of performance testing conducted on this source, as would be required per 40 CFR § 60.4211.

012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214]**Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?**

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

Source ID 754 (B70A-1): Only applicable to this source, the permittee shall record the following information:

- (a) documentation that the engine is certified to meet the Tier 2 emission standards; and
 (b) if a particulate filter is used, records must be kept of any corrective action taken after the back pressure monitor has been activated.

Source ID 764 (M9): Applicable only to this source, the permittee shall maintain the necessary documents to demonstrate that this source was purchased as a certified engine meeting Tier 4 emission standards.

V. REPORTING REQUIREMENTS.

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

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

[Additional authority for this condition is derived from 40 CFR § 60.4211.]

- (a) The permittee shall:
- (1) Maintain a non-resettable hour meter on each generator;
 - (2) Operate and maintain each engine in accordance with Merck's established generator preventive maintenance program;
 - (3) Not tamper with any device or element of design unless allowed by the manufacturer; and
 - (4) Change only those emission-related settings that are permitted by the manufacturer.

(b) Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

[Compliance with this condition ensures that Source 754 complies with 25 Pa. Code §§ 129.112(c) and 129.115(f).]

014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]**Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?**

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

Source ID 764 (M9): Applicable only to this source -

**SECTION E. Source Group Restrictions.**

- (a) The permittee shall do all of the following, except as permitted under paragraph (b) of this condition:
- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; and,
 - (2) Change only those emission-related settings that are permitted by the manufacturer.
- (b) If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
- (1) The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions; and,
 - (2) The must conduct a performance test as described under Testing Requirements.

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

Source ID 754 (70A-1) is a 1,000-kW diesel-fired generator set with a Caterpillar engine, Model C32, rated 1,502 bhp.

Source ID 763 (M8) is a 2,000-kW diesel-fired generator set with a Caterpillar engine, Model 3516C, rated at 2,944 bhp; the air emissions are controlled with SCR and an oxidation catalyst for NO_x and CO/VOC reduction, respectively.

Source ID 764 (M9) is a 2,000-kW diesel-fired generator set manufactured in August 2014, with a Caterpillar engine, Model 3516C, rated at 2,944 bhp, and the engine family is ECPXL78.1NSA. The air emissions are controlled with SCR and an oxidation catalyst for NO_x and CO/VOC reduction, respectively.

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

**SECTION E. Source Group Restrictions.**

Group Name: SG5

Group Description: Emergency Engines Subject to NSPS IIII

Sources included in this group

ID	Name
152	BLDG 28-2 DIESEL EMERG GEN
753	BLDG 66-1 DIESEL EMERG GEN
759	BLDG 95-2 DIESEL EMERG GEN

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 these sources at any time, in excess of 0.04 gr/dscf, pursuant to 25 Pa. Code § 123.13 (c)(1)(i).

002 [25 Pa. Code §123.21]**General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from either of these sources in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 ppmvd.

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

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

Fuel specifications for these engines shall meet the following:

- (a) sulfur content of 15 ppm maximum; and
- (b) minimum cetane index of 40, or a maximum aromatic content of 35%, by volume.

[Compliance with (a), above, assures compliance with 25 Pa. Code § 123.21.]

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

[Additional authority for this condition is derived from 40 CFR § 60.4211 and 25 Pa. Code § 129.112(c)(10).]

Operating time shall not exceed either of the following in any 12 consecutive month period:

- (a) maintenance checks and readiness tests - 100 hours;
- (b) Source ID 152 (B28-2): total operational time - less than 100 hours;
- (c) Source ID 753 (B66-1): total operational time - less than 500 hours; and,
- (d) Source ID 759 (B95-2): total operational time - less than 100 hours.

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

(a) The following are applicable for the analysis of commercial fuel oil to demonstrate compliance with the sulfur limitation for these sources:

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

**SECTION E. Source Group Restrictions.**

139.4(12)--(15).

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

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained each time a fuel oil delivery is made to demonstrate compliance with the sulfur limitation for this generator.

(c) In lieu of fuel oil analysis or fuel oil receipts with each delivery, the permittee shall receive annually from the fuel oil supplier, a certification that all of the fuel oil delivered to the facility indicates the following minimum or maximum specifications, as applicable:

(1) sulfur content to not exceed 15 ppm; and

(2) cetane index or aromatic content as follows:

(A) cetane index – minimum of 40; or

(B) aromatic content – maximum of 35 volume%.

(3) If the permittee changes fuel oil supplier during the course of the calendar year, the above certifications shall be required from each new fuel oil supplier.

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

[Additional authority for this permit condition is derived from 40 CFR § 60.4209.]

The following shall be monitored using a non-resettable hour meter or other Department approved method:

(a) hours spent for emergency operation; and

(b) hours spent for non-emergency operation*; and

(c) hours spent for maintenance and readiness checks (maximum of 100 hours per annum, but can petition for additional hours if necessary).

* Operation for non-emergency purposes up to 50 hours per 12-consecutive month period is allowed, but such operation is counted toward the 100 hour limit for maintenance and testing. This 50 hour limitation cannot be used for peak shaving or to generate income by supplying power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

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

Source ID 152 (B28-2): Applicable to this source only, the permittee shall record the following on a monthly, and 12-consecutive month, basis:

(a) Operating times; and

(b) NOx emissions aggregated from Sources 152, 153, 750A, and 761.

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

[Additional authority for this condition is also derived from 40 CFR § 63.6590(c)(1).]

(a) The permittee shall record the following information for Sources 152 (B28-2), 753 (B66-1), and 759 (B95-2):

(1) fuel supplier records showing the maximum sulfur content, and either the cetane index or aromatic content; and,

(2) records of the hours of operation for emergency and maintenance/readiness checks.

(b) The permittee shall record the following from Sources 753 (B66-1) and 759 (B95-2):

(1) documentation that the engine is certified to meet the Tier 2 emission standards; and

(2) if a particulate filter is used, records must be kept of any corrective action taken after the back pressure monitor has been activated.

**SECTION E. Source Group Restrictions.****# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall keep records of the operation of each engine in emergency and non-emergency service that is recorded through the non-resettable hour meter or other Department-approved method. The permittee must record the time of operation of each engine and the reason the engine was in operation during that time.

V. REPORTING REQUIREMENTS.

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

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

[Additional authority for this condition is also derived from 40 CFR § 60.4211.]

(a) The permittee shall:

- (1) Maintain a non-resettable hour meter on each generator;
- (2) Operate and maintain each engine in accordance with Merck's established preventive maintenance program; and,
- (3) Not tamper with any device or element of design unless allowed by the manufacturer.

(b) Manufacturer's specifications for maintenance and operation, or records of repair and maintenance shall be made available to the Department upon request.

[Compliance with this condition ensures that Source 753 complies with 25 Pa. Code §§ 129.112(c) and 129.115(f).]

VII. ADDITIONAL REQUIREMENTS.**# 011 [25 Pa. Code §127.411]****Content of applications.**

Source ID 152 consists of a 750-kW diesel-fired emergency generator with a Cummins engine, Model QST30-G5, designated as B28-2, rated 1,490 hp.

Source ID 753 consists of a 1,500-kW diesel-fired emergency generator with a Caterpillar engine, Model 3512C, designated as B66-1, rated 2,206 bhp (15.2 MMBtu/hr).

Source ID 759 consists of a 50-kW diesel-fired peak generator with a Caterpillar engine, Model 3054C, designated B95-2, rated approximately 95 bhp (0.6 MMBtu/hr).

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

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this Title V facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
033	ERIE CITY BOILER 3		
Emission Limit			
0.150	Lbs/MMBTU	Daily basis; nat gas or #2 fuel oil	NOX
98.000	Tons/Yr	Determined on a 12-month rolling basis	NOX
12.300	Tons/Yr	Aggregated; Determined on a 12-month rolling basis	VOC
035	KEELER BOILER 5		
Emission Limit			
0.200	Lbs/MMBTU	Daily basis; nat gas or #2 fuel oil	NOX
82.000	Tons/Yr	Determined on a 12-month rolling basis	NOX
12.300	Tons/Yr	Aggregated; Determined on a 12-month rolling basis	VOC
041	BABCOCK WILCOX BOILER 7		
Emission Limit			
6.640	Lbs/Hr	Fuel oil	CO
6.890	Lbs/Hr	Nat gas	CO
30.100	Tons/Yr	Determined on a 12-month rolling basis	CO
0.100	Lbs/MMBTU	Daily avg; Nat gas	NOX
0.120	Lbs/MMBTU	Daily avg; Fuel oil	NOX
39.600	Tons/Yr	Determined on a 12-month rolling basis	NOX
0.840	Lbs/Hr	Nat gas	PM10
8.100	Tons/Yr	Determined on a 12-month rolling basis	PM10
13.100	Lbs/Hr	Fuel oil	PM10
48.550	Lbs/Hr	Fuel oil	SO2
1.680	Lbs/Hr	Nat gas	SOX
24.200	Tons/Yr	Determined on a 12-month rolling basis	SOX
0.840	Lbs/Hr	Nat gas	TSP
8.100	Tons/Yr	Determined on a 12-month rolling basis	TSP
13.110	Lbs/Hr	Fuel oil	TSP
0.190	Lbs/Hr	Nat gas	VOC
3.700	Tons/Yr	Determined on a 12-month rolling basis	VOC
7.940	Lbs/Hr	Fuel oil	VOC
042	ABCO BOILER 8		
Emission Limit			
10.000	PPMV		Ammonia
0.370	Lbs/MMBTU	Daily avg; Natural gas	CO
0.380	Lbs/MMBTU	Daily avg; #2 fuel oil	CO
55.400	Tons/Yr	Determined on a 12-month rolling basis	CO
0.012	Lbs/MMBTU	Daily avg; Natural gas	NOX
0.100	Lbs/MMBTU	Daily avg; #2 fuel oil	NOX
32.900	Tons/Yr	Determined on a 12-month rolling basis	NOX
0.010	Lbs/MMBTU	Daily avg; Natural gas	PM10
0.060	Lbs/MMBTU	Daily avg; #2 fuel oil	PM10
10.600	Tons/Yr	Determined on a 12-month rolling basis	PM10

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
16.900	Tons/Yr	Determined on a 12-month rolling basis	SOX
0.010	Lbs/MMBTU	Daily avg; Natural gas	TSP
0.060	Lbs/MMBTU	Daily avg; #2 fuel oil	TSP
10.600	Tons/Yr	Determined on a 12-month rolling basis	TSP
0.010	Lbs/MMBTU	Daily avg; Natural gas	VOC
0.011	Lbs/MMBTU	Daily avg; #2 fuel oil	VOC
3.100	Tons/Yr	Determined on a 12-month rolling basis	VOC
045	BOILER 10		
Emission Limit		Pollutant	
10.000	PPMV		Ammonia
0.370	Lbs/MMBTU	Daily avg; Nat. gas	CO
0.380	Lbs/MMBTU	Daily avg; #2 fuel oil	CO
55.400	Tons/Yr	Determined on a 12-month rolling basis	CO
0.012	Lbs/MMBTU	Daily avg; Nat. gas	NOX
0.100	Lbs/MMBTU	Daily avg; #2 fuel oil	NOX
32.900	Tons/Yr	Determined on a 12-month rolling basis	NOX
0.010	Lbs/MMBTU	Daily avg; Nat. gas	PM10
0.060	Lbs/MMBTU	Daily avg; #2 fuel oil	PM10
10.600	Tons/Yr	Determined on a 12-month rolling basis	PM10
16.900	Tons/Yr	Determined on a 12-month rolling basis	SOX
0.010	Lbs/MMBTU	Daily avg; Nat. gas	TSP
0.060	Lbs/MMBTU	Daily avg; #2 fuel oil	TSP
10.600	Tons/Yr	Determined on a 12-month rolling basis	TSP
0.010	Lbs/MMBTU	Daily avg; Nat. gas	VOC
0.011	Lbs/MMBTU	Daily avg; #2 fuel oil	VOC
3.100	Tons/Yr	Determined on a 12-month rolling basis	VOC
039	COGEN II GAS TURBINE		
Emission Limit		Pollutant	
391.300	Tons/Yr	Determined on a 12-month rolling basis	CO
25.000	PPMV	Daily avg; Nat gas; 15% O2, dry basis	NOX
128.230	Tons/Yr	Determined on a 12-month rolling basis	NOX
17.350	Tons/Yr	Determined on a 12-month rolling basis	PM2.5
23.500	Tons/Yr	Determined on a 12-month rolling basis	SOX
150.000	PPMV	15% O2, dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
63.000	Tons/Yr	Determined on a 12-month rolling basis	TSP
1.970	Tons/Yr	Determined on a 12-month rolling basis	VOC
5.000	PPMV	15% O2, dry basis	VOC
12.300	Tons/Yr	Aggregated; Determined on a 12-month rolling basis	VOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
043	COGEN III GAS TURBINE		
Emission Limit		Pollutant	
67.000	PPMV	15% O ₂ , dry basis	CO
160.700	Tons/Yr	Determined on a 12-month rolling basis	CO
9.000	PPMV	15% O ₂ , dry basis	NOX
30.000	PPMV	Isochr or elect disturbance at 15% O ₂	NOX
79.100	Tons/Yr	Determined on a 12-month rolling basis	NOX
10.000	Lbs/Hr	Hourly average	PM10
43.900	Tons/Yr	Determined on a 12-month rolling basis	PM10
0.006	Lbs/MMBTU		SOX
14.400	Tons/Yr	Determined on a 12-month rolling basis	SOX
150.000	PPMV	15% oxygen	SOX
5.000	Lbs/Hr	Hourly average	TSP
22.000	Tons/Yr	Determined on a 12-month rolling basis	TSP
0.004	Lbs/MMBTU	15% O ₂ , dry basis	VOC
9.600	Tons/Yr	Determined on a 12-month rolling basis	VOC
105	BIOLOGICAL MANUFACTURING		
Emission Limit		Pollutant	
28.320	Tons/Yr	Aggregate limit (B28, B29, B60, B65, and B76); Determined on a 12-month rolling basis	VOC
105A	SHELL FREEZERS (B28, B62, & B66)		
Emission Limit		Pollutant	
2.700	Tons/Yr	Per each shell freezer; Determined on a 12-month rolling basis	VOC
5.300	Tons/Yr	Aggregate limit (B28, B62, and B66); Determined on a 12-month rolling basis	VOC
107	BUILDING 12		
Emission Limit		Pollutant	
30.600	Tons/Yr	Disinfection; Determined on a 12-month rolling basis	VOC
108	BUILDING 66		
Emission Limit		Pollutant	
11.900	Tons/Yr	Disinfection; Determined on a 12-month rolling basis	VOC
111	BUILDING 62		
Emission Limit		Pollutant	
7.080	Tons/Yr	Disinfection operations; Determined on a 12-month rolling basis	VOC
112	BUILDING 38 DISINFECTION OPERATIONS		
Emission Limit		Pollutant	
5.900	Tons/Yr	Determined on a 12-month rolling basis	VOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
150	EMERGENCY GENERATORS (INSTALLED BTW 1997 AND 1999)		
Emission Limit		Pollutant	
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
152	BLDG 28-2 DIESEL EMERG GEN		
Emission Limit		Pollutant	
3.500	GRAMS/KW-Hr		CO
2.750	Tons/OZNESEAS	Aggregate	NOX
6.600	Tons/Yr	Aggregate; Determined on a 12-month rolling basis	NOX
100.000	Lbs/Hr	Aggregate	NOX
1,000.000	Lbs/Day	Aggregate	NOX
6.400	GRAMS/KW-Hr		NOx+NMHC
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
0.200	GRAMS/KW-Hr		TSP
153	EXEMPT NG GENERATORS (NSPS JJJJ)		
Emission Limit		Pollutant	
4.000	GRAMS/HP-Hr	540 hp and 177 hp	CO
387.000	GRAMS/HP-Hr	67 hp engine	CO
2.000	GRAMS/HP-Hr	540 hp and 177 hp	NOX
2.750	Tons/OZNESEAS	Aggregate	NOX
6.600	Tons/Yr	Aggregate; Determined on a 12-month rolling basis	NOX
100.000	Lbs/Day	Aggregate	NOX
1,000.000	Lbs/Day	Aggregate	NOX
10.000	GRAMS/HP-Hr	67 hp engine	NOx+NMHC
1.000	GRAMS/HP-Hr	540 hp and 177 hp	VOC
378	MISC VOC SOURCES		
Emission Limit		Pollutant	
2.700	Tons/Yr	Per source; Determined on a 12-month rolling basis	VOC
3.000	Lbs/Hr	Per source	VOC
15.000	Lbs/Day	Per source	VOC
380	4 SHELL FREEZERS BLDG 12/12A		
Emission Limit		Pollutant	
0.360	Tons/Yr	Determined on a 12-month rolling basis	Hazardous Air Pollutants
7.200	Tons/Yr	Determined on a 12-month rolling basis	VOC
381	BLDG 12-1 NG EMERG GEN		
Emission Limit		Pollutant	
0.440	Tons/Yr	Determined on a 12-month rolling basis	CO
0.470	Tons/Yr	Determined on a 12-month rolling basis	NOX

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
0.190	Tons/Yr	Determined on a 12-month rolling basis	VOC
0.190	Tons/Yr	Determined on a 12-month rolling period	VOC
383	REFRIGERATED TRAILER IC ENGINES		
Emission Limit		Pollutant	
5.500	gr/KW-Hr		CO
7.500	gr/KW-Hr		NOx+NMHC
0.300	gr/KW-Hr		TSP
384	BIOLOGICAL PROCESSES		
Emission Limit		Pollutant	
2.700	Tons/Yr	Per source; Determined on a 12-month rolling basis	VOC
3.000	Lbs/Hr	Per source	VOC
15.000	Lbs/Day	Per source	VOC
385	GAS FUEL TANK/PUMP (5,000 GAL)		
Emission Limit		Pollutant	
1.000	Tons/Yr	Determined on a 12-month rolling basis	VOC
732	BLDG 81 NG PEAK GENS (81-1, 81-2)		
Emission Limit		Pollutant	
2.600	Tons/Yr	Per each engine; Determined on a 12-month rolling basis	CO
1.000	Tons/Yr	Per each engine; Determined on a 12-month rolling basis	NOX
3.000	gr/HP-Hr	Applies to each engine	NOX
500.000	PPMV	Per each engine; Determined on a dry basis	SOX
0.040	gr/DRY FT3	Per each engine; Applies to filterable PM only	TSP
0.650	Tons/Yr	Per each engine; Determined on a 12-month rolling basis	VOC
733	M-5 MOBILE DIESEL GENERATOR		
Emission Limit		Pollutant	
0.620	Tons/Yr	Determined on a 12-month rolling basis	CO
3.100	Lbs/Hr		CO
8.000	Tons/Yr	Determined on a 12-month rolling basis	NOX
30.400	Lbs/Hr		NOX
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
0.200	Tons/Yr	Determined on a 12-month rolling basis	VOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
734	M-6 MOBILE DIESEL GENERATOR		
Emission Limit		Pollutant	
0.650	Tons/Yr	Determined on a 12-month rolling basis	CO
3.240	Lbs/Hr		CO
3.500	Tons/Yr	Determined on a 12-month rolling basis	NOX
15.200	Lbs/Hr		NOX
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
0.120	Tons/Yr	Determined on a 12-month rolling basis	VOC
735	BLDG 44-E NG EMERG GEN		
Emission Limit		Pollutant	
0.850	Tons/Yr	Determined on a 12-month rolling basis	CO
0.640	Tons/Yr	Determined on a 12-month rolling basis	NOX
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
0.090	Tons/Yr	Determined on a 12-month rolling basis	VOC
736	BLDG 82-1 NG EMERG GEN		
Emission Limit		Pollutant	
250.000	Lbs/Yr	Determined on a 12-month rolling basis	NOX
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
737	BLDG 33-1 DIESEL EMERG GEN		
Emission Limit		Pollutant	
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
12.300	Tons/Yr	Aggregated; Determined on a 12-month	VOC
12.300	Tons/Yr	Aggregated; Determined on a 12-month rolling basis	VOC
738	BLDG 24-2 NG EMERG GEN		
Emission Limit		Pollutant	
0.640	Tons/Yr	Determined on a 12-month rolling basis	CO
0.770	Tons/Yr	Determined on a 12-month rolling basis	NOX
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
0.190	Tons/Yr	Determined on a 12-month rolling basis	VOC
745	NO. 2 FUEL OIL GENERATORS		
Emission Limit		Pollutant	
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
12.300	Tons/Yr	Aggregated; Determined on a 12-month	VOC
12.300	Tons/Yr	Aggregated; Determined on a 12-month rolling basis	VOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
746	PROPANE GENERATORS		
Emission Limit		Pollutant	
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
12.300	Tons/Yr	Aggregated; Determined on a 12-month rolling basis	VOC
12.300	Tons/Yr	Comb source total	VOC
747	NATURAL GAS GENERATORS		
Emission Limit		Pollutant	
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
12.300	Tons/Yr	Aggregated; Determined on a 12-month rolling basis	VOC
12.300	Tons/Yr	Comb source total	VOC
748	BLDG 17-1 NG PEAK GEN		
Emission Limit		Pollutant	
0.370	Tons/Yr	Determined on a 12-month rolling basis	CO
2.600	Tons/Yr	Determined on a 12-month rolling basis	NOX
3.000	GRAMS/HP-Hr		NOX
6.500	Lbs/Hr		NOX
500.000	PPMV	Per each engine; Determined on a dry basis	SOX
0.040	gr/DRY FT3	Per each engine; Applies to filterable PM only	TSP
0.400	Tons/Yr	Determined on a 12-month rolling basis	VOC
0.990	Lbs/Hr		VOC
750A	PORTABLE GODWIN PUMPS		
Emission Limit		Pollutant	
2.750	Tons/OZNESEAS	Aggregate	NOX
6.600	Tons/Yr	Aggregate; Determined on a 12-month rolling basis	NOX
100.000	Lbs/Hr	Aggregate	NOX
1,000.000	Lbs/Day	Aggregate	NOX
751	BLDG 29-3 DIESEL EMERG GEN		
Emission Limit		Pollutant	
6.900	GRAMS/HP-Hr		NOX
8.640	Tons/Yr	Determined on a 12-month rolling basis	NOX
0.210	Tons/Yr	Determined on a 12-month rolling basis	PM2.5
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
0.400	GRAMS/HP-Hr		TSP

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
	0.160 Tons/Yr	Determined on a 12-month rolling basis	VOC
752	PARTS CLEANERS		
	Emission Limit		Pollutant
	1.000 Tons/Yr	Per each parts cleaner; Determined on a 12-month rolling basis	VOC
753	BLDG 66-1 DIESEL EMERG GEN		
	Emission Limit		Pollutant
	1.420 GRAMS/HP-Hr		CO
	4.480 GRAMS/HP-Hr		NOX
	0.120 GRAMS/HP-Hr		PM10
	500.000 PPMV	Determined on a dry basis	SOX
	0.040 gr/DRY FT3	Applies to filterable PM only	TSP
	0.120 GRAMS/HP-Hr		TSP
	0.290 GRAMS/HP-Hr		VOC
754	BLDG 70A-1 DIESEL PEAK GEN		
	Emission Limit		Pollutant
	3.500 GRAMS/KW-Hr		CO
	6.290 GRAMS/KW-Hr		NOX
	0.200 GRAMS/KW-Hr		PM10
	500.000 PPMV	Determined on a dry basis	SOX
	0.040 gr/DRY FT3	Applies to filterable PM only	TSP
	0.200 GRAMS/KW-Hr		TSP
	0.110 GRAMS/KW-Hr		VOC
755	BLDG 75B-1 NG EMERG GEN		
	Emission Limit		Pollutant
	500.000 PPMV	Determined on a dry basis	SOX
	0.040 gr/DRY FT3	Applies to filterable PM only	TSP
756	MISC. SUBPART ZZZZ PROPANE GENS		
	Emission Limit		Pollutant
	500.000 PPMV	Determined on a dry basis	SOX
	0.040 gr/DRY FT3	Applies to filterable PM only	TSP
758	MISC. SUBPART ZZZZ NG GENS		
	Emission Limit		Pollutant
	500.000 PPMV	Determined on a dry basis	SOX
	0.040 gr/DRY FT3	Applies to filterable PM only	TSP

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
759	BLDG 95-2 DIESEL EMERG GEN		
Emission Limit			Pollutant
5.000	GRAMS/KW-Hr		CO
7.500	GRAMS/KW-Hr		NOx+NMHC
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
0.300	GRAMS/KW-Hr		TSP
761	MOBILE CENTRAL UTILITIES PUMP		
Emission Limit			Pollutant
2.750	Tons/OZNESEAS	Aggregate	NOX
6.600	Tons/Yr	Aggregate; Determined on a 12-month rolling basis	NOX
100.000	Lbs/Hr	Aggregate	NOX
1,000.000	Lbs/Day	Aggregate	NOX
763	M-8 DIESEL PEAK GEN		
Emission Limit			Pollutant
3.500	GRAMS/KW-Hr		CO
0.400	GRAMS/KW-Hr		NMHC
0.670	GRAMS/KW-Hr		NOX
0.100	GRAMS/KW-Hr		PM10
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
0.100	GRAMS/KW-Hr		TSP
764	M-9 DIESEL PEAK GEN		
Emission Limit			Pollutant
10.000	PPMV	Dry volume, @ 15% O2	Ammonia
3.500	GRAMS/KW-Hr		CO
0.400	GRAMS/KW-Hr		NMHC
0.670	GRAMS/KW-Hr		NOX
0.100	GRAMS/KW-Hr		PM10
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
0.100	GRAMS/KW-Hr		TSP
765	BLDG 29-4 NG PEAK GEN		
Emission Limit			Pollutant
0.250	Lbs/MMBTU		CO
0.500	Lbs/MMBTU		NOX
0.270	GRAMS/MMBTU		SOX
0.035	GRAMS/MMBTU		TSP
0.250	Lbs/MMBTU		VOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
766	BLDG 62-4 NG PEAK GEN		
Emission Limit			Pollutant
0.250	GRAMS/HP-Hr		CO
0.500	GRAMS/HP-Hr		NOX
0.270	GRAMS/MMBTU		SOX
0.035	GRAMS/MMBTU		TSP
0.250	GRAMS/HP-Hr		VOC
767	BLDG 38-8 NG EMERG GEN		
Emission Limit			Pollutant
4.000	GRAMS/HP-Hr		CO
2.000	GRAMS/HP-Hr		NOX
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
1.000	GRAMS/HP-Hr		VOC
768	BLDG 46-2 NG EMERG GEN		
Emission Limit			Pollutant
4.000	GRAMS/HP-Hr		CO
2.000	GRAMS/HP-Hr		NOX
500.000	PPMV	Determined on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
1.000	GRAMS/HP-Hr		VOC
770	B60-2 NG PEAK GEN (1,300 KW)		
Emission Limit			Pollutant
2.000	GRAMS/HP-Hr		CO
1.000	GRAMS/HP-Hr		NOX
500.000	PPMV	Applies on a dry basis	SOX
0.040	gr/DRY FT3	Applies to filterable PM only	TSP
0.700	GRAMS/HP-Hr		VOC
777	BLDG 6 FIRE PUMP		
Emission Limit			Pollutant
1.000	Tons/Yr	Determined on a 12-month rolling basis	NOX
1.000	Tons/Yr	Determined on a 12-month rolling basis	VOC

Site Emission Restriction Summary

Emission Limit		Pollutant
18.000 Tons/Yr	Research & Development; Determined on a 12-month rolling basis	VOC
10.000 Tons/Yr	Individual HAP; Determined on a 12-month rolling basis	Hazardous Air Pollutants
25.000 Tons/Yr	Total HAP; Determined on a 12-month rolling basis	Hazardous Air Pollutants



SECTION G. Emission Restriction Summary.

**SECTION H. Miscellaneous.**

The emission limitations contained in the Emission Restriction Summary Section of this permit are: incomplete, provided for informational purposes only, and are not enforceable emission limitations. The actual emission limitations are provided for in Sections C, D, or E of this permit.

The management of on-site wastes shall be in accordance with the site's waste management plan. Definitions of waste types allowed to be burned in the incinerators, are as follows:

(a) General Plant Trash

All non-recycled general plant trash consisting of discard and refuse from daily office, production and research operations such as paper, cardboard, plastic, foamed polystyrene, rubber, and cafeteria waste.

(Definition matches the facility's Waste Permit, No. 400459, as of May 4, 2012.)

(b) Pathological Waste

Animal bedding and carcasses are collected from animal facilities.

Infectious lab wastes include paper waste gloves, culture dishes, collection containers, slides, plates and devices used for transfer, inoculation and mixing cultures.

Sharps include hypodermic needles, suture needles, disposable razors, syringes, pipettes, broken glass and scalpel blades.

Chemotherapeutic wastes include paper wastes, gloves, tubing, culture dishes, collection containers, slide plates, and transfer devices used for the research and manufacture of anti-neoplastic agents.

Infectious manufacturing wastes include those generated during the manufacturing process for the production of biological consisting of paper waste, gloves, culture dishes, collection containers, slides, plates, and devices used for transfer, inoculation, and mixing cultures as well as solidified infectious waste liquids.

(Definition matches the facility's Waste Permit, No. 400459, as of May 4, 2012.)

(c) Returned Goods

Returned goods include: returned trade goods, returned sample goods, packaged quality control rejects and associated packaging, and quality control retention discards, and packaging material discards. Dosage forms of the packaged goods include tablets, capsules, ointments, oral suspensions, powders, liquids, vaccines and freeze-dried products. Returned goods are received at Building 5 for segregation and staging. All goods containing hazardous waste are transported to an off-site disposal facility for disposal. Non-hazardous packaged goods, in their original market packaging and shipping containers, will be incinerated.

(Definition matches the facility's Waste Permit, No. 400459, as of May 4, 2012.)

(d) Pharmaceutical Manufacturing Waste

Pharmaceutical manufacturing waste includes waste from floor sweepings, dust collectors and off-spec products, along with discarded commercial non-hazardous chemicals discarded from Research and Development labs and/or QA/QC Labs.

(Definition matches the facility's Waste Permit, No. 400459, as of May 4, 2012.)

(e) Biological Manufacturing Waste

Non-infectious wastes collected from the biological manufacturing areas.

(Definition matches the facility's Waste Permit, No. 400459, as of May 4, 2012.)

(f) Low Level of Radionuclide Waste

Waste Containing Low Levels of Radionuclides including: Discards and refuse from laboratories including paper, plastic, glass, fabric, and carcasses containing radioactive isotopes. The types of radioactive isotopes used at the West Point site are listed in the site's current PA DEP Bureau of Radiation Protection license (License No. PA-0487). Some short-lived isotopes (those with half-lives less than 120 days), are held for decay-in-storage to assure it is deregulated and then released for incineration. Non-decayed radioactive waste is incinerated as permitted by PADEP's Bureau of Radiation Protection.

**SECTION H. Miscellaneous.**

(Definition matches the facility's Waste Permit, No. 400459, as of May 4, 2012, except for referencing radioactive licenses. The PA DEP Bureau of Radiation Protection license has replaced the NRC license referenced in the 2007 Attachment P-1 of the facility's Solid Waste Permit.)

(g) Composite Waste

Composite waste includes varying amounts of any of the above waste streams with the exception of Pathological Wastes Containing Low Levels of Radionuclides.

(Definition matches the facility's Waste Permit, No. 400459, as of May 4, 2012.)

(h) Ash Residue

Ash residue, from the incinerators, is stored in leak-proof roll-off containers located at Building 71/73 complex. Roll-offs are covered or placed under a roof for protection from the weather. Roll-offs are transported to an approved off-site landfill facility as needed. (Definition matches the permittee's Waste Permit, Number 400459, as of May 4, 2012.)

(i) Medical/infectious waste - means any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that is listed in paragraphs (1) through (7) of this definition. The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulations in 40 CFR 62, part 261; household waste, as defined in 40 CFR § 261.4(b)(1); ash from incineration of medical/infectious waste, once the incineration process has been completed; human corpses, remains, and anatomical parts that are intended for interment or cremation; and domestic sewage materials identified in 40 CFR § 62.261.4(a)(1).

(1) Cultures and stocks of infectious agents and associated biologicals, including: cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.

(2) Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers.

(3) Human blood and blood products including:

(i) Liquid waste human blood;

(ii) Products of blood;

(iii) Items saturated and/or dripping with human blood; or

(iv) Items that were saturated and/or dripping with human blood that are now caked with dried human blood; including serum, plasma, and other blood components, and their containers, which were used or intended for use in either patient care, testing and laboratory analysis or the development of pharmaceuticals. Intravenous bags are also included in this category.

(4) Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.

(5) Animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals or testing of pharmaceuticals.

(6) Isolation wastes including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from certain highly communicable diseases, or isolated animals known to be infected with highly communicable diseases.

(7) Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

(j) Chemotherapeutic Waste - means waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.

The following previously issued plan approvals and operating permit serve as the basis for certain terms and conditions set forth in this Title V Permit:

CP-46-0005

PA-46-0005E

PA-46-0005G

PA-46-0005K

PA-46-313-117D

PA-46-0005A

**SECTION H. Miscellaneous.**

The Department has determined that the emissions from the following activities, excluding those indicated as site level requirements, in Section C, of this permit, do not require additional limitations, monitoring, or recordkeeping:

- B97 Emergency generator, south parking garage.
- B69 Temporary emergency generator.
- B21 Temporary emergency generator.

October 2003. The permit was amended to add the following Plan Approvals: PA-46-0005J, N, R, S, and U. APS - 345491, AUTH ID - 506585

Additionally, the following changes have been incorporated into this amended permit:

- Source 103 Mug II (Microwave Room). This source has been permanently deactivated.
- Source 105 (Bio Mfg). Two of the shell freezers have been permanently removed, leaving seven (7).
- Source 207 (Accela Coating Pans). Six (6) coating pans have been permanently removed, leaving three (3).
- Source 375 (Graphic Services). The Shredder/baler, and Press No. 86 have been permanently deactivated.
- Source 746 (Propane emergency generators). B21-1 has been permanently deactivated.
- Source 747 (Natural gas emergency generators). B2-1 and B44-1 were correctly moved to Source 746.
- Source 747 (Natural gas emergency generators). B1-2, B26-2, and B38-2 have all been permanently deactivated.

November 2004. APS: 345491, AUTH ID: 546049. The permit was amended to address the following changes:

- Incorporates the following plan approvals: PA-46-0005Q, PA-46-0005T, PA-46-0005W, and PA-46-0005X.
- Addressed a change of responsible official.
- Corrected typographical errors and streamlined the permit operations.
- The following RFDs have been determined by the Department as needing no plan approval and/or additional operating permit since the Title V permit was issued, through the date of this amendment:

46-A01-1803

46-A01-2002 Upgrade the WHI

46-A01-2065 B44E RFD - De minimis VOC/HAP

46-A01-2066 B76 Particulate Emissions

46-A01-2072 B69 Replace catalyst beds in both Oxidizer units.

46-A01-2087 B46 EtO Sterilizer

46-A01-2102 B2-1 & B44-1: Remove two emergency generators from Source ID #747 (Natural Gas) and include in Source ID #746 (Propane) of Title V permit.

46-A01-2111 B69D Dust Collection System

46-A01-2119 B60A IPA system

46-A01-2180 B69 Solution Preparation Room SR-4

46-A01-2209 Disinfection for B12 Biological Manufacturing Complex

46-A01-2232 Building 81/SW lift Station Godwin Sewer Pump

- Incorporate changes from a Minor Operating Permit Modification, APS # 345491, Auth ID # 549066.

October 2006. APS:345491, AUTH: 629321. The permit was amended to incorporate plan approvals, 46-0005M (Boiler 8 and CO-Gen III) and 46-0005Y (AOS-5). The compliance certification and deviation reporting period and submittal dates have been changed, as noted in a new reporting condition in Section C of the permit, and the Small NOx Budget regulations (25 Pa. Code §§ 129.201 - 204) have been added to the permit.

August 2007. APS: 345491, AUTH: 671758. The Department renewed and amended the permit. The following changes have been made at this time:

- A 2.3 MMBtu/hr natural gas-fired heater used to pre-heat the natural gas for the turbines.
- Plan Approval 46-0005AB for a portable emergency/peaking generator has been incorporated (Source 751).
- Plan Approval 46-0005Z for Boiler 10 has been incorporated (Source 045).
- The following sources and control devices have been removed from the facility and the permit: 031, 032, 350, 356, 364, 367, 379, C10, C17, C321, C323, C350, C352, C353, C354, C355, C356, C61, and Fluid Bed Dryer F5 listed in Source 110.
- The following sources have been added to the permit: 752 (Parts Cleaners), C217 (Fluid Bed F3 Post Filters), C330 (TALV Room

**SECTION H. Miscellaneous.**

Filter), C373 (B69 Tray Dryer Filters), C742 (Catalytic Converter for Bldg 60 generator).

- The following RFDs have been determined by the Department as needing no plan approval and/or additional operating permit since the Title V permit was amended in November 2004:

- 46-A01-2246 Pilot Scale Development.
- 46-A01-2259 Mixer, granulator, transfer.
- 46-A01-2289 Process Room, P12.
- 46-A01-2290 Process Room P14.
- 46-A01-2291 Process Room P15.
- 46-A01-2310 Boiler #10 evaluation process.
- 46-A01-2354 92.5 kW emergency generator.
- 46-A01-2361 Disinfection process.
- 46-A01-2388 Dryer for R & D.
- 46-A01-2393 117 Hp emergency generator.
- 46-A01-2471 Dryer for R & D.
- 46-A01-2495 GLATT Column 6 to operate on aqueous solution only.

December 2008. APS: 345491, AUTH: 746762. The Department amended the TV operating permit, which addressed the following changes:

- Source 041, Condition #002(c). The source has a Department certified NO_x CEM. The short-term emission limits in lbs/hr (condition #002) are numerically equal to the emission limit that the CEM calculates in lbs/MMBtu (condition #004). The Department has removed the NO_x limits from Condition #002;
- Testing frequency change for the Waste Heat Incinerator (WHI, Source 002) and Rotary Kiln Incinerator (RKI, Source 005). This is to establish consistency between the two incinerators, as allowed under the federal regulations;
- Inclusion of a 15-minute block averaging period for the temperature monitoring for the two incinerators (Sources 002 and 005). The current operating permit does not specify the averaging period. This averaging period, which is more stringent than that allowed in the federal regulations (see 40 CFR § 60.37e(b)(3) and (4)), is consistent with the interlock requirements already in place for these two sources;
- Several minor changes in the generator sources (745, 746, and 747), where sources have either been moved to a different building or have been removed from the site;
- Consistency between CEM conditions for several sources (042, 043, 045, 002, and 005);
- Incorporation of RFD, number 46-A01-2563 (disinfection operations); and
- Identification a new Responsible Official.

2009. Administrative Amendment, APS: 345491; AUTH: 808230, to incorporate terms and conditions from Plan Approval 46-0005AC for 2 shell freezers bldg. 12, (Source 380), Bldg. 12 emergency generator 705 HP (Source 381), and 2 shell freezers Bldg. 12A (Source 852). In addition, as per company's request the following changes are being made at this time: Source Id 002 Conditions 025 and 030 the wording is added that reflects tertiary chamber and tertiary chamber exit gas temperature and Source Id 378 Condition 004 Bldg 20, Dept 255 has been added and Site Dept 233 of Q/C Labs-Biological has been removed, also Material Supply Sample Bldg 62 Dept 177 has been changed to Dept 263.

December 2010. APS: 345491, AUTH: 858569. Permit Amendment to incorporate plan approvals 46-0005AD (Source 753), AE (Source 105), and AF (Source 754). Additional changes include clarification to CEM language for Sources: 042, 045, 043, 002 and 005. Deletion of duplicate conditions for Sources 002 and 005.

August 2011. APS: 345491, AUTH: 887059. Permit amendment to address the following:

- removal of OX2 and the CAU;
- removal of Source 038 (Boiler 6) from the permit. The fuel line for the reheat burners has been permanently disconnected and the boiler can now and in the future only operate as a waste heat boiler;
- removal of the FujiFilm plate maker, fluids manufacturing, and the pharmaceutical tablet printer from Source 378 (each has been removed from the site);
- removal of generators 35-1 and 62-1 from Source 746 (both have been removed from the site);
- correct several typographical errors;
- removal of OX2 and the CAU from the operating permit;
- removal of AOS-3 (entailed the use of the CAU and one of the oxidizers);

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- reworded the conditions in AOS-5 (using less than 32 lbs of VOC per batch); and
- removal of maps, SCC, and emission limits for the sources and control devices that have been removed.

August 2012. APS: 781343, AUTH: 927695. Renewal of TVOP.

- The following sources have been removed from the permit: 110, 217, and 219 (all fluid bed dryers), emission unit SR3 in Source 320, the following tanks (ALC-01, TA-1021A, and TA-1021B) all previously listed in Source 749, Source 373 (Tray Dryers), Source 330 (TALV Rooms), Source 375 (Graphic Services) and the emergency diesel air compressor and the film processor in Source 378 (Misc. VOC Sources).

- General Permit. The facility applied for and was issued a general permit (GP11-46-0056) for the installation of a temporary CI diesel-fired generator. This was issued on February 12, 2012. As this generator is planned to be replaced with a permanent unit in the near future, it was decided to not incorporate the GP into the TVOP renewal.

- Change of Ownership Form concerning the corporate name change in the merger between Merck and Schering. No change in corporate name, only a change in federal tax ID at this particular facility.

- Between April 2010 and February 2012, the following RFDs were submitted and have been determined by the Department as needing no plan approval and/or additional operating permit:

2735 – For the replacement of a like kind 3-way catalyst (Feb 2012).

2601 – For the installation of thirty (30) electric powered refrigerated trailers each with a back-up 24 kW CI engine (Dec 2011).

2594 – for the installation of a dust collection system in a R & D building (Dec 2011).

2574 – Renovation of existing production space for GMP (Good Manufacturing Process) zones (Dec 2011).

2396 – Temporary CI generator (Aug 2011).

2237 – Stack modifications are necessary to meet the RICE MACT requirements (June 2011).

2149 – R & D spray dryer installation (May 2011).

1980 – Renovations to Building 38 concerning the vaccine production. No changes to operations or emissions (Feb 2011).

1958 – Renovations to Building 38 concerning the vaccine production (Feb 2011).

1641 – Installation of a Godwin Pump for ground water or wastewater (Aug 2010).

1463 – Relocation of a mobile generator at the facility (Apr 2010).

New applicable regulations include the following:

- 40 CFR 63, Subpart JJJJJ (6J), Area Source Boiler NESHAP;

- 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE;

- 40 CFR 60, Subpart IIII, NSPS for CI Internal Combustion Engines;

- 40 CFR Part 89, Nonroad mobile CI engines;

- 40 CFR Part 1068, General Compliance provisions for nonroad programs; and

- 40 CFR 63, subpart VVVVV (6V), Chemical manufacturing Area Source MACT.

July 2013. APS: 781343, Auth: 979373. Operating permit amendment to address the following:

- Incorporation of Plan Approval Number 46-0005AM;

- Incorporation of Plan Approval Number 46-0005AK;

- removal of Source 320, 340, and the maintenance hoods found in Source 378;

- Update the applicable generators to address EPA's changes in the RICE MACT (ZZZZ) and NSPS, Subpart IIII;

- Documentation of ERCs used in Plan Approval 46-0005AK were originally VOC ERCs and were converted to NOx ERCs at a ratio of 1.3 to 1;

- Removal of Control Device C161 (Oxidizer 1) from the permit as allowed under plan approval 46-0005AM;

- Correction of typographical errors;

- GP11-46-0030 was issued by the Department in October 2008, and the engine was removed in August of 2010; and

- Between February 2012 and May 2013, the following RFDs were submitted and have been determined by the Department as needing no plan approval and/or additional operating permit:

2751 - like kind replacement of a tablet press.

2797 - renovation of GMP space in production area (B29).

2902 - installation of a new Janumet manufacturing line in Building 69.

3042 - temporary operation of a pilot scale activated carbon canister system to control potential odors from the Building 24 wastewater collection system.

3067 - installation of a 540 hp natural gas fired generator support a new cold vault that will be installed in existing space in B69D.

3324 - like kind replacement of the air to fuel ratio controller for B60-1 generator (Source 742).

3338 - modification of earlier RFD to use Cooling Tower Blow Down water as quench water in the Rotary Kiln Incinerator.

3430 - temporary Tier 3 rental mobile 99 hp diesel-fired generator.

**SECTION H. Miscellaneous.**

3458 - replaced GP11-46-0056 as a de minimis emission increase.

January 2014. APS: 781343, AUTH: 1004983. Permit Amendment to address to following:

- incorporation of Plan Approval, Number 46-0005AI;
- removal of past compliance dates;
- change Source 744 from peaking to non-peaking status (unit became non-peak on 10-19-2013);
- deletion of a monitoring condition that is no longer necessary and was not part of RACT;
- clarify catalyst temperatures for the generators;
- removal of "display shop" from Source 378 as it has been removed from the facility;
- corrected averaging times for both HMIWI temperature averaging periods; and
- correct typographical errors.

June 2014. APS: 781343, AUTH: 1025608 Permit Amendment to address the following:

- incorporation of Plan Approval 46-0005AH (affects Sources 107 and 108, Bldgs 12 and 66, respectively);
- Change Source 740 from peak shaving generator to a non-peak generator;
- Remove references to sources that have been permanently shut-down (B69D-1 generator, B38-3 generator, Boiler #4, B38 Process Rooms, and B69 SD3A storage tank);
- Clarify catalyst temperature requirements required under 40 CFR 63, Subpart ZZZZ;
- Rename Source 759 from B70-1 to B38-7 due to a change of location
- Create a new general stack testing condition; and
- Correct typographical errors.

December 2014. APS: 781343. AUTH: 1049093. Permit amendment to address the following:

- Incorporate Plan Approval 46-0005AJ;
- Correct typographical errors; and
- Address changes in some of the waste definitions to match those in PADEP's Waste Management Operating Permit.

December 2015. APS: 781343, AUTH: 1091916. Permit amendment to address the following:

- Incorporation of plan approvals 46-0005AO and 46-0005AL;
- Removal of the following sources:
 - Source 207 (Accela Coating Pans);
 - Source 322 (B69 Film Coating Suspension Prep);
 - Source 324 (Process Rooms);
 - Source 325 (B69 Vacuum System);
 - Sources 362, 363, 365, and 366 (Glatt Columns 2, 3, 4, and 5, respectively).; and
 - Building 43 (found in Section C of the permit).
- Correct typographical errors in the Boilers;
- Moving of generator 32-1 to 56-3 and change of fuel type (as outlined in eRFD number 4067);
- Numerous clarifications to sources that no longer operate in certain capacities.
- Between May 2013 and January 2016, the following RFDs were submitted and have been determined by the Department as needing no plan approval and/or additional operating permit:
 - 3880 - Installation of a Tier II emergency generator;
 - 3911 - Dust collection and air conveyance system;
 - 4067 - Change fuel type and location of emergency generator from B32-1 to B56-3;
 - 4276 - Reconfigure the exhaust catalyst and muffler on Generator B29-3 (Source ID 751);
 - 4802 - Replacement of existing RKI baghouse bags with catalyst impregnated bags;
 - 4853 - Replacement of two fuel oil storage tanks;
 - 5018 - Installation of pilot equipment including a spray dryer and a tray dryer;
 - 5023 - Installation of a new odor scrubber at its wastewater equalization facility;
 - 5318 - Installation of a replacement emergency generator for current B92-1 generator; and
 - 5320 - Installation of a replacement emergency generator for current B75C-1 generator.

- Specifically, for each ozone season beginning after January 1, 2015, the Department intends to accept the surrender of annual and ozone season TR NO_x allowances as a compliance alternative to the surrender of annual and ozone season CAIR NO_x allowances if the TR allowances are surrendered for compliance purposes in a manner consistent with the surrender provisions for CAIR allowances set forth in the applicable sections specified in this notice. The Department consulted with staff in the United States Environmental Protection Agency (EPA) Region III Office in developing an alternative allowance surrender approach for compliance with the applicable SIP-approved requirements. To this end, the EPA has confirmed, in writing, that TR NO_x allowances may be surrendered as set forth in the applicable regulations in 25 Pa. Code Chapters 129 and 145. A detailed notice was

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published in the PA bulletin on April 4, 2015 [45 Pa.B. 1687].

June 2016. APS: 781343, Auth: 1137748. Permit Amendment to incorporate plan approval number 46-0005AP (Refrigerated Trailers) and to fix several typographical errors.

October 2016. APS781343, Auth: 1149569. Minor permit modification to place hourly limitations on six (6) generators to comply with the presumptive RACT II regulations found in 25 Pa. Code § 129.97(c)(8).

December 2016. Significant permit modification to address case-by-case RACT II regulations found in 25 Pa. Code § 129.99 for Sources: 005, 033, 035, 105, 107, 108, 111, and various buildings that perform R&D.

February 2017. APS: 781343, Auth: 1167669. Administrative Amendment to remove Source 760 (B97-1 generator) from the TVOP as the source has been sold.

November 2017. APS: 781343, Auth: 1170938 and APS: 781343, Auth ID: 1187039 - Permit renewal and Administrative Amendment, respectively.

- Two new sources created (Source numbers 152 and 153) to address a total of four (4) emergency generators that were installed under RFDs.
- The RKI (Source 005) and WHI (Source 002) have been removed from service. The Department conducted a closure inspection and these two sources were found to be permanently disabled and have been removed from the TVOP.
- Source Number 757 has had its status changed from a mobile generator to an emergency generator as the source no longer meets the definition of a mobile source. The source's name has been changed to "Generator 4A" to indicate the status change. All applicable requirements from 40 CFR 63, Subpart ZZZZ, have been incorporated into the TVOP at this time.
- Source 755. Previously, it was determined that this source should not have been included in the aggregate RACT VOC limit of 12.3 tons. The VOC calculation method was never removed until now.
- Sources 755 and 747. The 80% operating limitation on the monitoring and recording change has been removed from these two sources as it had been previously removed from the other sources having the same limitation.
- eRFD number 6444 (installation of two temporary generators) was found to be exempt from needing a plan approval or operating permit.

December 2017. APS: 781343, Auth: 1203356. Permit amendment to incorporate plan approval number 46-0005AQ (Sources 765 and 766).

Additional change addresses a change in the permit contact from Diane B. Dona to Cassie Gaudiosi.

April 2018. APS: 781343, Auth: 1213748. Minor Operating Permit Modification to address the following changes:

- Updating the site contact information;
- Convert two (2) peak shaving generators (Sources 742 and 751) to emergency generators;
- Update Source ID names related to Building 70/70A;
- Remove four (4) generators that are no longer in use and have been removed from service (B71-1, B77-1, B26A-1, and B38-2A);
- Reassign the B75C-1 generator from Source 747 as a new and separate source;
- Consolidate the shell freezers currently under Sources 380 and 852 into one Source number 380; and
- Clarify and consolidate Condition #012(c) and (e) for Source 378.

June 2019. Shell Freezers found in Sources 107 and 108 have been removed from the facility and the Responsible Official has been changed to Marcos Costa, as he meets the Department's definition of a responsible official.

March 2020. APS: 781343, AUTH: 1306266. Administrative Amendment to incorporate Plan Approval Numbers 46-0005AS and 46-0005AT into the TVOP.

March 2021. APS: 781343, AUTH: 1344223. Administrative Amendment to incorporate Plan Approval No. 46-0005AR into the TVOP. Additionally, the name for Source ID 759 has been changed from "BLDG 38-7 Generator" to "BLDG 95-2 Generator".

May 2021. APS: 781343, Auth: 1346733. Minor permit modification to modify conditions applicable to Source ID 045 (Boiler 10), specifically with regards to the Hypermix controls.

August 2021. APS: 781343, AUTH: 1364578. Administrative Amendment to incorporate Plan Approval No. 46-0005AW into the TVOP.

October 2021. APS: 781343, Auth: 1343360. Minor permit modification for the following:

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- Removal of references to sources no longer existing at the site.
- Removal of the reference to "peak" for Source ID 751 (Bldg 29-3 Generator) .
- Updating the list of buildings with R&D labs included under the 18 tons/yr VOC emission cap for R&D activities in Section C, #008.
- Updating the building number for the Pharmaceutical Testing Lab from Bldg 20 to Bldg 38 in Section D, Source ID: 378.
- Updating FML10 to reflect two (2) 396,600 Gal Storage Tanks per RFD No. 4853.
- Inclusion of recent RFDs approved by DEP:
 - RFD No. 6765, for the temporary operation of the Hypermix ring pressure outside the permit requirements to do stack testing and determine optimal operating scenarios.
 - RFD No. 7730, for the replacement of two portable Godwin pumps that are reflected under new Source 750A.
 - RFD No. 8108, for the addition of R&D laboratories in Building 16 and Building 46 as part of R&D operations.
 - RFD No. 8111, for the addition of a R&D laboratory in Building 69D as part of R&D operations.
 - RFD No. 8549, for the addition of a mobile laboratory trailer (Mobile R&D Laboratory 1) as part of R&D operations.
 - RFD No. 8589, for the reactivation of two (2) shell freezers located in Building 62 (Source ID 105).
 - RFD No. 8612, for the addition of lab equipment in Building 65 (B65) as part of R&D operations.
 - RFD No. 8664, for a new vaccine production line in Building 28 (B28), added to Source ID 378 (new category "Filter Testing").
 - RFD No. 8843, for a temporary diesel fired emergency generator for Building 28 that is reflected under new Source ID 775.
 - RFD No. 8844, for a temporary diesel-powered crane mounted on Building 44 (B44-T) that is reflected under Source ID 775.
 - RFD No. 9133, for a new vaccine production line in Building 29 (B29), that is covered under Source ID 378 and one (1) 26-kilowatt (kW) diesel-fired internal combustion engine that is reflected under Source ID 775.

June 2023. APS: 781343, AUTH: 1388730. This Title V Operating Permit has been renewed for another 5-term. This Title V Operating Permit incorporates Plan Approval No. 46-0005AZ, for the installation a 750-kW natural gas-fired generator for emergency use in Building 16 (Source ID 774) and the reinstallation of a 2,000 kW diesel-fired peak generator (Source ID 764). This Title V Operating Permit also incorporates presumptive RACT III requirements. Per this permit renewal:

- The following sources have been removed: Source IDs 740 (B16-1), 741 (B56-2), 744 (B78-1), 762 (M-7), and 775 (MTU Engine, Crane, and Isuzu Engine).
- Source 745: B61-1 generator was deactivated on October 28, 2021.
- Sources created in Section D: Source IDs 105A, 384, 385, 750A, and 777.
- Source Groups 1 through 5 were created to group similar engine types.



***** End of Report *****
