COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date:	February 20, 2020	Effective Date:	March 15, 2023
Revision Date:	March 15, 2023	Expiration Date:	January 31, 2025
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: 10-00368

Federal Tax Id - Plant Code: 45-5100747-2

Owner Information

Name: MARKWEST LIBERTY BLUESTONE LLC
Mailing Address: 4600 J. BARRY COURT, SUITE 500
CANONSBURG, PA 15317

Plant Information

Plant: MARKWEST LIBERTY BLUESTONE LLC/BLUESTONE GAS PROC PLT
Location: 10 Butler County 10932 Jackson Township
SIC Code: 1321 Mining - Natural Gas Liquids

Responsible Official

Name: RICHARD P. KLINE
Title: OPERATIONS DIRECTOR
Phone: (740) 946 - 1545 Email: rpkline@marathonpetroleum.com

Permit Contact Person

Name: ALEXANDRA M. JUAREZ
Title: ENVIRONMENTAL ENGINEER
Phone: (412) 815 - 8886 Email: AJuarez@marathonpetroleum.com

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

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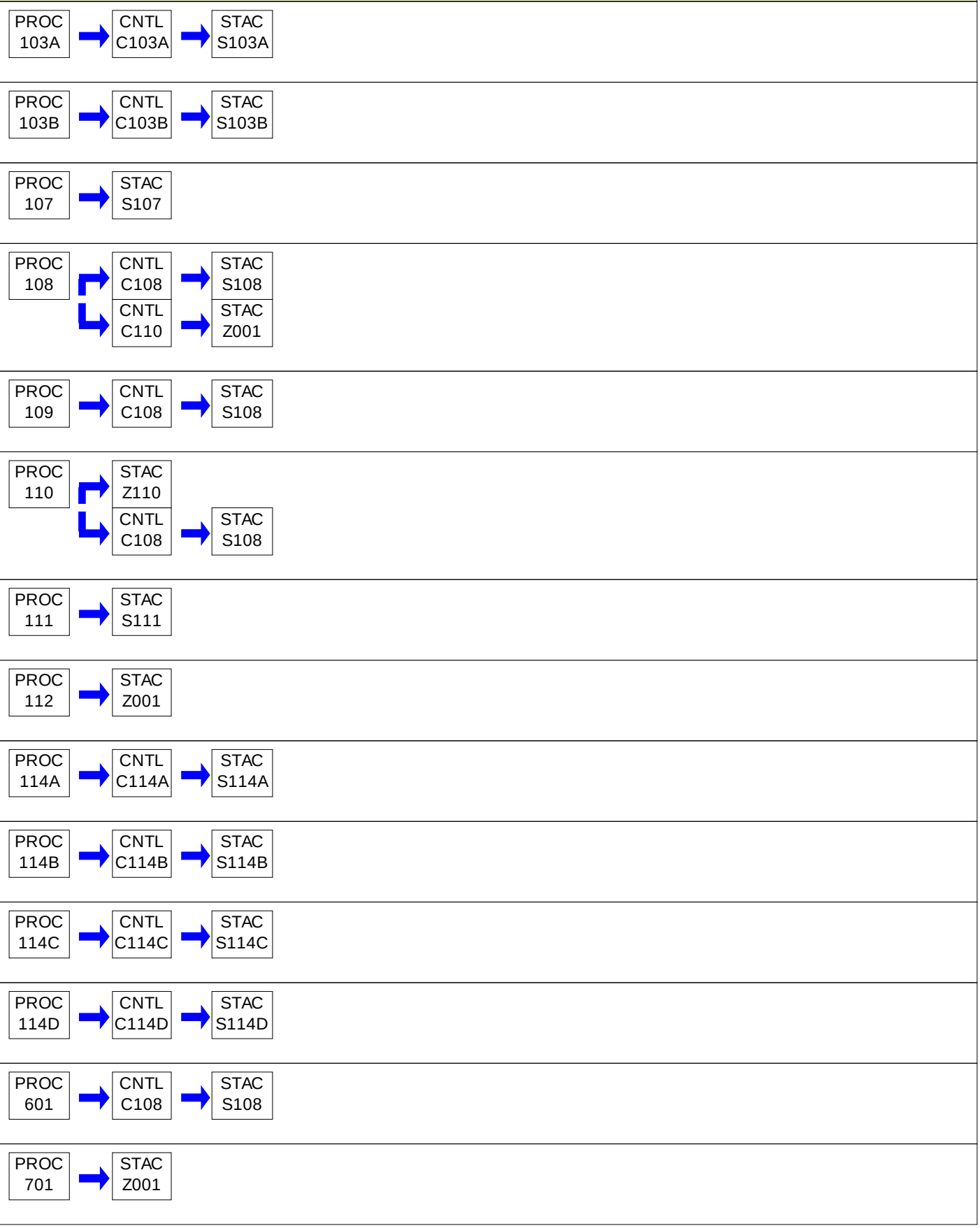
SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput		Fuel/Material
103A	840 BHP WAUKESHA F3524GSI COMP ENG UNIT 5701, SN 5283701374	4.600	MCF/HR	NATURAL GAS
103B	840 BHP WAUKESHA F3524GSI COMP ENG UNIT 5702, SN 5283701373	4.600	MCF/HR	NATURAL GAS
107	PROCESS HEATERS	351.000	MMBTU/HR	
		328.000	MCF/HR	NATURAL GAS
108	TRUCK AND RAILYARD LOADING			
109	STORAGE TANK			
110	GAS PROCESSING PLANT VENTING		N/A	
111	OLYMPIAN EMERGENCY GENERATOR	0.850	MMBTU/HR	
		0.790	MCF/HR	
112	ELECTRIC COMPRESSOR ENGINES			
114A	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4701, SN 5283701468	12.136	MCF/HR	NATURAL GAS
114B	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4702, SN 5283701448	12.136	MCF/HR	NATURAL GAS
114C	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4703, SN 5283701397	12.136	MCF/HR	NATURAL GAS
114D	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4704, SN 5283701443	12.136	MCF/HR	NATURAL GAS
601	VENTING/BLOWDOWN			
701	OTHER FUGITIVES			
801	PIGGING OPERATIONS			
C103A	NSCR - SOURCE 103A			
C103B	NSCR - SOURCE 103B			
C108	PLANT PROCESS FLARE		N/A	Natural Gas
			N/A	Refinery Gas
C110	TEMPORARY FLARE		N/A	Natural Gas
			N/A	Refinery Gas
C114A	NSCR - SOURCE 114A			
C114B	NSCR - SOURCE 114B			
C114C	NSCR - SOURCE 114C			
C114D	NSCR - SOURCE 114D			
S103A	COMPRESSOR STACK			
S103B	COMPRESSOR STACK			
S107	PROCESS HEATERS EXHAUST			
S108	FLARE STACK			
S111	STACK FROM OLYMPIAN EMERGENCY GENERATOR			
S114A	COMPRESSOR STACK			
S114B	COMPRESSOR STACK			
S114C	COMPRESSOR STACK			
S114D	COMPRESSOR STACK			
Z001	OTHER FUGITIVES			
Z110	GAS PROCESSING PLANT FUGITIVES			

PERMIT MAPS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PROC 103B
CNTL C103B
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STAC Z001
PROC 109
CNTL C108
STAC S108
PROC 110
STAC Z110
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STAC S108
PROC 111
STAC S111
PROC 112
STAC Z001
PROC 114A
CNTL C114A
STAC S114A
PROC 114B
CNTL C114B
STAC S114B
PROC 114C
CNTL C114C
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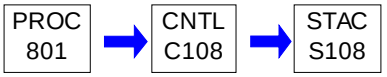
PROC 701
STAC Z001

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].

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#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.

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(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 NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.

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

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

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(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

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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 § 127.513]

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

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the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department in accordance with the submission requirements specified in Section B, Condition #022 of this permit. The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

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

Recordkeeping Requirements

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

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

(2) The dates the analyses were performed.

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

(4) The analytical techniques or methods used.

(5) The results of the analyses.

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

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

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

#026 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]

Reporting Requirements

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

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

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

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

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

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

(1) Construction or demolition of buildings or structures.

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

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

(4) Clearing of land.

(5) Stockpiling of materials.

(6) Open burning operations.

(7) Not applicable

(8) Not applicable

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

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

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

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

(c) A person responsible for any source specified in subsections (a)(1) -- (7) or (9) shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

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

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

(3) Paving and maintenance of roadways.

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

(d) Not applicable

SECTION C. Site Level Requirements

 # 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 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) Not applicable

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

(c) Not applicable

 # 004 [25 Pa. Code §123.41]

Limitations

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

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

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

 # 005 [25 Pa. Code §123.42]

Exceptions

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

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

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

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

(4) Not applicable

 # 006 [25 Pa. Code §129.14]

Open burning operations

(a) [Not applicable]

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

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

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

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

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

SECTION C. Site Level Requirements

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

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

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

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

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

(4) - (5) [Not applicable]

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

(7) A fire set solely for cooking food.

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

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

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

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

(2) [Not applicable]

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

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

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

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

II. TESTING REQUIREMENTS.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368D & E]

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

III. MONITORING REQUIREMENTS.

 # 008 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured using either of the following:

SECTION C. Site Level Requirements

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

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

 # 009 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

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

(b) All detected fugitive and visible emissions shall be reported to the facility manager and/or shift supervisor.

IV. RECORDKEEPING REQUIREMENTS.

 # 010 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

(a) The permittee shall maintain a record of the monitoring conducted to determine the presence of fugitive and visible emissions.

(b) This recordkeeping shall contain a listing or notation of any and all sources of fugitive and visible emissions; the cause of the fugitive or visible emissions; duration of the emission; and the corrective action taken to abate the deviation and prevent future occurrences.

 # 011 [25 Pa. Code §129.100]

Compliance demonstration and recordkeeping requirements.

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

[25 Pa. Code § 129.100(f)]

[The RACT II applicability sent to the Department on September 7, 2018 (electronic e-mail) & the review memo for the 2019 renewal serve as records to demonstrate exemption from RACT II for several sources.]

V. REPORTING REQUIREMENTS.

 # 012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368D & E]

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

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

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

SECTION C. Site Level Requirements

(iii) Unless otherwise required by this Plan Approval, other malfunctions shall be reported to the Department, in writing, within five (5) business days of malfunction discovery.

 # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The annual compliance certification report, required under Section B. General Title V Requirements, Condition #026, shall be submitted to the Department by March 1 of each year. The annual compliance certification shall cover the period of February 1 through January 31 of each year.

[The submission deadline under Section C, VIII. Compliance Certification is in agreement with the March 1 deadline of this condition.]

 # 014 [25 Pa. Code §135.21]

Emission statements

(a) Except as provided in subsection (d), this section applies to stationary sources or facilities:

(1) Located in an area designated by the Clean Air Act as a marginal, moderate, serious, severe or extreme ozone nonattainment area and which emit oxides of nitrogen or VOC.

(2) Not located in an area described in subparagraph (1) and included in the Northeast Ozone Transport Region which emit or have the potential to emit 100 tons or more oxides of nitrogen or 50 tons or more of VOC per year.

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

(c) Annual emission statements are due by March 1 for the preceding calendar year beginning with March 1, 1993, for calendar year 1992 and shall provide data consistent with requirements and guidance developed by the EPA. The guidance document is available from: United States Environmental Protection Agency, 401 M. Street, S.W., Washington, D.C. 20460. The Department may require more frequent submittals if the Department determines that one or more of the following applies:

(1) A more frequent submission is required by the EPA.

(2) Analysis of the data on a more frequent basis is necessary to implement the requirements of the act.

(d) Subsection (a) does not apply to a class or category of stationary sources which emits less than 25 tons per year of VOC's or oxides of nitrogen, if the Department in its submissions to the Administrator of the EPA under section 182(a)(1) or (3)(B)(ii) of the Clean Air Act (42 U.S.C.A. 7511a(a)(1) or (3)(B)(ii)) provides an inventory of emissions from the class or category of sources based on the use of the emission factors established by the Administrator or other methods acceptable to the Administrator. The Department will publish in the Pennsylvania Bulletin a notice of the lists of classes or categories of sources which are exempt from the emission statement requirement under this subsection.

VI. WORK PRACTICE REQUIREMENTS.

 # 015 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368A, B, D, & E]

In accordance with 25 Pa. Code Section 123.1(c), the owner or operator of a facility, shall take all reasonable actions to prevent particulate matter from becoming airborne, and shall at a minimum comply with the following requirements:

a. The owner or operator of a facility shall not allow paved and unpaved internal roadways to generate excessive dust

SECTION C. Site Level Requirements

emissions or the tracking of dirt/soils onto public roads.

b. The owner or operator of a facility shall prevent excessive emissions and carryout. Methods which may be used to prevent excessive emissions or carryout include, but are not limited to, sweeping and/or use of a tire washing system.

c. The owner or operator of a facility shall apply water or other chemical dust suppressants to the unpaved road surface to reduce fugitive dusts, if necessary based on daily site conditions. Water, if used, shall not be applied if the result would be a potentially unsafe condition, such as ice formation. In no event the owner or operator of the facility shall use waste oil as a dust suppressant.

d. The owner or operator shall establish an appropriate speed limit, within 120 days of the issuance of this General Permit and post on all unpaved roadways within the facility. The owner or operator of the facility shall submit the proposed speed limit to the Department, in writing, for approval. The owner or operator of the facility shall develop the speed limit signs consistent with the requirements of Pennsylvania Department of Transportation (PennDOT) (overall dimension 20 inches x 24
inches, 'SPEED LIMIT' in 4-inch letters and 10-inch numerals).

e. If necessary to prevent earthen carryout, the owner or operator of the facility shall wash wheels and chassis of the vehicles upon leaving the facility, to prevent earthen carryout onto roadways.

f. The owner or operator shall apply water or other chemical dust suppressants, as needed on the access roadways if unpaved at the unloading areas to reduce fugitive dusts.

g. The owner or operator shall remove promptly any earth or other material that is deposited by trucking or other means on public roadways.
i. A written manual documenting the activities utilized at the facility to control fugitive particulate matter emissions shall be maintained on-site.

h. The company shall keep sufficient records to demonstrate that the activities utilized at the facility to control fugitive particulate matter emissions are being implemented.

i. The records documenting implementation of the activities utilized at the facility to control fugitive particulate matter emissions shall be maintained at the facility for 5 years and shall be made available to DEP upon request.

VII. ADDITIONAL REQUIREMENTS.

 # 016 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368A, B, D, & E]

a. If required by Section 112(r) of the Clean Air Act, the owner or operator of the facility 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 owner or operator of the facility 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 facility. The owner or operator of the facility shall submit the RMP to the Environmental
Protection Agency according to the following schedule and requirements:

i. The owner or operator of the facility shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:

A. Three years after the date on which a regulated substance is first listed under § 68.130; or,

SECTION C. Site Level Requirements

B. The date on which a regulated substance is first present above a threshold quantity in a process.

ii. The owner or operator of the facility shall submit any additional relevant information requested by the Department or the Environmental Protection Agency concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

iii. The owner or operator of the facility 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 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.

 # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

COVERED PROCESS UNIT shall mean any process unit that is subject to the equipment leak provisions of 40 C.F.R. Part 60, Subparts KKK (and by reference Subpart VV) or Subpart OOOOa (and by reference Subpart VVa).

DISTILLATION UNIT shall mean a device or vessel in which distillation operations occur, including all associated internals (such as trays or packing) and accessories (such as reboiler, condenser, vacuum pump, steam jet, etc.), plus any associated recovery system.

DOR shall mean Delay of Repair.

EFFECTIVE DATE shall mean January 8, 2019.

ISOLATION VALVE shall mean a valve that temporarily (or permanently) isolates a part or piece of equipment, correspondingly removing that part or piece from VOC services.

LDAR or LEAK DETECTION and REPAIR shall mean the leak detection and repair activities required by any applicable "equipment leak" regulations set forth in 40 C.F.R. Part 60, Subparts KKK, OOOOa, and VVa, as well as any applicable state or local equipment leak requirements that require the use of Method 21 or OGI, as applicable to the alternative work practice as specified in 40 C.F.R. § 60.18(g), to monitor for equipment leaks and also require the repair of leaks discovered through such monitoring. LDAR REGULATIONS shall collectively mean the federal, state and local law, regulations, permit and requirements referenced in this subparagraph.

MAINTENANCE SHUTDOWN shall mean a shutdown of a Covered Process Unit that either is done for the purpose of scheduled maintenance and that lasts longer than 14 calendar days.

METHOD 21 shall mean the test method found at 40 C.F.R. Part 60, Appendix A, Method 21. To the extent that the Covered Equipment is subject to regulations that modify Method 21, those modifications shall be applicable.

NATURAL GASOLINE STORAGE VESSEL shall mean a storage vessel that stores natural gasoline product.

OPTICAL GAS IMAGING INSTRUMENT or OGI shall mean an instrument that images a gas cloud, not visible to the naked eye, and can absorb/emit radiant energy at the waveband of the infrared camera. The waveband must contain at least the range of 3.3 to 3.4 micrometers.

PILOT-OPERATED MODULATING PRESSURE RELIEF VALVE or PORV shall mean a pilot valve (or control pilot) used to control or limit the pressure in a system or which can build up for a process upset, instrument or equipment failure, or fire.

PROCESS UNIT means equipment assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products as defined in 40 C.F.R. § 60.5430. A Process Unit can operate indepedently if supplied with sufficient feed or raw materials and

SECTION C. Site Level Requirements

sufficient storage facilities for the products.

REPAIR VERIFICATION MONITORING shall mean the utilization of monitoring (or other method) to be completed by no later than the next calendar Day after each attempt at repair of a leaking piece of equipment in order to determine whether the leak has been eliminated or is below the applicable leak definition in this LDAR Program.

 # 018 [25 Pa. Code §129.96]

Applicability

(b) The NOx requirements of this section and § § 129.97—129.100 apply Statewide to the owner and operator of a NOx emitting facility and the VOC requirements of this section and § § 129.97—129.100 apply Statewide to the owner and operator of a VOC emitting facility when the installation of a new source or a modification or change in operation of an existing source after July 20, 2012, results in the source or facility meeting the definition of a major NOx emitting facility or a major VOC emitting facility and for which a requirement or an emission limitation, or both, has not been established in § § 129.51—129.52e, 129.54—129.69, 129.71—129.75, 129.77, 129.101—129.107 and 129.301—129.310.

[MarkWest Bluestone was previously Synthetic Minor. Now, MarkWest Bluestone is a major VOC source.]
[Source 109 is subject to § 129.57 and therefore exempt from RACT II.]

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

[The followng sources have individual VOC PTEs < 1 TPY:
- Sources 111, 701, & 801.
- Fugitive emissions from pump seals & compressors included in Source 110.
- Seven (7) heaters of Source 107 (H-5801 Bluestone I Regen Heater; 2-H-101 Bluestone II Regen Heater; 2-H-102 Deethanization I Regen Heater; 2-H-802 Depropanizer I HMO Heater; 3-H-741 Bluestone III Regen Heater; 3-H-781 Bluestone III HMO Heater; and 7-H-1775 Deethanizer II Regen Heater). The remaining five (5) heaters of Source 107 are subject to presumptive RACT II requirements.]

[§ 129.96(a) & (d) do not apply.]

 # 019 [25 Pa. Code §129.97]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.

(a) The owner and operator of a source listed in one or more of subsections (b)—(h) located at a major NOx emitting facility or major VOC emitting facility subject to § 129.96 (relating to applicability) shall comply with the applicable presumptive RACT requirement or RACT emission limitation, or both, beginning with the specified compliance date as follows, unless an alternative compliance schedule is submitted and approved under subsections (k)—(m) or § 129.99 (relating to alternative RACT proposal and petition for alternative compliance schedule):

(1) [Not Applicable]

(2) January 1, 2017, or 1 year after the date the source meets the definition of a major NOx emitting facility or major VOC emitting facility, whichever is later, for a source subject to § 129.96(b).

[Sources subject to RACT II presumptive requirements are the following: Sources 103A, 103B, 114A, 114B, 114C, 114D, 107, 108, & 601; and Control Devices C108 & C110.]

(b) - (h) [Omitted. Applicable provisions are incorporated &/or cited in Sections D & E of this permit.

 # 020 [25 Pa. Code §129.99]

Alternative RACT proposal and petition for alternative compliance schedule.

(a) The owner or operator of an air contamination source subject to § 129.97 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) located at a major NOx emitting facility or major VOC emitting facility subject to § 129.96 (relating to applicability) that cannot meet the applicable presumptive RACT requirement or RACT emission limitation of § 129.97 may propose an alternative RACT requirement or RACT emission limitation in accordance with subsection (d).

SECTION C. Site Level Requirements

(b) [Not Applicable]

(c) The owner or operator of a VOC air contamination source with a potential emission rate equal to or greater than 2.7 tons of VOC per year that is not subject to § 129.97 located at a major VOC emitting facility subject to § 129.96 shall propose a VOC RACT requirement or RACT emission limitation in accordance with subsection (d).

[Sources subject to RACT II alternative requirements are the following: four (4) fugitive emissions sources, namely connectors, flanges, PSV (pressure safety valves), & valves. These fugitive emissions sources are included in Source 110.]

(d) - (k) [Omitted. Refer to 25 Pa. Code § 129.99 in www.pacodeandbulletin.gov.]

VIII. COMPLIANCE CERTIFICATION.

The permittee shall submit within thirty days of 01/31/2021 a certificate of compliance with all permit terms and conditions set forth in this Title V permit as required under condition #026 of section B of this permit, and annually thereafter.

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

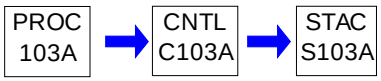
***** Permit Shield In Effect *****

SECTION D. Source Level Requirements

Source ID: 103A Source Name: 840 BHP WAUKESHA F3524GSI COMP ENG UNIT 5701, SN 5283701374

Source Capacity/Throughput: 4.600 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: SOURCE TEST SUBMITTALS
§ 127.12B - REFRIGERANT COMPRESSORS
§ 60 SUBPART JJJJ



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

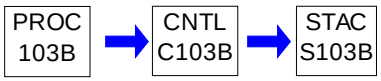
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 103B Source Name: 840 BHP WAUKESHA F3524GSI COMP ENG UNIT 5702, SN 5283701373

Source Capacity/Throughput: 4.600 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: SOURCE TEST SUBMITTALS
§ 127.12B - REFRIGERANT COMPRESSORS
§ 60 SUBPART JJJJ



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

SECTION D. Source Level Requirements

Source ID: 107 Source Name: PROCESS HEATERS

Source Capacity/Throughput: 351.000 MMBTU/HR
328.000 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: SOURCE TEST SUBMITTALS
§ 127.12B - LDAR
§ 60 SUBPART DB
§ 60 SUBPART DC
§ 60 SUBPART OOOOA

PROC 107 → STAC S107

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.11]
Combustion units

A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of 0.4 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

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

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

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

[PA 10-368E and 10-368G]

(a) Emissions from 2-H-802 Depropanizer I HMO Heater [42.4 MMBtu/hr] shall not exceed any of the following:
(i) NOx: 0.05 lb/MMBtu; 9.3 tpy, calculated as a 12-month rolling total.
(ii) CO: 0.05 lb/MMBtu; 9.3 tpy, calculated as a 12-month rolling total.

(b) Emissions from 6-H-851 Fractionator HMO Heater [119.2 MMBtu/hr] shall not exceed any of the following:
(i) NOx: 0.035 lb/MMBtu; 18.27 tpy, calculated as a 12-month rolling total.
(ii) CO: 0.051 lb/MMBtu; 26.76 tpy, calculated as a 12-month rolling total.

(c) Emissions from 6-H-852a Fractionator HMO Heater [64.8 MMBtu/hr] shall not exceed any of the following:
(i) NOx: 0.04 lb/MMBtu; 11.353 tpy, calculated as a 12-month rolling total.
(ii) CO: 0.041 lb/MMBtu; 11.637 tpy, calculated as a 12-month rolling total.

(d) Emissions from 7-H-1768 Deethanizer II HMO Heater [60.7 MMBtu/hr] shall not exceed any of the following:
(i) NOx: 0.04 lb/MMBtu; 10.64 tpy, calculated as a 12-month rolling total.
(ii) CO: 0.04 lb/MMBtu; 10.64 tpy, calculated as a 12-month rolling total.

II. TESTING REQUIREMENTS.

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

[PA 10-368E & 10-368G. Starting with the initial Title V operating permit, VOC is removed from the list of emissions that must be tested.]

(1) Within 90 days after achieving the normal rated capacity at which the affected source will be operated, but no later than

SECTION D. Source Level Requirements

180 days from startup of the source(s), stack test(s) for NOx and CO shall be performed on 2-H-802 Depropanizer I HMO Heater [42.4 MMBtu/hr], 6-H-851 Fractionator HMO Heater [119.2 MMBtu/hr], 6-H-852a Fractionator HMO Heater [64.5 MMBtu/hr], and 7-H-1768 Deethanizer II HMO Heater [60.7 MMBtu/hr], in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection. The stack test(s) shall be performed while the aforementioned source(s) are operating at maximum normal operating conditions.

(2) - (9) [Omitted. For the latest instructions on source test submittals (Source Testing Section, August 17, 2018), follow the requirements of Source Group SOURCE TEST SUBMITTALS in Section E of this permit.]

(10) The permittee shall ensure all federal reporting requirements contained in the applicable subpart of 40 CFR are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.

(11) Actions Related to Noncompliance Demonstrated by a Stack Test:

(a) If the results of a stack test, performed as required by this approval, exceed the level specified in any condition of this approval, the Permitee shall take appropriate corrective actions. Within 30 days of the Permitee receiving the stack test results, a written description of the corrective actions shall be submitted to the Department. The Permitee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. The Department shall notify the Permitee within 30 days, if the corrective actions taken are deficient. Within 30 days of receipt of the notice of deficiency, the Permitee shall submit a description of additional corrective actions to the Department. The Department reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) If the results of the required stack test exceed any limit defined in this plan approval, the test was not performed in accordance with the stack test protocol or the source and/or air cleaning device was not operated in accordance with the plan approval, then another stack test shall be performed to determine compliance. Within 120 days of the Permitee receiving the original stack test results, a retest shall be performed. The Department may extend the retesting deadline if the Permitee demonstrates, to the Department's satisfaction, that retesting within 120 days is not practicable. Failure of the second test to demonstrate compliance with the limits in the plan approval, not performing the test in accordance with the stack test protocol or not operating the source and/or air cleaning device in accordance with the plan approval may be grounds for immediate revocation of the plan approval to operate the affected source.

(12) Once every five (5) years and not more than 60 months after the previous stack test, the permittee shall perform stack test(s) for NOx and CO on 2-H-802 Depropanizer I HMO Heater [42.4 MMBtu/hr], 6-H-851 Fractionator HMO Heater [119.2 MMBtu/hr], 6-H-852a Fractionator HMO Heater [64.8 MMBtu/hr], and 7-H-1768 Deethanizer II HMO Heater [60.7 MMBtu/hr] in accordance with the provisions of Condition #004 for this source. The stack test(s) shall be performed while the aforementioned source(s) are operating at the maximum or normal rated capacity as stated on the application for PA 10-368E.

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.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368E & 10-368G]

(a) The permittee shall maintain a record of all preventative maintenance inspections of this source. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, any actions taken to correct the problems or defects, and any routine maintenance performed.

SECTION D. Source Level Requirements

(b) All required records shall be maintained for a minimum of five (5) years, and shall be made available to Department personnel upon request.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368E & 10-368G]

(a) The permittee shall install, maintain, and operate this source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368G]

(1) The owner or operator of the natural gas compression and/or processing facility shall, at a minimum, on a monthly basis perform a leak detection and repair program that includes audible, visual, and olfactory ("AVO") inspections.

(2) Within 180 calendar days after the initial startup of a source, the owner or operator of the facility shall at a minimum, on a quarterly basis, use forward looking infrared ("FLIR") cameras or other leak detection monitoring devices approved by the Department for the detection of fugitive leaks. The Department may grant an extension for use of a FLIR camera upon receipt of a written request from the owner or operator of the facility documenting the justification for the requested extension.

(3) If any leak is detected, the owner or operator of the facility shall repair the leak as expeditiously as practicable, but no later than fifteen (15) calendar days after the leak is detected, except as provided in 40 CFR §§ 60.482- 60.489. The owner or operator shall record each leak detected and the associated repair activity. The records shall be retained for a minimum of five (5) years and shall be made available to the Department upon request.

VII. ADDITIONAL REQUIREMENTS.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For RACT II purposes:

(a) Applicability of RACT II to the heaters of Source 107 are as follows:

(1) Four (4) heaters are subject to § 129.97(c)(2) – i.e., PTE VOC < 2.7 TPY (but > 1 TPY). These are H-5602 Bluestone I Deethanization Heater; 2-H-801 Bluestone II HMO Heater; 6-H-851 Fractionation HMO Heater; and 6-H-852a Fractionation HMO Heater.

(2) One (1) heater is subject to § 129.97(d) – i.e. PTE VOC > 2.7 TPY. This is 7-H-1768 Deethanizer II HMO Heater.

(3) Seven (7) heaters are exempt from RACT II pursuant to § 129.96(c) – i.e., PTE VOC < 1 TPY. These are H-5801 Bluestone I Regen Heater; 2-H-101 Bluestone II Regen Heater; 2-H-102 Deethanization I Regen Heater; 2-H-802 Depropanizer I HMO Heater; 3-H-741 Bluestone III Regen Heater; 3-H-781 Bluestone III HMO Heater; and 7-H-1775 Deethanizer II Regen Heater.

(b) Compliance with a work practice requirement established through PA 10-368E assures compliance of the four heaters

SECTION D. Source Level Requirements

in paragraph (a)(1) with § 129.97(c) and the one heater in paragraph (a)(2) with § 129.97(d).

(c) Compliance with recordkeeping requirements established through PA 10-368E assures compliance with § 129.100(d) & (i).

(d) Because MarkWest Bluestone is not a major NOx source, presumptive RACT II NOx limits and requirements do not apply. The NOx limit pursuant to § 129.97(g)(1)(i) does not apply to 7-H-1768 Deethanizer II HMO Heater.

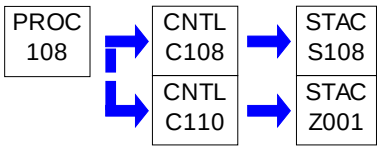
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 108 Source Name: TRUCK AND RAILYARD LOADING

Source Capacity/Throughput:

Conditions for this source occur in the following groups: § 127.12B - LDAR
§ 60 SUBPART OOOOA



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.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368A & D]

(a) The permittee shall maintain a record of all preventative maintenance inspections of this source. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, any actions taken to correct the problems or defects, and any routine maintenance performed.

(b) All required records shall be maintained for a minimum of five (5) years, and shall be made available to Department personnel upon request.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368A & D]

(a) The permittee shall install, maintain, and operate this source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For RACT II purposes:

(a) Applicability of RACT II to Source 108 are as follows:

(1) 'Emissions not captured' and 'emissions from hose disconnection' are subject to § 129.97(c)(2) – i.e., PTE VOC < 2.7 TPY.

(2) 'Emissions captured & directed to flare' is subject to § 129.97(c)(6) – i.e., an incinerator, thermal oxidizer or catalytic oxidizer used primarily for air pollution control.

(b) For emissions under paragraph (a)(1):

(1) Compliance with a work practice requirement established through PA 10-368A & D assures compliance with § 129.97(c).

(2) Compliance with recordkeeping requirements established through PA 10-368A & D assures compliance with § 129.100(d) & (i).

(c) For emissions under paragraph (a)(2), see C108 in Section D of this permit for applicable RACT II requirements.

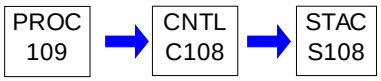
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 109 Source Name: STORAGE TANK

Source Capacity/Throughput:

Conditions for this source occur in the following groups: § 127.12B - LDAR
§ 60 SUBPART OOOOA



I. RESTRICTIONS.

Control Device Efficiency Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368E]

In accordance with 25 Pa. Code §§ 127.1 and 127.12(a)(5), the owner or operator of condensate tank or other storage vessel shall install and operate VOC control equipment that has a control efficiency of at least 95% on a storage vessel that has actual uncontrolled VOC emissions of greater than or equal to two tons per year. The owner or operator may use any of the following or any other method approved by the Department for calculating VOC emissions from condensate tank or other storage vessel.

i. Vasquez-Beggs Equation (VBE)
ii. Environmental Consultants and Research, Inc. (EC/R) Equation
iii. An equation of state (EOS) calculation program such as E&P Tank®
iv. Determination of the gas oil ratio (GOR) and throughput of the hydrocarbon liquids
v. Process simulators (HYSIM®, HYSYS®, WINSIM®, PROSIM®, etc.)
vi. Direct measurement of emissions

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368E]

(a) The permittee shall maintain a record of all preventative maintenance inspections of this source. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, and any routine maintenance performed.

(b) All required records shall be maintained for a minimum of five (5) years, and shall be made available to Department personnel upon request.

V. REPORTING REQUIREMENTS.

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

SECTION D. Source Level Requirements

VI. WORK PRACTICE REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368E]

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

 # 004 [25 Pa. Code §129.57]

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

The provisions of this section shall apply to above ground stationary storage tanks with a capacity equal to or greater than 2,000 gallons which contain volatile organic compounds with vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions. Storage tanks covered under this section shall have pressure relief valves which are maintained in good operating condition and which are set to release at no less than .7 psig (4.8 kilopascals) of pressure or .3 psig (2.1 kilopascals) of vacuum or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department. Section 129.56(g) (relating to storage tanks greater than 40,000 gallons capacity containing volatile organic compounds) applies to this section. Petroleum liquid storage vessels which are used to store produced crude oil and condensate prior to lease custody transfer shall be exempt from the requirements of this section.

VII. ADDITIONAL REQUIREMENTS.

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

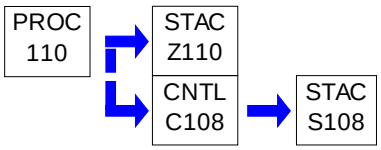
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 110 Source Name: GAS PROCESSING PLANT VENTING

Source Capacity/Throughput: N/A

Conditions for this source occur in the following groups: § 127.12B - LDAR
§ 60 SUBPART OOOOA
§ 65 SUBPART D



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.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368A & D]

(a) The permittee shall maintain a record of all preventative maintenance inspections of this source. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, any actions taken to correct the problems or defects, and any routine maintenance performed.

(b) The permittee shall maintain monthly records of the hours of operation of this source.

(c) The permittee shall maintain monthly records of the amount of natural gas processed.

(d) All required records shall be maintained for a minimum of five (5) years, and shall be made available to Department personnel upon request.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

All records required under §§ 60.5421a & 60.5420a(c) shall be retained by the owner or operator for 5 years & made available to the Department or appropriate approved local air pollution control agency upon receipt of a written request from the Department or appropriate approved local air pollution control agency.

[Authority for this condition is also derived from 25 Pa. Code § 129.100(i). This condition applies to the four fugitive emissions sources identified under VII. Additional Requirements of this source. For the four fugitive emissions sources identified, this condition streamlines out the 2-year recordkeeping requirement under § 60.5421a(b)(2).]

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.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368A & D]

(a) The permittee shall install, maintain, and operate this source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

(b) The permittee shall install a device to measure the amount of natural gas processed during a calendar month.

VII. ADDITIONAL REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For RACT II purposes:

(a) Fugitive emissions sources included in Source 110 that are subject to RACT II Case-by-Case (§ 129.99) are the following: connectors, flanges, PSV (pressure safety valves), & valves.

(b) Proposed under the authority of § 129.99, RACT VOC requirement for fugitive emissions sources identified in paragraph (a) is § 40 CFR 60 Subpart OOOOa.

[Applicable provisions of § 60 Subpart OOOOa are incorporated under Source Group § 60 SUBPART OOOOa in Section E of this permit. Note that § 60 Subpart OOOOa, which is a requirement of PA 10-368D & GP5 10-368B, applies to all fugitive emission sources of Source 110 regardless of RACT II applicability.]

(c) Compliance with §§ 60.5421a & 60.5420a(c), which are recordkeeping requirements of § 60 Subpart OOOOa, assures compliance with recordkeeping requirement pursuant to § 129.100(d).

 # 005 [25 Pa. Code §129.99]

Alternative RACT proposal and petition for alternative compliance schedule.

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

[The 25 Pa. Code § 129.99(g) is included as a condition in RACT 10-000-368 issued on November 18, 2019.]

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

SECTION D. Source Level Requirements

Source ID: 111 Source Name: OLYMPIAN EMERGENCY GENERATOR

Source Capacity/Throughput: 0.850 MMBTU/HR
0.790 MCF/HR

PROC 111 → STAC S111

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

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

(b) Not applicable

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

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

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

(ii) - (iii) Not applicable

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

(d) Not applicable

 # 002 [25 Pa. Code §123.21]

General

(a) Not applicable

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

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368D]

The permitee shall maintain the emission of NOx not greater than 100 lbs/hr, 1000 lbs/day, 2.75 tons per ozone season, and 6.6 tons per year on a 12-month rolling basis for the total of all of the exempted engines at the facility.

II. TESTING REQUIREMENTS.

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

SECTION D. Source Level Requirements

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368D]

The permittee shall maintain a record of NOx emission per hour, per day and, per year based on 12-months rolling total to demonstrate that the source is in compliance with the NOx restrictions. Present month's NOx emission record shall be added with previous 11 months records to get 12 months rolling total.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) -(3): Not applicable.

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

(i) - (iii): Not applicable.

(iv) on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

(5) - (6): Not applicable.

(b) - (e): Not applicable.

(f) Owners and operators of facilities with internal combustion engines that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

 # 006 [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?

(a) - (d): Not applicable.

SECTION D. Source Level Requirements

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

(f) - (h): Not applicable.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4234]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in § 60.4233 over the entire life of the engine.

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4236]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

What is the deadline for importing or installing stationary SI ICE produced in the previous model year?

(a) After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in § 60.4233.

(b) After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in § 60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in § 60.4233 may not be installed after January 1, 2010.

(c) For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in § 60.4233 after January 1, 2011.

(d) In addition to the requirements specified in §§ 60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in paragraphs (a), (b), and (c) of this section, after the date specified in paragraph (a), (b), and (c) of this section.

(e) The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4237]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?

(a) -(b): Not applicable.

(c) If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.

 # 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?

(a) If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in §60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum

engine power. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

(2) [Not Applicable]

(b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

(2) [Not Applicable]

(c) [Not Applicable]

(d) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (d)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (d)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (d)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) [The 'no time limit' condition is streamlined out by Condition #003 for this source.]

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

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The 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.

(ii) - (iii) [Vacated]

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of this section. Except as provided in paragraph (d)(3)(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) [Not Applicable]

SECTION D. Source Level Requirements

(ii) [Reserved]

(e) Owners and operators of stationary SI natural gas fired engines may operate their engines 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 an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of § 60.4233.

(f) - (h) [Not Applicable]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37974, June 28, 2011; 78 FR 6697, Jan. 30, 2013]

 # 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?

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(2) Maintenance conducted on the engine.

(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to § 60.4243(a)(2), documentation that the engine meets the emission standards.

(b) For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(c) - (e): Not applicable.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 78 FR 6697, Jan. 30, 2013]

 # 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4246]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

SECTION D. Source Level Requirements

 # 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4248]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) are given in 40 CFR 90.105, 40 CFR 1054.107, and 40 CFR 1060.101, as appropriate. The values for certified emissions life for stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) certified to 40 CFR part 1048 are given in 40 CFR 1048.101(g). The certified emissions life for stationary SI ICE with a maximum engine power greater than 75 KW (100 HP) certified under the voluntary manufacturer certification program of this subpart is 5,000 hours or 7 years, whichever comes first. You may request in your application for certification that we approve a shorter certified emissions life for an engine family. We may approve a shorter certified emissions life, in hours of engine operation but not in years, if we determine that these engines will rarely operate longer than the shorter certified emissions life. If engines identical to those in the engine family have already been produced and are in use, your demonstration must include documentation from such in-use engines. In other cases, your demonstration must include an engineering analysis of information equivalent to such in-use data, such as data from research engines or similar engine models that are already in production. Your demonstration must also include any overhaul interval that you recommend, any mechanical warranty that you offer for the engine or its components, and any relevant customer design specifications. Your demonstration may include any other relevant information. The certified emissions life value may not be shorter than any of the following:

(i) 1,000 hours of operation.

(ii) Your recommended overhaul interval.

(iii) Your mechanical warranty for the engine.

Certified stationary internal combustion engine means an engine that belongs to an engine family that has a certificate of conformity that complies with the emission standards and requirements in this part, or of 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054, as appropriate.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

SECTION D. Source Level Requirements

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and carbon dioxide (CO_2).

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in § 60.4243(d) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in § 60.4243(d), then it is not considered to be an emergency stationary ICE under this subpart.

(1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.

(2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 60.4243(d).

(3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 60.4243(d)(2)(ii) or (iii) and § 60.4243(d)(3)(i).

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining or natural gas production.

Manufacturer has the meaning given in section 216(1) of the Clean Air Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1048.801.

Model year means the calendar year in which an engine is manufactured (see “date of manufacture”), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see “date of manufacture”), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous

SECTION D. Source Level Requirements

calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see “date of manufacture”).

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Pipeline-quality natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipeline-quality natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units per standard cubic foot.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to June 12, 2006, with passive emission control technology for NOX (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to either: a gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Stationary internal combustion engine test cell/stand means an engine test cell/stand, as defined in 40 CFR part 63, subpart PPPPP, that tests stationary ICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Subpart means 40 CFR part 60, subpart JJJJ.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

Volatile organic compounds means volatile organic compounds as defined in 40 CFR 51.100(s).

Voluntary certification program means an optional engine certification program that manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich

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burn engines that use LPG can choose to participate in to certify their engines to the emission standards in § 60.4231(d) or (e), as applicable.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 76 FR 37974, June 28, 2011; 78 FR 6698, Jan. 30, 2013]

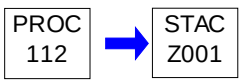
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 112 Source Name: ELECTRIC COMPRESSOR ENGINES

Source Capacity/Throughput:

Conditions for this source occur in the following groups: § 127.12B - LDAR
§ 60 SUBPART OOOO



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

SECTION D. Source Level Requirements

Source ID: 114A Source Name: 1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4701, SN 5283701468

Source Capacity/Throughput: 12.136 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: SOURCE TEST SUBMITTALS
§ 127.12B - COMPRESSOR ENGINES
§ 60 SUBPART JJJJ
§ 60 SUBPART OOOO

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

SECTION D. Source Level Requirements

Source ID: 114B Source Name: 1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4702, SN 5283701448

Source Capacity/Throughput: 12.136 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: SOURCE TEST SUBMITTALS
§ 127.12B - COMPRESSOR ENGINES
§ 60 SUBPART JJJJ
§ 60 SUBPART OOOO

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

SECTION D. Source Level Requirements

Source ID: 114C Source Name: 1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4703, SN 5283701397

Source Capacity/Throughput: 12.136 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: SOURCE TEST SUBMITTALS
§ 127.12B - COMPRESSOR ENGINES
§ 60 SUBPART JJJJ
§ 60 SUBPART OOOO

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

SECTION D. Source Level Requirements

Source ID: 114D Source Name: 1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4704, SN 5283701443

Source Capacity/Throughput: 12.136 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: SOURCE TEST SUBMITTALS
§ 127.12B - COMPRESSOR ENGINES
§ 60 SUBPART JJJJ
§ 60 SUBPART OOOO

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

SECTION D. Source Level Requirements

Source ID: 601 Source Name: VENTING/BLOWDOWN

Source Capacity/Throughput:

PROC 601 → CNTL C108 → STAC S108

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 001 [25 Pa. Code §129.100]

Compliance demonstration and recordkeeping requirements.

(a) The permittee shall keep records to demonstrate compliance of this source with § § 129.96—129.99 in the following manner:

(1) The records must include sufficient data and calculations to demonstrate that the requirements of § § 129.96—129.99 are met.

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

(b) The records shall be retained by the owner or operator for 5 years and made available to the Department or appropriate approved local air pollution control agency upon receipt of a written request from the Department or appropriate approved local air pollution control agency.

[Paragraphs (a) & (b) of this condition are § 129.100(d) & (i), respectively.]

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 002 [25 Pa. Code §129.97]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.

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

[§ 129.97(c) for sources meeting § 129.97(c)(2).]

SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

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

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

SECTION D. Source Level Requirements

Source ID: 701 Source Name: OTHER FUGITIVES

Source Capacity/Throughput:

Conditions for this source occur in the following groups: § 60 SUBPART OOOOA

PROC 701 → STAC Z001

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 §127.441]

Operating permit terms and conditions.

Fugitive emissions for this source include the following. These are identifed in this permit for purposes of reporting emissions.

(1) Compressor rod-packing emissions (i.e., leaking from packing) from all compressors associated with either gas-fired (Sources 114A, 114B, 114C, & 114D) or electrical engines (Source 112).

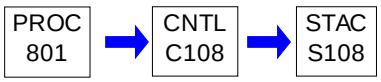
(2) Crankcase blowby emissions (i.e., in the second stroke of a 4-stroke engine as gas & air have been introduced into piston & compressed) from gas-fired engines (Sources 114A, 114B, 114C, & 114D).

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

SECTION D. Source Level Requirements

Source ID: 801 Source Name: PIGGING OPERATIONS

Source Capacity/Throughput:



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

SECTION D. Source Level Requirements

Source ID: C108 Source Name: PLANT PROCESS FLARE

Source Capacity/Throughput:	N/A	Natural Gas
	N/A	Refinery Gas

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §129.97]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.

For RACT II purposes, the two flares (C108, C110) meet the requirements of § 129.97(c)(6).

(a) Compliance with § 60.18 for flares (i.e., C108, C110) assures compliance with § 129.97(c).

(b) Compliance with recordkeeping provisions of rules citing § 60.18 assures compliance with § 129.100(d) & (i).

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]

Subpart A - General Provisions

General control device requirements.

(a) INTRODUCTION.

(1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.

(2) [Not Applicable]

SECTION D. Source Level Requirements

(b) FLARES. Paragraphs (c) through (f) apply to flares.

(c)

(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.

(i)

(A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, Vmax, as determined by the following equation:

Vmax = (XH2-K1)* K2

Where:

Vmax = Maximum permitted velocity, m/sec.

K1 = Constant, 6.0 volume-percent hydrogen.

K2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

XH2 = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §60.17).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.

(4)

(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, Vmax, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.

(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, Vmax, as determined by the method specified in paragraph (f)(6).

(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

SECTION D. Source Level Requirements

(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(f)

(1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

HT = K * Sum(i=1 to i=n) Ci * Hi

[For the equation and notations, refer to § 60.18 of Title 40 - Protection of Environment in www.ecfr.gov]

where:
HT = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;
K = (1.740 * 10^-7) (1/ppm) (g mole/scm) (MJ/kcal)
where the standard temperature for (g mole/scm) is 20 Degrees C
[For the equation and notations, refer to § 60.18 of Title 40 - Protection of Environment in www.ecfr.gov]
Ci = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17); and
Hi = Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

(5) The maximum permitted velocity, Vmax, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

Log10 (Vmax) = (HT + 28.8)/31.7
Vmax = Maximum permitted velocity, M/sec
28.8 = Constant
31.7 = Constant
HT = The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the following equation.

Vmax = 8.706 + 0.7084 (HT)
Vmax = Maximum permitted velocity, m/sec
8.706 = Constant
0.7084 = Constant
HT = The net heating value as determined in paragraph (f)(3).

(g) - (i) [Not Applicable]

[51 FR 2701, Jan. 21, 1986, as amended at 63 FR 24444, May 4, 1998; 65 FR 61752, Oct. 17, 2000; 73 FR 78209, Dec. 22, 2008]

SECTION D. Source Level Requirements

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

SECTION D. Source Level Requirements

Source ID: C110 Source Name: TEMPORARY FLARE

Source Capacity/Throughput:	N/A	Natural Gas
	N/A	Refinery Gas

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §129.97]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.

For RACT II purposes, the two flares (C108, C110) meet the requirements of § 129.97(c)(6).

(a) Compliance with § 60.18 for flares (i.e., C108, C110) assures compliance with § 129.97(c).

(b) Compliance with recordkeeping provisions of rules citing § 60.18 assures compliance with § 129.100(d) & (i).

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]

Subpart A - General Provisions

General control device requirements.

(a) INTRODUCTION.

(1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.

(2) [Not Applicable]

SECTION D. Source Level Requirements

(b) FLARES. Paragraphs (c) through (f) apply to flares.

(c)

(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.

(i)

(A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, Vmax, as determined by the following equation:

Vmax = (XH2-K1)* K2

Where:

Vmax = Maximum permitted velocity, m/sec.

K1 = Constant, 6.0 volume-percent hydrogen.

K2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

XH2 = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §60.17).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.

(4)

(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, Vmax, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.

(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, Vmax, as determined by the method specified in paragraph (f)(6).

(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

SECTION D. Source Level Requirements

(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(f)

(1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

HT = K * Sum(i=1 to i=n) Ci * Hi

[For the equation and notations, refer to § 60.18 of Title 40 - Protection of Environment in www.ecfr.gov]

where:
HT = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;
K = (1.740 * 10^-7) (1/ppm) (g mole/scm) (MJ/kcal)
where the standard temperature for (g mole/scm) is 20 Degrees C
[For the equation and notations, refer to § 60.18 of Title 40 - Protection of Environment in www.ecfr.gov]
Ci = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17); and
Hi = Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

(5) The maximum permitted velocity, Vmax, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

Log10 (Vmax) = (HT + 28.8)/31.7
Vmax = Maximum permitted velocity, M/sec
28.8 = Constant
31.7 = Constant
HT = The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the following equation.

Vmax = 8.706 + 0.7084 (HT)
Vmax = Maximum permitted velocity, m/sec
8.706 = Constant
0.7084 = Constant
HT = The net heating value as determined in paragraph (f)(3).

(g) - (i) [Not Applicable]

[51 FR 2701, Jan. 21, 1986, as amended at 63 FR 24444, May 4, 1998; 65 FR 61752, Oct. 17, 2000; 73 FR 78209, Dec. 22, 2008]

SECTION D. Source Level Requirements

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

SECTION E. Source Group Restrictions.

Group Name: SOURCE TEST SUBMITTALS

Group Description: Conditions for all source test submittals (Source Testing Section, August 17, 2018)

Sources included in this group

ID	Name
103A	840 BHP WAUKESHA F3524GSI COMP ENG UNIT 5701, SN 5283701374
103B	840 BHP WAUKESHA F3524GSI COMP ENG UNIT 5702, SN 5283701373
107	PROCESS HEATERS
114A	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4701, SN 5283701468
114B	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4702, SN 5283701448
114C	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4703, SN 5283701397
114D	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4704, SN 5283701443

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source test submittals shall be as follows:

(1) At least 90 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department for review and approval in accordance with paragraph (8) of this condition. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(2) At least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the Department in accordance with paragraph (8)(B) of this condition. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department (Source Testing Section).

(3) Within 15 calendar days after completion of the on-site testing portion of an emission test program, if a complete test report has not yet been submitted, an electronic mail notification indicating the completion date of the on-site testing shall be sent to the Department in accordance with paragraph (8)(B) of this condition.

(4) A complete test report shall be submitted to the Department no later than 60 calendar days after completion of the onsite testing portion of an emission test program.

(5) A complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or noncompliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:

(A) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.

(B) Permit number(s) and condition(s) which are the basis for the evaluation.

(C) Summary of results with respect to each applicable permit condition.

(D) Statement of compliance or non-compliance with each applicable permit condition.

(6) All submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(7) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.

(8)

SECTION E. Source Group Restrictions.

(A) All submittals, besides notifications, shall be accomplished through PSIMS*Online, available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp, when it becomes available.

(B) If internet submittal cannot be accomplished, one electronic copy of all source test submissions (notifications, protocols, reports, supplemental information, etc.) shall be sent to both PSIMS Administration in Central Office and to Regional Office AQ Program Manager.

Electronic copies of Protocols and Reports shall be sent to the following e-mail addresses:

CENTRAL OFFICE:
RA-EPstacktesting@pa.gov

NORTHWEST REGIONAL OFFICE:
RA-EPNWstacktesting@pa.gov

Nottifications and Supplemental Information shall be submitted to the following:

OnBase Submittal
http://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

SECTION E. Source Group Restrictions.

Group Name: § 127.12B - COMPRESSOR ENGINES

Group Description: PA 10-368F requirements for the four (4) compressor engines

Sources included in this group

ID	Name
114A	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4701, SN 5283701468
114B	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4702, SN 5283701448
114C	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4703, SN 5283701397
114D	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4704, SN 5283701443

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

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

(b) Not applicable

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

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

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

(ii) - (iii) Not applicable

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

(d) Not applicable

 # 002 [25 Pa. Code §123.21]

General

(a) Not applicable

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

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368F]

Emissions from these engines shall not exceed the following:

NOx: 0.20 g/BHP-hr (per engine)
CO: 0.25 g/BHP-hr (per engine)
VOC: 0.16 g/BHP-hr (per engine)
Formaldehyde: 0.01 g/BHP-hr (per engine)

SECTION E. Source Group Restrictions.

II. TESTING REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368F]

(a) Within sixty (60) days after achieving the rated brake horsepower, but no later than one hundred eighty (180) days after initial start-up of each engine, the permittee shall perform stack testing on each compressor engine for NOx, CO, Volatile Organic Compounds (VOC), and Formaldehyde (HCHO). Engine testing load conditions shall be representative to within 10% of maximum load design capacity or to within 10% of the maximum permitted operating load as proposed by the applicant.

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

[§ 60 Subpart JJJJ, which applies to the sources of this source group, requires subsequent stack tests every 8,760 hour or 3 years, whichever comes first.]

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

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

(A) Within sixty (60) days after achieving the rated brake horsepower, but no later than one hundred eighty (180) days after the initial startup of the SI ICE, the owner or operator shall demonstrate compliance with the applicable emission limits. Combined emissions of VOC excluding formadehyde (via US EPA Method 18 / 25A, or equivalent), and formalehyde (via US EPA Method 320, or equivalent) shall be considered for the purposes of demonstrating compliance with the VOC emission limit(s) of this Plan Approval.

(B) - (G) [Omitted. For the latest instructions on source test submittals (Source Testing Section, August 17, 2018), follow the requirements of Source Group SOURCE TEST SUBMITTALS in Section E of this permit, Condition #001, paragraphs (1) to (6).]

(H) All testing shall be performed in accordance with any applicable federal regulations (such as New Source performance Standards, Subpart I); 25 Pa. Code, Chapter 139; and the current revision of the Department's Source Testing Manual or an alternative test method as approved by the Department. The following federal reference methods or alternative test method as approved by the Department shall be used to demonstrate compliance:

40 CFR 60, Appendix A, Method 7E shall be used to determine the NOx emissions.
40 CFR 60, Appendix A, Method 10 shall be used to determine the CO emissions.
40 CFR 60, Appendix A, Method 18 shall be used to determine the VOC emissions.
40 CFR Part 63 Appendix A, Method 320 shall be used to determine the HCHO emissions.

(I) [Omitted. For the latest instructions on source test submittals (Source Testing Section, August 17, 2018), follow the requirements of Source Group SOURCE TEST SUBMITTALS in Section E of this permit, Condition #001, paragraph (8).]

(J) The owner or operator shall ensure that all applicable federal reporting requirements are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between federal and state laws and regulation, the permittee shall comply with the most stringent provision, term, condition, method or rule.

(K) If, at any time, the Department has reason to believe that the air contaminant emissions from the exhaust of SI ICE(s) operating under this Plan Approval are, or may be, in excess of any applicable air contaminant emission limitation, the owner or operator shall conduct stack tests as are deemed necessary by the Department to determine the actual air contaminant emission rate. The owner or operator shall perform any such testing in accordance with the applicable

SECTION E. Source Group Restrictions.

provisions of 25 Pa. Code, Chapter 139 (relating to sampling and testing) as well as in accordance with any additional requirements or conditions established by the Department at the time the owner or operator is notified, in writing, of the need to conduct testing.

III. MONITORING REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368F]

(a) The owner or operator shall measure inlet temperature, outlet temperature, inlet pressure, and outlet pressure at least once a month for each source.

(b) The facility shall monitor at least once per week the air/fuel ratio controller set point for each source.

IV. RECORDKEEPING REQUIREMENTS.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368F]

(a) The permittee shall maintain a record of all preventative maintenance inspections of these source(s) and control device(s). These records shall, at a minimum, contain the dates of the inspections, any problems or defects, any actions taken to correct the problems or defects, and any routine maintenance performed.

(b) The permittee shall maintain monthly records of the amount of fuel combusted and hours of operation for each engine.

(c) All required records shall be maintained on site for a minimum of five (5) years, and shall be made available to Department personnel upon request.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368F]

(a) The permittee shall maintain records of the required monitoring of NSCR catalyst inlet and outlet temperature(s) and pressure(s), and air to fuel ratio setpoint(s), to determine compliance with the applicable permit limits.

(b) All required records shall be maintained on site for a minimum of five (5) years, and shall be made available to Department personnel upon request.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368F]

(a) The permittee shall install, maintain, and operate an appropriately designed air-to-fuel ratio controller on each engine.

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

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368F]

(a) NSCR inlet temperatures shall be maintained in the range of 750-1250°F.

SECTION E. Source Group Restrictions.

(b) NSCR outlet temperatures shall not exceed 1350°F.

(c) Air to fuel ratio controller O2 level setpoints shall be maintained within a range of ± 0.003 of the setpoint observed during the most recent compliant stack test; and shall at all times be maintained in the range of 0.9-1.3.

(d) [Receipt of a letter, dated June 22, 2018, containing the proposed pressure differential range completed and assured compliance with this one-time plan approval condition. See other work practice condition for this source group for the pressure differential range.]

 # 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The pressure differential range across the NSCR catalyst(s) shall be maintained within the range of 0.5 to 5.0 inches of water column.

[This setting is based on a letter dated June 22, 2018, in compliance with Condition #016(d) of PA 10-368F.]

VII. ADDITIONAL REQUIREMENTS.

 # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For RACT II purposes, Sources 114A, 114B, 114C, & 114D are subject to § 129.97(g)(3)(iii) – i.e., rich burn stationary internal combustion engine with a rating equal to or greater than 500 bhp.

(a) Compliance with PA 10-368F's 0.16 g/bhp-hr VOC limit assures compliance with § 129.97(g)(3)(iii)(B)'s 1.0 g/bhp-hr limit.

(b) Compliance with PA 10-368F's testing & recordkeeping requirements assures compliance with § 129.100(a)(4), (d) & (i).

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

SECTION E. Source Group Restrictions.

Group Name: § 127.12B - LDAR

Group Description: Leak Detection and Repair Program, GP5 10-368B and PA 10-368D & E

Sources included in this group

ID	Name
107	PROCESS HEATERS
108	TRUCK AND RAILYARD LOADING
109	STORAGE TANK
110	GAS PROCESSING PLANT VENTING
112	ELECTRIC COMPRESSOR ENGINES

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[GP5 10-368B, PA 10-368D & E]

(1) The owner or operator of the natural gas compression and/or processing facility shall, at a minimum, on a monthly basis perform a leak detection and repair program that includes audible, visual, and olfactory ("AVO") inspections.

(2) Within 180 calendar days after the initial startup of a source, the owner or operator of the facility shall at a minimum, on a quarterly basis, use forward looking infrared ("FLIR") cameras or other leak detection monitoring devices approved by the Department for the detection of fugitive leaks. The Department may grant an extension for use of a FLIR camera upon receipt of a written request from the owner or operator of the facility documenting the justification for the requested extension.

(3) If any leak is detected, the owner or operator of the facility shall repair the leak as expeditiously as practicable, but no later than fifteen (15) calendar days after the leak is detected, except as provided in 40 CFR §§ 60.482- 60.489. The owner or operator shall record each leak detected and the associated repair activity. The records shall be retained for a minimum of five (5) years and shall be made available to the Department upon request.

VII. ADDITIONAL REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pilot-Operated Modulating Pressure Relief Valves ("PORVs")

SECTION E. Source Group Restrictions.

(a) "Markwest Liberty Bluestone, LLC" shall install and operate Bottom Dome Vent Piping on any new PORV that is or will be subject to the requirements of Subpart OOOOa, with the exception of the PORV categories identified below:

1. Atmospheric PORVs that are not otherwise required to be routed through a closed-vent system; or

2. Snap-action PORVs.

(b) "Markwest Liberty Bluestone, LLC" shall conduct Method 21 monitoring on PORVs subject to Subpart OOOOa on a quarterly frequency, unless: (i) more frequent monitoring is required by federal, state, or local laws or regulations; or (ii) the relevant Covered Process Unit has been permanently shut down.

(c) "Markwest Liberty Bluestone, LLC" shall repair all leaks of PORVs detected at or above 500 ppm:

1. By no later than five Days after detecting a leak, "Markwest Liberty Bluestone, LLC" shall perform a first attempt at repair of the PORV. By no later than 15 Days after detection, "Markwest Liberty Bluestone, LLC" shall perform a final attempt at repair of the PORV or place it on the DOR list provided that "Markwest Liberty Bluestone, LLC" have complied with all applicable regulations.

2. "Markwest Liberty Bluestone, LLC" shall conduct Repair Verification Monitoring after repair of any leaks.

3. For all PORVs placed on the DOR list, "Markwest Liberty Bluestone, LLC" shall:

i. Require sign-off from the relevant process unit supervisor or person of similar authority that the PORV is technically infeasible to repair without a process unit shutdown;

ii. Undertake monthly Method 21 monitoring of PORVs placed on the DOR list; and

iii. Repair the PORV within the time frame required by the applicable LDAR regulation.

(d) The following PORVs with pressure safety valve (PSV) identification numbers located at the Bluestone Facility are not covered by this requirement: PSV-1003A, PSV-1003B, PSV-V103, and 0-PSV-1001.

(e) For each leak identified, "MarkWest Liberty Bluestone, LLC" shall record the following information: the date the leak was identified and the Screening Value; the date of all repair attempts; the repair methods used during each repair attempt; the date, time, and Screening Values for all re-monitoring events; and, if applicable, documentation of compliance with requirements for PORVs placed on the DOR list.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Hose Connections to Railcar/Truck Loading Operations

"Markwest Liberty Bluestone, LLC" shall use either of the following options to monitor for leaks at any hose connections in VOC service during railcar or truck loading operations, or representative of loading conditions, at each railcar or truck loading bay at any Covered Facility:

a. "Markwest Liberty Bluestone, LLC" shall conduct OGI monitoring in accordance with 40 C.F.R. § 60.18(g)-(i) of such hose connections during railcar or truck loading operations, or representative of loading conditions, at least once within each 60-Day period at any railcar or truck loading bay that operates at least once during such 60-Day period, and annually thereafter, shall conduct Method 21 monitoring of such hose connections for any leaks above 500 ppm.

b. "Markwest Liberty Bluestone, LLC" shall conduct Method 21 monitoring for any leaks above 500ppm quarterly to identify leaks at any hose connections during railcar or truck loading operations, or representative of loading conditions, at each railcar or truck loading bay at any Covered Facility.

"Markwest Liberty Bluestone, LLC" shall repair all leaks of hose connections identified above, in accordance with the following requirements:

a. By no later than five Days after detecting a leak, "Markwest Liberty Bluestone, LLC" shall perform a first attempt at

SECTION E. Source Group Restrictions.

repair;

b. By no later than 15 Days after detection, “Markwest Liberty Bluestone, LLC” shall perform a final attempt at repair; and,

c. By no later than the end of the next Maintenance Shutdown.

“MarkWest Liberty Bluestone, LLC” shall maintain the following records:

a. Identification of each railcar loading and truck loading bay at each Covered Facility.

b. For each bay, dates of OGI and Method 21 monitoring event, and for each monitoring event, identification and number of connections that triggered leak repair requirements; and

c. Dates of first attempt and final attempts at repair.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Natural Gasoline Storage Vessels

(a) For Natural Gasoline Storage Vessels operating, “Markwest Liberty Bluestone, LLC” shall conduct Method 21 monitoring for any leaks above 500 ppm from pressure relief devices operating on such Natural Gasoline Storage Vessels on a quarterly basis.

(b) "Markwest Liberty Bluestone, LLC” shall repair all leaks of pressure relief devices, in accordance with the following requirements:

(1) By no later than five Days after detecting a leak, “Markwest Liberty Bluestone, LLC” shall perform a first attempt at repair;

(2) By no later than 15 Days after detection, “Markwest Liberty Bluestone, LLC” shall perform a final attempt at repair;

(3) “Markwest Liberty Bluestone, LLC” shall conduct Repair Verification Monitoring after repair of any leaks; and

(4) For all pressure relief devices placed on the DOR list, “Markwest Liberty Bluestone, LLC” shall:

i. Require sign-off from the relevant process unit supervisor or person of similar authority that the pressure relief device is technically infeasible to repair without a process unit shutdown;

ii. Undertake quarterly Method 21 monitoring of pressure relief devices placed on the DOR list; and

iii. Repair the pressure relief devices within the time frame required by the applicable LDAR regulation.

(c) If “MarkWest Liberty Bluestone, LLC” detect leaks of any such pressure relief device above 500 ppm in two consecutive quarterly monitoring periods for the Bluestone Facility, “MarkWest Liberty Bluestone, LLC” shall install an Isolation Valve upstream of the pressure relief device within 30 Days, or as soon as reasonably practicable thereafter, of identifying the second leak.

(d) “MarkWest Liberty Bluestone, LLC”, subject to #004(b) and (c) of this section above, shall maintain the following records:

(1) For each Natural Gasoline Storage Vessel subject to #004(a) of this section, dates of each Method 21 monitoring event of each pressure relief valve on such vessel and identification;

(2) Dates of first attempt and final attempts at repair, or indication of pressure relief valve being placed on the DOR list; and

SECTION E. Source Group Restrictions.

(3) Date that an Isolation Valve was installed on the Natural Gasoline Storage Vessel, as appropriate.

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

SECTION E. Source Group Restrictions.

Group Name: § 127.12B - REFRIGERANT COMPRESSORS

Group Description: PA 10-368A & B requirements for the two (2) refrigerant compressors

Sources included in this group

ID	Name
103A	840 BHP WAUKESHA F3524GSI COMP ENG UNIT 5701, SN 5283701374
103B	840 BHP WAUKESHA F3524GSI COMP ENG UNIT 5702, SN 5283701373

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

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

(b) Not applicable

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

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

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

(ii) - (iii) Not applicable

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

(d) Not applicable

 # 002 [25 Pa. Code §123.21]

General

(a) Not applicable

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

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368A & B]

Emissions from these engines shall not exceed the following:

(a) NOx: 0.3 g/BHP-hr (per engine)
(b) CO: 0.65 g/BHP-hr (per engine) [streamlined out by paragraph (d)]
(c) VOC: 0.25 g/BHP/hr (per engine) [streamlined out by paragraph (e)]

[The CO and VOC emissions limits from this requirement have been streamlined with the more stringent restrictions as follows.]

(d) CO - 0.50 gms/hp-hr (per engine); 0.93 #/hr (per engine); and 8.11 TPY for the total of the 2 engines.
(e) VOC - 0.20 gms/hp-hr (per engine); 0.37 #/hr (per engine); and 3.24 TPY for the total of the 2 engines.

SECTION E. Source Group Restrictions.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368A & B]

Formaldehyde emissions from these engines shall not exceed 0.068 lb/hr, per engine.

II. TESTING REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368A & B]

(a) Within sixty (60) days after achieving the rated brake horsepower, but no later than one hundred eighty (180) days after initial start-up of each engine, the permittee shall perform stack testing on each compressor engine for NOx, CO, Volatile Organic Compounds (VOC), and Formaldehyde (HCHO). Engine testing load conditions shall be representative to within 10% of maximum load design capacity or to within 10% of the maximum permitted operating load as proposed by the applicant.

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

[§ 60 Subpart JJJJ, which applies to the sources of this source group, requires subsequent stack tests every 8,760 hour or 3 years, whichever comes first.]

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

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

(A) Within sixty (60) days after achieving the rated brake horsepower, but no later than one hundred eighty (180) days after the initial startup of the SI ICE, the owner or operator shall demonstrate compliance with the applicable emission limits. Combined emissions of VOC excluding formadehyde (via US EPA Method 18 / 25A, or equivalent), and formalehyde (via US EPA Method 320, or equivalent) shall be considered for the purposes of demonstrating compliance with the VOC emission limit(s) of this Plan Approval.

(B) - (G) [Omitted. For the latest instructions on source test submittals (Source Testing Section, August 17, 2018), follow the requirements of Source Group SOURCE TEST SUBMITTALS in Section E of this permit, Condition #001, paragraphs (1) to (6).]

(H) All testing shall be performed in accordance with any applicable federal regulations (such as New Source performance Standards, Subpart I); 25 Pa. Code, Chapter 139; and the current revision of the Department's Source Testing Manual or an alternative test method as approved by the Department. The following federal reference methods or alternative test method as approved by the Department shall be used to demonstrate compliance:

40 CFR 60, Appendix A, Method 7E shall be used to determine the NOx emissions.
40 CFR 60, Appendix A, Method 10 shall be used to determine the CO emissions.
40 CFR 60, Appendix A, Method 18 shall be used to determine the VOC emissions.
40 CFR Part 63 Appendix A, Method 320 shall be used to determine the HCHO emissions.

(I) The owner/operator shall ensure that the stack height at Bluestone facility will bot exceed the GEP stack height, as intended by GEP.

(J) [Omitted. For the latest instructions on source test submittals (Source Testing Section, August 17, 2018), follow the

SECTION E. Source Group Restrictions.

requirements of Source Group SOURCE TEST SUBMITTALS in Section E of this permit, Condition #001, paragraph (8).]

(K) The owner or operator shall ensure that all applicable federal reporting requirements are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between federal and state laws and regulation, the permittee shall comply with the most stringent provision, term, condition, method or rule.

(L) If, at any time, the Department has reason to believe that the air contaminant emissions from the exhaust of SI ICE(s) authorized under this Plan Approval are, or may be, in excess of any applicable air contaminant emission limitation, the owner or operator shall conduct stack tests as are deemed necessary by the Department to determine the actual air contaminant emission rate. The owner or operator shall perform any such testing in accordance with the applicable provisions of 25 Pa. Code, Chapter 139 (relating to sampling and testing) as well as in accordance with any additional requirements or conditions established by the Department at the time the owner or operator is notified, in writing, of the need to conduct testing.

(M) The owner or operator of a SI ICE located in the regions for which the daily Air Quality Index (AQI) and AQI forecast is available shall not perform any testing and/or tuning on days that the AQI is forecast to be higher than 100 for either Ozone or PM2.5. The owner or operator may check or obtain by e-mail daily AQI and AQI forecast by registering at http://www.aqpartners.org

III. MONITORING REQUIREMENTS.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368A & B]

(a) The facility shall follow manufacturer's recommendations as to the temperature and pressure change needed across the NSCR to ensure proper performance. The owner or operator shall measure inlet temperature, outlet temperature, inlet pressure, and outlet pressure at least once a month for each source and indicate along with the manufacturer's values or range of values for immediate reference.

(b) The facility shall monitor at least once per week the air/fuel ratio controller set point for each source.

IV. RECORDKEEPING REQUIREMENTS.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368A & B]

(a) The permittee shall maintain a record of all preventative maintenance inspections of these source(s). These records shall, at a minimum, contain the dates of the inspections, any problems or defects, any actions taken to correct the problems or defects, and any routine maintenance performed.

(b) The permittee shall maintain monthly records of the amount of fuel combusted and hours of operation for each engine.

(c) All required records shall be maintained for a minimum of five (5) years, and shall be made available to Department personnel upon request.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain records of the required monitoring of NSCR catalyst inlet and outlet temperature(s) and pressure(s), and air to fuel ratio setpoint(s), to determine compliance with the applicable permit limits (i.e., manufacturer's recommendations).

(b) All required records shall be maintained on site for a minimum of five (5) years, and shall be made available to Department personnel upon request.

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).

VI. WORK PRACTICE REQUIREMENTS.

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[PA 10-368A & B]

(a) The permittee shall install, maintain, and operate an appropriately designed air-to-fuel ratio controller on each engine.

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

VII. ADDITIONAL REQUIREMENTS.

 # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For RACT II purposes, Sources 103A & 103B are subject to § 129.97(g)(3)(iii) – i.e., rich burn stationary internal combustion engine with a rating equal to or greater than 500 bhp.

(a) Compliance with PA 10-368A & B's 0.20 g/bhp-hr VOC limit assures compliance with § 129.97(g)(3)(iii)(B)'s 1.0 g/bhp-hr limit.

(b) Compliance with PA 10-368A & B's testing & recordkeeping requirements assures compliance with § 129.100(a)(4), (d) & (i).

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

SECTION E. Source Group Restrictions.

Group Name: § 60 SUBPART DB

Group Description: NSPS for industrial-commercial-institutional steam generating units.

Sources included in this group

ID	Name
107	PROCESS HEATERS

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Condition of this source group applies only to Source 107's 6-H-851 Fractionation HMO Heater (119.2 mmbtu/hr).

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.44b]

Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units

Standard for nitrogen oxides.

(a) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that is subject to the provisions of this section and that combusts only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain NOX (expressed as NO2) in excess of the following emission limits:

FUEL/STEAM GENERATING UNIT TYPE	NITROGEN OXIDE EMISSION LIMITS (EXPRESSED AS NO2) HEAT INPUT
(1) Natural gas and distillate oil, except (4)	
(i) Low heat release rate	43 ng/J (0.10 lb/mmbtu)
(ii) [Not Applicable]	

(2) - (4) [Not Applicable]

[Compliance with the NOx limit of 0.10 lb/mmbtu for all large hot oil heaters are required by § 60.44b(a).]

(b) - (g) [Not Applicable]

(h) For purposes of paragraph (i) of this section, the NOX standards under this section apply at all times including periods of startup, shutdown, or malfunction.

(i) Except as provided under paragraph (j) of this section, compliance with the emission limits under this section is determined on a 30-day rolling average basis.

(j) [Not Applicable. NOx emission to be calculated as 30-day rolling average.]

(k) [Not Applicable]

(l) [Not Applicable. Large hot oil heaters must comply with the 0.10 lb/mmbtu NOx limit pursuant to § 60.44b(a).]

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009; 77 FR 9459, Feb. 16, 2012]

II. TESTING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee complies with NOx emission monitoring requirement of § 60 Subpart Db through use of PEMS (Predictive Emission Monitoring System) pursuant to § 60.48b(g)(2). PEMS models/plans are subject to the requirements of PERFORMANCE SPECIFICATION 16 (PS-16) (Specifications and test procedures for PEMS in stationary sources) in § 40 Part 60, Appendix B.

SECTION E. Source Group Restrictions.

(1) Applicability is detailed in PS-16, Paragraph 1.1.

(2) As per PS-16, Paragraph 2.2, periodic quality assurance assessments include quarterly or semi-annual relative accuracy audits (RAA) and yearly relative accuracy test audits (RATA).

(3) PS-16 is cited in this permit by reference only.

 # 004 [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.

(a) The NOX emission standards under §60.44b apply at all times. [Omitted reference to PM and opacity standards, which do not apply.]

(b) [Not Applicable]

(c) Compliance with the NOX emission standards under §60.44b shall be determined through performance testing under paragraph (e) or (f), or under paragraphs (g) and (h) of this section, as applicable.

(d) [Not Applicable]

(e) To determine compliance with the emission limits for NOX required under §60.44b, the owner or operator of an affected facility shall conduct the performance test as required under §60.8 using the continuous system for monitoring NOX under §60.48b.

(1) For the initial compliance test, NOX from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NOX emission standards under §60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(2) - (3) [Not Applicable]

(4) Following the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less and that combusts natural gas, distillate oil, gasified coal, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the NOX standards in §60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, NOX emissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports. 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.

[Omitted phrase stating that § 60.48b(g)(1) and (g)(2) will not be used to determine compliance with the NOx emission standards. § 60.48b(g)(2) will be used to demonstrate compliance with the 0.10 lb/mmbtu NOx limit.]

(5) [Not Applicable]

(f) - (j) [Not Applicable]

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9460, Feb. 16, 2012; 79 FR 11249, Feb. 27, 2014]

III. MONITORING REQUIREMENTS.

 # 005 [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 E. Source Group Restrictions.

(a) [Not Applicable]

(b) - (f) [Omitted. § 60.48b(g)(2) will be used to demonstrate compliance with the applicable NOx limit.]

(g) The owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less, and that has an annual capacity factor for residual oil having a nitrogen content of 0.30 weight percent or less, natural gas, distillate oil, gasified coal, or any mixture of these fuels, greater than 10 percent (0.10) shall:

(1) [Omitted; this cites sections/provisions on CEMS (Continuous Emission Monitoring System). § 60.48b(g)(2) will be used to demonstrate compliance with the applicable NOx limit.]

(2) Monitor steam generating unit operating conditions and predict NOX emission rates as specified in a plan submitted pursuant to §60.49b(c).

(h) - (l) [Not Applicable]

[72 FR 32742, June 13, 2007, as amended at 74 FR 5087, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9460, Feb. 16, 2012]

IV. RECORDKEEPING REQUIREMENTS.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]

Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units

Reporting and recordkeeping requirements.

(a) - (c) [See V. Reporting Requirements for this source group.]

(d) Except as provided in paragraph (d)(2) of this section, the owner or operator of an affected facility shall record and maintain records as specified in paragraph (d)(1) of this section.

(1) The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day. [Omitted statements on annual capacity factor. The heater in this source group only combusts natural gas.]

(2) [Omitted.]

(e) - (f) [Not Applicable]

(g) Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the NOX standards under §60.44b shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date;

(2) The average hourly NOX emission rates (expressed as NO2) (ng/J or lb/MMBtu heat input) measured or predicted;

(3) The 30-day average NOX emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;

(4) Identification of the steam generating unit operating days when the calculated 30-day average NOX emission rates are in excess of the NOX emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;

(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;

(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;

SECTION E. Source Group Restrictions.

(7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

(8) - (10) [Not Applicable]

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

(j) - (n) [Not Applicable]

(o) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of 2 years following the date of such record.

(p) - (u) [Not Applicable]

(v) - (w) [See V. Reporting Requirements in this source group.]

(x) - (y) [Not Applicable]

[72 FR 32742, June 13, 2007, as amended at 74 FR 5089, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

V. REPORTING REQUIREMENTS.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]

Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units

Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility;

(2) [Not Applicable]

(3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired; and

(4) [Not Applicable]

(b) The owner or operator of each affected facility subject to the SO2, PM, and/or NOX emission limits under §§60.42b, 60.43b, and 60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B of this part. [Omitted statement referencing § 60.44b(j) and (k), which do not apply.]

(c) The owner or operator of each affected facility subject to the NOx standard in §60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions in the provisions of §60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored in §60.48b(g)(2) and the records to be maintained in §60.49b(g). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. The plan shall: [Omitted statement on coke gas oven.]

(1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NOX emission rates (i.e., ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas O2 level);

(2) Include the data and information that the owner or operator used to identify the relationship between NOX emission rates and these operating conditions; and

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(3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g).

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

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

(h) The owner or operator of any affected facility in any category listed in paragraphs (h)(1) or (2) of this section is required to submit excess emission reports for any excess emissions that occurred during the reporting period.

(1) [Not Applicable]

(2) Any affected facility that is subject to the NOX standard of §60.44b, and that:

(i) Combusts natural gas, distillate oil, gasified coal, or residual oil with a nitrogen content of 0.3 weight percent or less; or

(ii) Has a heat input capacity of 73 MW (250 MMBtu/hr) or less and is required to monitor NOX emissions on a continuous basis under §60.48b(g)(1) or steam generating unit operating conditions under §60.48b(g)(2).

(3) - (4) [Not Applicable]

(i) The owner or operator of any affected facility subject to the continuous monitoring requirements for NOX under §60.48(b) shall submit reports containing the information recorded under paragraph (g) of this section.

(v) The owner or operator of an affected facility may submit electronic quarterly reports for SO2 and/or NOX and/or opacity in lieu of submitting the written reports required under paragraphs (h), or (i) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format. [Omitted reference to paragraphs (j), (k), and (l) of this section, which do not apply.]

(w) The reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5089, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

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.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For informational purposes, the following are sections of § 60 Subpart Db that do not apply to this source group.

(a) § 60.42b - Standard for sulfur dioxide (SO2)
(b) § 60.43b - Standard for particulate matter (PM)
(c) § 60.45b - Compliance and performance test methods and procedures for sulfur dioxide
(d) § 60.47b - Emission monitoring for sulfur dioxide

SECTION E. Source Group Restrictions.

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As required by 40 CFR 60.46b(j)(12), the permittee shall conduct an annual relative accuracy test audit (RATA) to confirm the PEMS model performance within 365 days of the most recent PEMS approval and once every four quarters as required by Performance Specification 16.

The permittee shall monitor the following predictive emissions monitoring system (PEMS) parameters: Stack O2; Ambient Dewpoint Temperature; and Stack Temperature. This system will serve as an excess emissions PEMS.

Pursuant to Performance Specification 16 Section 6.1.4, the Dewpoint (relative humidity) correlations may be extrapolated to values outside those experienced during the testing.

The permittee shall perform any additional testing to ensure PEMS parameter ranges are sufficient for this emission unit by no later than 365 days after 01/08/2019.

If the permittee conducts additional testing, the permittee shall conduct a RATA, by no later than 730 days after 01/08/2019, to confirm PEMS model performance as required by Performance Specification 16.

The permittee shall submit the results of any additional testing conducted, including expanded PEMS parameter ranges or modified PEMS models in the next Annual PEMS Report.

If major operational changes occur, or in the case of a failed RATA, the permittee shall retest the emission unit within 60 days at new or changed parameters following the procedure outlined in Performance Specification 16.

All PEMS model development or parameter updating and resulting RATA testing conducted shall follow the procedures set forth in Performance Specification 16, and the following general procedures, as applicable:

• Collect data. Collect NOx and O2 emission data over the desired range of the operating parameter of interest. In accordance with EPA Reference Method 7E Section 8.5, the permittee may use an appropriate time interval between the bias or calibration checks completed during testing. As specified in Method 7E, if the post-test bias check fails, data is invalid from the time of the last successful bias check to the time of the next successful bias check. In accordance with Method 7E Section 8.5(2), each post-test bias check may serve as the pre-test bias check for the next period of data collection. When the analyzers are operated in the manner described in this permit, an initial RATA is not required since the reference method itself is being used. In accordance with Method 7E Section 8.4(3), a multi-hole probe may be used with the analyzer system to meet the sampling point requirements of Method 7E.

• Divide the data. Once all the data are collected, such data shall be divided into two groups: Group 1 data is used to build or modify the model; and Group 2 data is used to validate the model. Once the model is built or modified, the Group 2 data, hich consists of valid EPA reference method (Method 7E) runs, is used to conduct a RATA on the new or modified model.

• Validate model. Once an acceptable model has been developed using the Group 1 data, the model shall be validated with a RATA in accordance with Performance Specification 16 Section 8.2. The Group 2 data collected earlier may be used for the reference method runs for model validation. Model validation procedures in Performance Specification 16 for an excess emission PEMS shall be used. In no case shall Group 1 data used to build or modify the model also be used to validate the model.

The permittee shall calculate a 30-day rolling average from average daily NOx emissions calculated by PEMS on an hourly basis.

• Each daily NOx average must have 75% of the hourly average PEMS parameters within the specified ranges for the daily average to be considered valid.

• The 30-day averaging period must also have a minimum of 22 days per period.

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.41b]

Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units

SECTION E. Source Group Restrictions.

Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

[Below are select definitions for purposes of this permit.]

ANNUAL CAPACITY FACTOR means the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility in a calendar year.

GASEOUS FUEL means any fuel that is a gas at ISO conditions. This includes, but is not limited to, natural gas and gasified coal (including coke oven gas).

HEAT INPUT means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

HEAT RELEASE RATE means the steam generating unit design heat input capacity (in MW or Btu/hr) divided by the furnace volume (in cubic meters or cubic feet); the furnace volume is that volume bounded by the front furnace wall where the burner is located, the furnace side waterwall, and extending to the level just below or in front of the first row of convection pass tubes.

HEAT TRANSFER MEDIUM means any material that is used to transfer heat from one point to another point.

ISO CONDITIONS means a temperature of 288 Kelvin, a relative humidity of 60 percent, and a pressure of 101.3 kilopascals.

LOW HEAT RELEASE RATE means a heat release rate of 730,000 J/sec-m3 (70,000 Btu/hr-ft3) or less.

MAXIMUM HEAT INPUT CAPACITY means the ability of a steam generating unit to combust a stated maximum amount of fuel on a steady state basis, as determined by the physical design and characteristics of the steam generating unit.

NATURAL GAS means:
(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or
(2) Liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17); or
(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

PROCESS HEATER means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

STEAM GENERATING UNIT means a device that combusts any fuel or byproduct/waste and produces steam or heats water or heats any heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart.

STEAM GENERATING UNIT OPERATING DAY means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009; 77 FR 9459, Feb. 16, 2012]

SECTION E. Source Group Restrictions.

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

SECTION E. Source Group Restrictions.

Group Name: § 60 SUBPART DC

Group Description: NSPS for small industrial-commercial-institutional steam generating units

Sources included in this group

ID	Name
107	PROCESS HEATERS

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Condition of this source group applies to the following hot oil heater included in Source 107.

(1) 2-H-801 Bluestone II HMO Heater (18.52 mmbtu/hr)
(2) 2-H-802 Depropanizer I HMO Heater (42.4 mmbtu/hr)
(3) 3-H-781 Bluestone III HMO Heater (13.68 mmbtu/hr)
(4) 6-H-852a Fractionation HMO Heater (64.8 mmbtu/hr)
(5) 7-H-1768 Deethanizer II HMO Heater (60.7 mmbtu/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).

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units

Reporting and recordkeeping requirements.

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

(b) - (f) [Not Applicable]

(g)
(1) [Omitted.§60.48c(g)(2)]

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month. [§60.48c(g)(2)]

(3) [Omitted.]

(h) [Not Applicable]

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) [Not Applicable. Sources in this source group are not subject to any periodic reporting under this section.]

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

SECTION E. Source Group Restrictions.

V. REPORTING REQUIREMENTS.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units

Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include: [This notification is a one-time requirement.]

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) [Not Applicable]

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) [Not Applicable]

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For informational purposes, the following are sections of § 60 Subpart Dc that do not apply to this source group.

(a) § 60.42c - Standard for sulfur dioxide (SO2)
(b) § 60.43c - Standard for particulate matter (PM)
(c) § 60.44c - Compliance and performance test methods and procedures for sulfur dioxide
(d) § 60.45c - Compliance and performance test methods and procedures for sulfur dioxide
(e) § 60.46c - Emission monitoring for sulfur dioxide
(f) § 60.47c - Emission monitoring for particulate matter

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.41c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units

Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

[Below are select definitions for purposes of this permit.]

ANNUAL CAPACITY FACTOR means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

HEAT INPUT means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

MAXIMUM DESIGN HEAT INPUT CAPACITY means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

SECTION E. Source Group Restrictions.

NATURAL GAS means:
(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or
(2) Liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17); or
(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

PROCESS HEATER means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

STEAM GENERATING UNIT means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

STEAM GENERATING UNIT OPERATING DAY means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

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

SECTION E. Source Group Restrictions.

Group Name: § 60 SUBPART JJJJ

Group Description: NSPS for stationary spark ignition internal combustion engines

Sources included in this group

ID	Name
103A	840 BHP WAUKESHA F3524GSI COMP ENG UNIT 5701, SN 5283701374
103B	840 BHP WAUKESHA F3524GSI COMP ENG UNIT 5702, SN 5283701373
114A	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4701, SN 5283701468
114B	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4702, SN 5283701448
114C	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4703, SN 5283701397
114D	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4704, SN 5283701443

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [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?

(a) - (d) Not applicable

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

[Compliance with NOx, CO, & VOC emission limits pursuant to PA 10-368A &B for the refrigerant compressors and pursuant to PA 10-368F for the compressor engines assures compliance with the emission limits of § 60.4233(e) & § 60 Subpart JJJJ's Table 1.]

(f) - (h) Not applicable.

II. TESTING REQUIREMENTS.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60 Subpart JJJJ Table 2]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Table 2 to Subpart JJJJ of Part 60.--

Requirements for Performance Tests

[As stated in §60.4244, you must comply with the following requirements for performance tests within 10 percent of 100 percent peak (or the highest achievable) load]

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary SI internal combustion engine demonstrating compliance according to §60.4244.	a. limit the concentration of NOX in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A or ASTM Method D6522-00(2005) a.	(a) If using a control device, the sampling site must be located at the outlet of the control device.

SECTION E. Source Group Restrictions.

	ii. Determine the O 2 con- centration of the station- ary internal combustion engine ex- haust at the sampling port location;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A or ASTM Method D6522- 00(2005) a.	(b) Measure- ments to de- termine O 2 con- centration must be made at the same time as the measurements for NO X con- centration.
	iii. Determine the exhaust flowrate of the station- ary internal combustion engine ex- haust;	(3) Method 2 or 19 of 40 CFR part 60.	
	iv. If necessary, measure moisture content of the stationary internal combustion engine ex- haust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03 (incorporated by reference, see §60.17).	(c) Measure- ments to de- termine moisture must be made at the same time as the mea- surement for NOX con- centration.
	v. Measure NO X at the exhaust of the stationary internal combustion engine.	(5) Method 7E of 40 CFR part 60, appendix A, Method D6522- 00(2005) a, Method 320 of 40 CFR part 63, ap- pendix A, or ASTM D6348-03 (incorporated by reference, see §60.17).	(d) Results of this test con- sist of the average of the three 1- hour or longer runs.
b. limit the con- centration of CO in the stationary SI internal com- bustion en- gine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A.	(a) If using a control de- vice, the sampling site must be lo- cated at the outlet of the control de- vice.

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	ii. Determine the O 2 con- centration of the station- ary internal combustion engine ex- haust at the sampling port location;	(2) Method 3, 3A, or 3Bb of 40 CFR part 60, appendix A or ASTM Method D6522- 00(2005) a.	(b) Measure- ments to de- termine O 2 con- centration must be made at the same time as the measurements for CO con- centration.
	iii. Determine the exhaust flowrate of the station- ary internal combustion engine ex- haust;	(3) Method 2 or 19 of 40 CFR part 60.	
	iv. If necessary, measure moisture content of the stationary internal combustion engine ex- haust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03 (incorporated by reference, see §60.17).	(c) Measure- ments to de- termine moisture must be made at the same time as the mea- surement for CO concen- tration.

Table 2 to Subpart JJJJ of Part 60.--
Requirements for Performance Tests--Contd.
[As stated in §60.4244, you must comply with the following requirements for performance tests within 10 percent of 100 percent peak (or the highest achievable) load]

For each	Complying with the requirement to	You must	Using	According to the following requirements
	v. Measure CO at the exhaust of the stationary internal com- bustion en- gine.	(5) Method 10 of 40 CFR part 60, appendix A, ASTM Meth- od D6522- 00(2005) a, Method 320 of 40 CFR part 63, ap- pendix A, or ASTM D 6348-03 (in- corporated by reference, see	(d) Results of this test con- sist of the average of the three 1- hour or longer runs.

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		§60.17).	
c. limit the con- centration of VOC in the stationary SI internal com- bustion en- gine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A.	(a) If using a control de- vice, the sampling site must be lo- cated at the outlet of the control de- vice.
	ii. Determine the O 2 con- centration of the station- ary internal combustion engine ex- haust at the sampling port location;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A or ASTM Method D6522- 00(2005) a.	(b) Measure- ments to de- termine O 2 con- centration must be made at the same time as the measurements for VOC con- centration.
	iii. Determine the exhaust flowrate of the station- ary internal combustion engine ex- haust;	(3) Method 2 or 19 of 40 CFR part 60.	
	iv. If necessary, measure moisture content of the stationary internal combustion engine ex- haust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03 (incorporated by reference, see §60.17).	(c) Measure- ments to de- termine moisture content must be made at the same time as the mea- surement for VOC con- centration.
	v. Measure VOC at the exhaust of the stationary internal combustion engine.	(5) Methods 25A and 18 of 40 CFR part 60, appendix A, Method 25A with the use of a methane cutter as de- scribed in 40 CFR 1065.265, Method 18 or 40 CFR part 60, appendix A,c d Method 320 of	(d) Results of this test con- sist of the average of the three 1- hour or longer runs.

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			40 CFR part	
			63, appendix	
			A, or ASTM	
			D6348-03	
			(incorporated	
			by reference,	
			see §60.17).	

aASTM D6522-00 is incorporated by reference; see 40 CFR 60.17. Also, you may petition the Administrator for approval to use alternative methods for portable analyzer.
bYou may use ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses, for measuring the O2 content of the exhaust gas as an alternative to EPA Method 3B.
cYou may use EPA Method 18 of 40 CFR part 60, appendix A, provided that you conduct an adequate presurvey test prior to the emissions test, such as the one described in OTM 11 on EPA's Web site (http://www.epa.gov/ttn/emc/prelim/otm11.pdf).
dYou may use ASTM D6420-99 (2004), Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography/Mass Spectrometry as an alternative to EPA Method 18 for measuring total nonmethane organic.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4244]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

(d) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 1 of this section:

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

Image: "Equation 1"

Where:

ER = Emission rate of NOX in g/HP-hr.

Cd = Measured NOX concentration in parts per million by volume (ppmv).

1.912 × 10-3 = Conversion constant for ppm NOX to grams per standard cubic meter at 20 degrees Celsius.

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Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

(e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

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

Image: "Equation 2"

Where:

ER = Emission rate of CO in g/HP-hr.

Cd = Measured CO concentration in ppmv.

1.164 × 10-3 = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP- hr.

(f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

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

Image: "Equation 3"

Where:

ER = Emission rate of VOC in g/HP-hr.

Cd = VOC concentration measured as propane in ppmv.

1.833 × 10-3 = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP- hr.

(g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A , then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

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

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"Equation 4"

Where:

RFi = Response factor of compound i when measured with EPA Method 25A.

CMi = Measured concentration of compound i in ppmv as carbon.

CAi = True concentration of compound i in ppmv as carbon.

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

"Equation 5"

Where:

C icorr = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C imeas = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

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

"Equation 6"

Where:

CPeq = Concentration of compound i in mg of propane equivalent per DSCM.

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [40 CFR Part 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?

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(2) Maintenance conducted on the engine.

(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060 , as applicable.

[§60.4245(a)(3) amended at 73 FR 59177, Oct. 8, 2008, effective Dec. 8, 2008]

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2) , documentation that the engine meets the emission standards.

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(b) Not applicable.

(c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in § 60.4231 must submit an initial notification as required in § 60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.

(1) Name and address of the owner or operator;

(2) The address of the affected source;

(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 used.

(d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in § 60.4244 within 60 days after the test has been completed.

(e) Not 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.

 # 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?

(a) If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in §60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator.

(2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.

(i) - (ii) Not applicable

(iii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you 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. In addition, you must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission

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standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

(i) Not applicable

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you 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. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(c) - (d) Not applicable

(e) Owners and operators of stationary SI natural gas fired engines may operate their engines 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 an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233.

(f) Not applicable

(g) It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

(h) Not applicable

VII. ADDITIONAL REQUIREMENTS.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60 Subpart JJJJ Table 3]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Table 3 to Subpart JJJJ of Part 60.--

Applicability of General Provisions to Subpart JJJJ
[As stated in §60.4246, you must comply with the following applicable General Provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1.....	General applicability of the General Provisions.....	Yes.....	
§60.2.....	Definitions.....	Yes.....	Additional terms defined in §60.4248.
§60.3.....	Units and abbreviations.....	Yes.....	
§60.4.....	Address.....	Yes.....	
§60.5.....	Determination of construction or	Yes.....	

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	modification.....		
§60.6.....	Review of plans.....	Yes.....	
§60.7.....	Notification and Record-keeping.....	Yes.....	Except that §60.7 only applies as specified in §60.4245.
§60.8.....	Performance tests.....	Yes.....	Except that §60.8 only applies to owners and operators who are subject to performance testing in subpart JJJJ.
§60.9.....	Availability of information.....	Yes.....	
§60.10.....	State Authority.....	Yes.....	
§60.11.....	Compliance with standards and maintenance requirements.....	Yes.....	Requirements are specified in subpart JJJJ.
§60.12.....	Circumvention.....	Yes.....	
§60.13.....	Monitoring requirements.....	No.....	
§60.14.....	Modification.....	Yes.....	
§60.15.....	Reconstruction.....	Yes.....	
§60.16.....	Priority list.....	Yes.....	
§60.17.....	Incorporations by reference.....	Yes.....	
§60.18.....	General control device requirements.....	No.....	
§60.19.....	General notification and reporting requirements.....	Yes.....	

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Am I subject to this subpart?

[Subpart JJJJ added and reserved at 71 FR 38497, July 6, 2006; text added at 73 FR 3591, Jan. 18, 2008]

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (5) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) - (3) Not applicable

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

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(ii) - (iv) Not applicable

(5) Not applicable

(6) The provisions of § 60.4236 of this subpart are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.

(b) Not applicable

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

(d) - (f) Not applicable

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4234]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4236]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

What is the deadline for importing or installing stationary SI ICE produced in the previous model year?

(a) After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in §60.4233.

(b) After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 1, 2010.

(c) For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in §60.4233 after January 1, 2011.

(d) In addition to the requirements specified in § §60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in paragraphs (a), (b), and (c) of this section, after the date specified in paragraph (a), (b), and (c) of this section.

(e) The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location.

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 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4246]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in § §60.1 through 60.19 apply to you.

 # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4248]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) are given in 40 CFR 90.105, 40 CFR 1054.107, and 40 CFR 1060.101, as appropriate. The values for certified emissions life for stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) certified to 40 CFR part 1048 are given in 40 CFR 1048.101(g) . The certified emissions life for stationary SI ICE with a maximum engine power greater than 75 KW (100 HP) certified under the voluntary manufacturer certification program of this subpart is 5,000 hours or 7 years, whichever comes first.

[Amended at 73 FR 59177, Oct. 8, 2008, effective Dec. 8, 2008]

Certified stationary internal combustion engine means an engine that belongs to an engine family that has a certificate of conformity that complies with the emission standards and requirements in this part, or of 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054, as appropriate.

[Amended at 73 FR 59177, Oct. 8, 2008, effective Dec. 8, 2008]

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and carbon dioxide (CO2).

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary SI ICE used for peak shaving are not considered emergency stationary ICE. Stationary ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of "manufacturer" in this section.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

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Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO 2 .

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by- product in petroleum refining of natural gas production.

Manufacturer has the meaning given in section 216(1) of the Clean Air Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1048.801.

Model year means either: The calendar year in which the engine was originally produced, or the annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year, and it must end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Pipeline-quality natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipeline-quality natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units per standard cubic foot.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to June 12, 2006, with passive emission control technology for NO X (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to either: a gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal

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combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Stationary internal combustion engine test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that test stationary ICE.

Stoichiometric means the theoretical air- to-fuel ratio required for complete combustion.

Subpart means 40 CFR part 60, subpart JJJJ.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

Volatile organic compounds means volatile organic compounds as defined in 40 CFR 51.100(s).

Voluntary certification program means an optional engine certification program that manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich burn engines that use LPG can choose to participate in to certify their engines to the emission standards in §60.4231(d) or (e), as applicable.

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

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Group Name: § 60 SUBPART OOOO

Group Description: NSPS for crude oil & natural gas production, transmission, & distribution (for the reciprocating c

Sources included in this group

ID	Name
112	ELECTRIC COMPRESSOR ENGINES
114A	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4701, SN 5283701468
114B	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4702, SN 5283701448
114C	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4703, SN 5283701397
114D	1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4704, SN 5283701443

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Implementation of the requirements of this source group are as follows:

(a) For Source 112, pursuant to PA 10-368D, and Sources 114A, 114B, 114C, and 114D, only the following sections of § 60 Subpart OOOO apply: §§ 60.5365, 60.5385, 60.5410, 60.5415, and 60.5420. Pursuant to § 60.5400, § 60 Subpart VVa does not apply to compressors.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420]

Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

What are my notification, reporting, and recordkeeping requirements?

(a) You must submit the notifications required in § 60.7(a)(1) and (4), and according to paragraphs (a)(1) and (2) of this section, if you own or operate one or more of the affected facilities specified in § 60.5365 that was constructed, modified, or reconstructed during the reporting period.

(1) - (2) [Not Applicable]

(b) Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (6) of this section to the Administrator and performance test reports as specified in paragraph (b)(7) of this section. The initial annual report is due 30 days after the end of the initial compliance period as determined according to § 60.5410. Subsequent annual reports are due on the same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs (b)(1) through (6) of this section. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting period.

SECTION E. Source Group Restrictions.

(1) The general information specified in paragraphs (b)(1)(i) through (iv) of this section.

(i) The company name and address of the affected facility.

(ii) An identification of each affected facility being included in the annual report.

(iii) Beginning and ending dates of the reporting period.

(iv) A certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(2) - (3) [Not Applicable]

(4) For each reciprocating compressor affected facility, the information specified in paragraphs (b)(4)(i) through (ii) of this section.

(i) The cumulative number of hours or operation or the number of months since initial startup, October 15, 2012, or since the previous reciprocating compressor rod packing replacement, whichever is later.

(ii) Records of deviations specified in paragraph (c)(3)(iii) of this section that occurred during the reporting period.

(5) - (7) [Not Applicable]

(c) Recordkeeping requirements. You must maintain the records identified as specified in § 60.7(f) and in paragraphs (c)(1) through (10) of this section. All records must be maintained for at least 5 years.

(1) - (2) [Not Applicable]

(3) For each reciprocating compressors affected facility, you must maintain the records in paragraphs (c)(3)(i) through (iii) of this section.

(i) Records of the cumulative number of hours of operation or number of months since initial startup or October 15, 2012, or the previous replacement of the reciprocating compressor rod packing, whichever is later.

(ii) Records of the date and time of each reciprocating compressor rod packing replacement.

(iii) Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in § 60.5385.

(4) - (11) [Not Applicable]

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5360]

Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

What is the purpose of this subpart?

This subpart establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO2) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011.

SECTION E. Source Group Restrictions.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5365]

Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

Am I subject to this subpart?

You are subject to the applicable provisions of this subpart if you are the owner or operator of one or more of the onshore affected facilities listed in paragraphs (a) through (g) of this section for which you commence construction, modification or reconstruction after August 23, 2011.

(a) - (b) [Not Applicable]

(c) Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

(d) - (e) [Not Applicable]

(f) The group of all equipment, except compressors, within a process unit is an affected facility.

(1) Addition or replacement of equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(2) Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§ 60.5400, 60.5401, 60.5402, 60.5421, and 60.5422 of this subpart if it is located at an onshore natural gas processing plant. Equipment not located at the onshore natural gas processing plant site is exempt from the provisions of §§ 60.5400, 60.5401, 60.5402, 60.5421, and 60.5422 of this subpart.

(3) [Not Applicable]

(g) - (h) [Not Applicable]

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5370]

Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

When must I comply with this subpart?

(a) You must be in compliance with the standards of this subpart no later than October 15, 2012 or upon startup, whichever is later.

(b) The provisions for exemption from compliance during periods of startup, shutdown and malfunctions provided for in 40 CFR 60.8(c) do not apply to this subpart.

(c) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5385]

Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

What standards apply to reciprocating compressor affected facilities?

You must comply with the standards in paragraphs (a) through (d) of this section for each reciprocating compressor affected facility.

(a) You must replace the reciprocating compressor rod packing according to either paragraph (a)(1) or (2) of this section.

(1) Before the compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning upon initial startup of your reciprocating compressor affected facility, or October 15, 2012, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.

(2) Prior to 36 months from the date of the most recent rod packing replacement, or 36 months from the date of startup for a new reciprocating compressor for which the rod packing has not yet been replaced.

SECTION E. Source Group Restrictions.

(b) You must demonstrate initial compliance with standards that apply to reciprocating compressor affected facilities as required by § 60.5410.

(c) You must demonstrate continuous compliance with standards that apply to reciprocating compressor affected facilities as required by § 60.5415.

(d) You must perform the required notification, recordkeeping, and reporting as required by § 60.5420.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5410]

Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

How do I demonstrate initial compliance with the standards for my gas well affected facility, my centrifugal compressor affected facility, my reciprocating compressor affected facility, my pneumatic controller affected facility, my storage vessel affected facility, and my equipment leaks and sweetening unit affected facilities at onshore natural gas processing plants?

You must determine initial compliance with the standards for each affected facility using the requirements in paragraphs (a) through (g) of this section. The initial compliance period begins on October 15, 2012 or upon initial startup, whichever is later, and ends no later than one year after the initial startup date for your affected facility or no later than one year after October 15, 2012. The initial compliance period may be less than one full year.

(a) - (b) [Not Applicable]

(c) To achieve initial compliance with the standards for each reciprocating compressor affected facility you must comply with paragraphs (c)(1) through (4) of this section.

(1) During the initial compliance period, you must continuously monitor the number of hours of operation or track the number of months since the last rod packing replacement.

(2) You must submit the notifications required in 60.7(a)(1), (3), and (4).

(3) You must submit the initial annual report for your reciprocating compressor as required in § 60.5420(b).

(4) You must maintain the records as specified in § 60.5420(c)(3) for each reciprocating compressor affected facility.

(d) - (e) [Not Applicable]

(f) For affected facilities at onshore natural gas processing plants, initial compliance with the VOC requirements is demonstrated if you are in compliance with the requirements of § 60.5400.

(g) [Not Applicable]

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5415]

Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

How do I demonstrate continuous compliance with the standards for my gas well affected facility, my centrifugal compressor affected facility, my stationary reciprocating compressor affected facility, my pneumatic controller affected facility, my storage vessel affected facility, and my affected facilities at onshore natural gas processing plants?

What additional requirements must I meet for determining initial compliance with control devices used to comply with the emission standards for my storage vessel or centrifugal compressor affected facility?

(a) - (b) [Not Applicable]

(c) For each reciprocating compressor affected facility, you must demonstrate continuous compliance according to paragraphs (c)(1) through (3) of this section.

(1) You must continuously monitor the number of hours of operation for each reciprocating compressor affected facility or track the number of months since initial startup, or October 15, 2012, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.

SECTION E. Source Group Restrictions.

(2) You must submit the annual report as required in § 60.5420(b) and maintain records as required in § 60.5420(c)(3).

(3) You must replace the reciprocating compressor rod packing before the total number of hours of operation reaches 26,000 hours or the number of months since the most recent rod packing replacement reaches 36 months.

(d) - (e) [Not Applicable]

(f) For affected facilities at onshore natural gas processing plants, continuous compliance with VOC requirements is demonstrated if you are in compliance with the requirements of § 60.5400.

(g) [Not Applicable]

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5425]

Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

What part of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430]

Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act, in subpart A or subpart VVa of part 60; and the following terms shall have the specific meanings given them.

Acid gas means a gas stream of hydrogen sulfide (H2 S) and carbon dioxide (CO2) that has been separated from sour natural gas by a sweetening unit.

Affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

Alaskan North Slope means the approximately 69,000 square-mile area extending from the Brooks Range to the Arctic Ocean.

API Gravity means the weight per unit volume of hydrocarbon liquids as measured by a system recommended by the American Petroleum Institute (API) and is expressed in degrees.

Bleed rate means the rate in standard cubic feet per hour at which natural gas is continuously vented (bleeds) from a pneumatic controller.

Centrifugal compressor means any machine for raising the pressure of a natural gas by drawing in low pressure natural gas and discharging significantly higher pressure natural gas by means of mechanical rotating vanes or impellers. Screw, sliding vane, and liquid ring compressors are not centrifugal compressors for the purposes of this subpart.
City gate means the delivery point at which natural gas is transferred from a transmission pipeline to the local gas utility.
Completion combustion device means any ignition device, installed horizontally or vertically, used in exploration and production operations to combust otherwise vented emissions from completions.

Compressor station means any permanent combination of one or more compressors that move natural gas at increased pressure from fields, in transmission pipelines, or into storage.

Continuous bleed means a continuous flow of pneumatic supply natural gas to the process control device (e.g., level control, temperature control, pressure control) where the supply gas pressure is modulated by the process condition, and then flows to the valve controller where the signal is compared with the process set-point to adjust gas pressure in the valve actuator.

Custody transfer means the transfer of natural gas after processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation.

SECTION E. Source Group Restrictions.

Dehydrator means a device in which an absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber).

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source: (1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Delineation well means a well drilled in order to determine the boundary of a field or producing reservoir.

Equipment means each pump, pressure relief device, open-ended valve or line, valve, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by this subpart.

Field gas means feedstock gas entering the natural gas processing plant.

Field gas gathering means the system used transport field gas from a field to the main pipeline in the area.
Flare means a thermal oxidation system using an open (without enclosure) flame. Completion combustion devices as defined in this section are not considered flares.

Flow line means a pipeline used to transport oil and/or gas from the well to a processing facility, a mainline pipeline, re-injection, or other useful purpose.

Flowback means the process of allowing fluids to flow from a natural gas well following a treatment, either in preparation for a subsequent phase of treatment or in preparation for cleanup and returning the well to production. The flowback period begins when material introduced into the well during the treatment returns to the surface immediately following hydraulic fracturing or refracturing. The flowback period ends with either well shut in or when the well is producing continuously to the flow line or to a storage vessel for collection, whichever occurs first.

Gas processing plant process unit means equipment assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the products.

Gas well or natural gas well means an onshore well drilled principally for production of natural gas.

Hydraulic fracturing or refracturing means the process of directing pressurized fluids containing any combination of water, proppant, and any added chemicals to penetrate tight formations, such as shale or coal formations, that subsequently require high rate, extended flowback to expel fracture fluids and solids during completions.

Hydraulic refracturing means conducting a subsequent hydraulic fracturing operation at a well that has previously undergone a hydraulic fracturing operation.

In light liquid service means that the piece of equipment contains a liquid that meets the conditions specified in § 60.485a(e) or § 60.5401(g)(2) of this part.

In wet gas service means that a compressor or piece of equipment contains or contacts the field gas before the extraction step at a gas processing plant process unit.

Intermittent/snap-action pneumatic controller means a pneumatic controller that vents non-continuously.

Liquefied natural gas unit means a unit used to cool natural gas to the point at which it is condensed into a liquid which is colorless, odorless, non-corrosive and non-toxic.

SECTION E. Source Group Restrictions.

Low pressure gas well means a well with reservoir pressure and vertical well depth such that 0.445 times the reservoir pressure (in psia) minus 0.038 times the vertical well depth (in feet) minus 67.578 psia is less than the flow line pressure at the sales meter.

Natural gas-driven pneumatic controller means a pneumatic controller powered by pressurized natural gas.

Natural gas liquids means the hydrocarbons, such as ethane, propane, butane, and pentane that are extracted from field gas.

Natural gas processing plant (gas plant) means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both. A Joule-Thompson valve, a dew point depression valve, or an isolated or standalone Joule-Thompson skid is not a natural gas processing plant.

Natural gas transmission means the pipelines used for the long distance transport of natural gas (excluding processing). Specific equipment used in natural gas transmission includes the land, mains, valves, meters, boosters, regulators, storage vessels, dehydrators, compressors, and their driving units and appurtenances, and equipment used for transporting gas from a production plant, delivery point of purchased gas, gathering system, storage area, or other wholesale source of gas to one or more distribution area(s).

Nonfractionating plant means any gas plant that does not fractionate mixed natural gas liquids into natural gas products.

Non-natural gas-driven pneumatic controller means an instrument that is actuated using other sources of power than pressurized natural gas; examples include solar, electric, and instrument air.

Onshore means all facilities except those that are located in the territorial seas or on the outer continental shelf.

Pneumatic controller means an automated instrument used for maintaining a process condition such as liquid level, pressure, delta-pressure and temperature.

Pressure vessel means a storage vessel that is used to store liquids or gases and is designed not to vent to the atmosphere as a result of compression of the vapor headspace in the pressure vessel during filling of the pressure vessel to its design capacity.

Process unit means components assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the products.

Reciprocating compressor means a piece of equipment that increases the pressure of a process gas by positive displacement, employing linear movement of the driveshaft.

Reciprocating compressor rod packing means a series of flexible rings in machined metal cups that fit around the reciprocating compressor piston rod to create a seal limiting the amount of compressed natural gas that escapes to the atmosphere.

Reduced emissions completion means a well completion following fracturing or refracturing where gas flowback that is otherwise vented is captured, cleaned, and routed to the flow line or collection system, re-injected into the well or another well, used as an on-site fuel source, or used for other useful purpose that a purchased fuel or raw material would serve, with no direct release to the atmosphere.

Reduced sulfur compounds means H2 S, carbonyl sulfide (COS), and carbon disulfide (CS2).

Responsible official means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

SECTION E. Source Group Restrictions.

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures ex
ceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representatives is approved in advance by the permitting authority;

(2) For a partnership or sole proprietorship: A general partner or the proprietor, respectively;

(3) For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA); or

(4) For affected facilities:

(i) The designated representative in so far as actions, standards, requirements, or prohibitions under title IV of the Clean Air Act or the regulations promulgated thereunder are concerned; or

(ii) The designated representative for any other purposes under part 60.

Routed to a process or route to a process means the emissions are conveyed via a closed vent system to any enclosed portion of a process unit where the emissions are predominantly recycled and/or consumed in the same manner as a material that fulfills the same function in the process and/or transformed by chemical reaction into materials that are not regulated materials and/or incorporated into a product; and/or recovered.

Salable quality gas means natural gas that meets the composition, moisture, or other limits set by the purchaser of the natural gas, regardless of whether such gas is sold.

Storage vessel means a unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provides structural support and is designed to contain an accumulation of liquids or other materials. The following are not considered storage vessels:

(1) Vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), and are intended to be located at a site for less than 180 consecutive days. If you do not keep or are not able to produce records, as required by § 60.5420(c)(5)(iv), showing that the vessel has been located at a site for less than 180 consecutive days, the vessel described herein is considered to be a storage vessel since the original vessel was first located at the site.

(2) Process vessels such as surge control vessels, bottoms receivers or knockout vessels.

(3) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.

Sulfur production rate means the rate of liquid sulfur accumulation from the sulfur recovery unit.

Sulfur recovery unit means a process device that recovers element sulfur from acid gas.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Sweetening unit means a process device that removes hydrogen sulfide and/or carbon dioxide from the sour natural gas stream.

Total Reduced Sulfur (TRS) means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide as measured by Method 16 of appendix A to part 60 of this chapter.

Total SO 2 equivalents means the sum of volumetric or mass concentrations of the sulfur compounds obtained by adding the quantity existing as SO2 to the quantity of SO2 that would be obtained if all reduced sulfur compounds were converted to SO2 (ppmv or kg/dscm (lb/dscf)).

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Underground storage vessel means a storage vessel stored below ground.

Well means an oil or gas well, a hole drilled for the purpose of producing oil or gas, or a well into which fluids are injected.

Well completion means the process that allows for the flowback of petroleum or natural gas from newly drilled wells to expel drilling and reservoir fluids and tests the reservoir flow characteristics, which may vent produced hydrocarbons to the atmosphere via an open pit or tank.

Well completion operation means any well completion with hydraulic fracturing or refracturing occurring at a gas well affected facility.

Well site means one or more areas that are directly disturbed during the drilling and subsequent operation of, or affected by, production facilities directly associated with any oil well, gas well, or injection well and its associated well pad.

Wellhead means the piping, casing, tubing and connected valves protruding above the earth's surface for an oil and/or natural gas well. The wellhead ends where the flow line connects to a wellhead valve. The wellhead does not include other equipment at the well site except for any conveyance through which gas is vented to the atmosphere.

Wildcat well means a well outside known fields or the first well drilled in an oil or gas field where no other oil and gas production exists.

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

SECTION E. Source Group Restrictions.

Group Name: § 60 SUBPART OOOOA

Group Description: NSPS for crude oil & natural gas production, transmission, & distribution after 9/18/2015

Sources included in this group

ID	Name
107	PROCESS HEATERS
108	TRUCK AND RAILYARD LOADING
109	STORAGE TANK
110	GAS PROCESSING PLANT VENTING
701	OTHER FUGITIVES

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5421a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What are my additional recordkeeping requirements for my affected facility subject to GHG and VOC requirements for onshore natural gas processing plants?

(a) You must comply with the requirements of paragraph (b) of this section in addition to the requirements of § 60.486a.

(b) The following recordkeeping requirements apply to pressure relief devices subject to the requirements of § 60.5401a(b)(1).

(1) When each leak is detected as specified in § 60.5401a(b)(2), a weatherproof and readily visible identification, marked with the equipment identification number, must be attached to the leaking equipment. The identification on the pressure relief device may be removed after it has been repaired.

(2) When each leak is detected as specified in § 60.5401a(b)(2), the information specified in paragraphs (b)(2)(i) through (x) of this section must be recorded in a log and shall be kept for 2 years in a readily accessible location:

(i) The instrument and operator identification numbers and the equipment identification number.

(ii) The date the leak was detected and the dates of each attempt to repair the leak.

(iii) Repair methods applied in each attempt to repair the leak.

(iv) “Above 500 ppm” if the maximum instrument reading measured by the methods specified in § 60.5400a(d) after each repair attempt is 500 ppm or greater.

(v) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(vi) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

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(vii) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(viii) Dates of process unit shutdowns that occur while the equipment is unrepaired.

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

(x) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of § 60.482-4a(a). The designation of equipment subject to the provisions of § 60.482-4a(a) must be signed by the owner or operator.

V. REPORTING REQUIREMENTS.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What are my notification, reporting, and recordkeeping requirements?

(a) You must submit the notifications according to paragraphs (a)(1) and (2) of this section if you own or operate one or more of the affected facilities specified in § 60.5365a that was constructed, modified or reconstructed during the reporting period.

(1) If you own or operate an affected facility that is the group of all equipment within a process unit at an onshore natural gas processing plant, or a sweetening unit at an onshore natural gas processing plant, you must submit the notifications required in § 60.7(a)(1), (3), and (4). If you own or operate a well, centrifugal compressor, reciprocating compressor, pneumatic controller, pneumatic pump, storage vessel, or collection of fugitive emissions components at a well site or collection of fugitive emissions components at a compressor station, you are not required to submit the notifications required in § 60.7(a)(1), (3), and (4).

(2) Not applicable

(b) Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (8) and (12) of this section and performance test reports as specified in paragraph (b)(9) or (10) of this section, if applicable, except as provided in paragraph (b)(13) of this section. You must submit annual reports following the procedure specified in paragraph (b)(11) of this section. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to § 60.5410a. Subsequent annual reports are due no later than same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs (b)(1) through (8) of this section, except as provided in paragraph (b)(13) of this section. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting period.

(1) The general information specified in paragraphs (b)(1)(i) through (iv) of this section for all reports.

(i) The company name, facility site name associated with the affected facility, US Well ID or US Well ID associated with the affected facility, if applicable, and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.

(ii) An identification of each affected facility being included in the annual report.

(iii) Beginning and ending dates of the reporting period.

(iv) A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(2) - (8) Not applicable

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(9) Within 60 days after the date of completing each performance test (see § 60.8) required by this subpart, except testing conducted by the manufacturer as specified in § 60.5413a(d), you must submit the results of the performance test following the procedure specified in either paragraph (b)(9)(i) or (ii) of this section.

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (https://www3.epa.gov/ttn/chief/ert/ert_info.html) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 60.4.

(10) Not applicable

(11) You must submit reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (https://cdx.epa.gov/).) You must use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI Web site (https://www3.epa.gov/ttn/chief/cedri/). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in § 60.4. Once the form has been available in CEDRI for at least 90 calendar days, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted.

(12) - (13) Not applicable

(c) Recordkeeping requirements. You must maintain the records identified as specified in § 60.7(f) and in paragraphs (c)(1) through (16) of this section. All records required by this subpart must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by this subpart that are submitted electronically via the EPA's CDX may be maintained in electronic format.

(1) - (17) Not applicable

[81 FR 35898, June 3, 2016, as amended at 82 FR 25733, June 5, 2017]

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5422a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What are my additional reporting requirements for my affected facility subject to GHG and VOC requirements for onshore natural gas processing plants?

(a) You must comply with the requirements of paragraphs (b) and (c) of this section in addition to the requirements of § 60.487a(a), (b), (c)(2)(i) through (iv), and (c)(2)(vii) through (viii). You must submit semiannual reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) Use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI Web site (https://www3.epa.gov/ttn/chief/cedri/). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, submit the report to the Administrator at the appropriate address listed in § 60.4. Once the form has been available in CEDRI for at least 90 days, you must begin submitting all subsequent reports via CEDRI. The report must be

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submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted.

(b) An owner or operator must include the following information in the initial semiannual report in addition to the information required in § 60.487a(b)(1) through (4): Number of pressure relief devices subject to the requirements of § 60.5401a(b) except for those pressure relief devices designated for no detectable emissions under the provisions of § 60.482-4a(a) and those pressure relief devices complying with § 60.482-4a(c).

(c) An owner or operator must include the information specified in paragraphs (c)(1) and (2) of this section in all semiannual reports in addition to the information required in § 60.487a(c)(2)(i) through (vi):

(1) Number of pressure relief devices for which leaks were detected as required in § 60.5401a(b)(2); and

(2) Number of pressure relief devices for which leaks were not repaired as required in § 60.5401a(b)(3).

VI. WORK PRACTICE REQUIREMENTS.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5400a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What equipment leak GHG and VOC standards apply to affected facilities at an onshore natural gas processing plant?

This section applies to the group of all equipment, except compressors, within a process unit.

(a) You must comply with the requirements of §§ 60.482-1a(a), (b), and (d), 60.482-2a, and 60.482-4a through 60.482-11a, except as provided in § 60.5401a.

(b) You may elect to comply with the requirements of §§ 60.483-1a and 60.483-2a, as an alternative.

(c) You may apply to the Administrator for permission to use an alternative means of emission limitation that achieves a reduction in emissions of methane and VOC at least equivalent to that achieved by the controls required in this subpart according to the requirements of § 60.5402a.

(d) You must comply with the provisions of § 60.485a except as provided in paragraph (f) of this section.

(e) You must comply with the provisions of §§ 60.486a and 60.487a except as provided in §§ 60.5401a, 60.5421a, and 60.5422a.

(f) You must use the following provision instead of § 60.485a(d)(1): Each piece of equipment is presumed to be in VOC service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described in ASTM E169-93, E168-92, or E260-96 (incorporated by reference as specified in § 60.17) must be used.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5401a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What are the exceptions to the equipment leak GHG and VOC standards for affected facilities at onshore natural gas processing plants?

(a) You may comply with the following exceptions to the provisions of § 60.5400a(a) and (b).

(b)

(1) Each pressure relief device in gas/vapor service may be monitored quarterly and within 5 days after each pressure release to detect leaks by the methods specified in § 60.485a(b) except as provided in § 60.5400a(c) and in paragraph (b)(4) of this section, and § 60.482-4a(a) through (c) of subpart VVa of this part.

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(2) If an instrument reading of 500 ppm or greater is measured, a leak is detected.

(3)

(i) When a leak is detected, it must be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in § 60.482-9a.

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

(4)

(i) Any pressure relief device that is located in a nonfractionating plant that is monitored only by non-plant personnel may be monitored after a pressure release the next time the monitoring personnel are onsite, instead of within 5 days as specified in paragraph (b)(1) of this section and § 60.482-4a(b)(1).

(ii) No pressure relief device described in paragraph (b)(4)(i) of this section may be allowed to operate for more than 30 days after a pressure release without monitoring.

(c) Sampling connection systems are exempt from the requirements of § 60.482-5a.

(d) Pumps in light liquid service, valves in gas/vapor and light liquid service, pressure relief devices in gas/vapor service, and connectors in gas/vapor service and in light liquid service that are located at a nonfractionating plant that does not have the design capacity to process 283,200 standard cubic meters per day (scmd) (10 million standard cubic feet per day) or more of field gas are exempt from the routine monitoring requirements of §§ 60.482-2a(a)(1), 60.482-7a(a), 60.482-11a(a), and paragraph (b)(1) of this section.

(e) Pumps in light liquid service, valves in gas/vapor and light liquid service, pressure relief devices in gas/vapor service, and connectors in gas/vapor service and in light liquid service within a process unit that is located in the Alaskan North Slope are exempt from the routine monitoring requirements of §§ 60.482-2a(a)(1), 60.482-7a(a), 60.482-11a(a), and paragraph (b)(1) of this section.

(f) An owner or operator may use the following provisions instead of § 60.485a(e):

(1) Equipment is in heavy liquid service if the weight percent evaporated is 10 percent or less at 150 °Celsius (302 °Fahrenheit) as determined by ASTM Method D86-96 (incorporated by reference as specified in § 60.17).

(2) Equipment is in light liquid service if the weight percent evaporated is greater than 10 percent at 150 °Celsius (302 °Fahrenheit) as determined by ASTM Method D86-96 (incorporated by reference as specified in § 60.17).

(g) An owner or operator may use the following provisions instead of § 60.485a(b)(2): A calibration drift assessment shall be performed, at a minimum, at the end of each monitoring day. Check the instrument using the same calibration gas(es) that were used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A-7 of this part, Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. Record the instrument reading for each scale used as specified in § 60.486a(e)(8). Divide these readings by the initial calibration values for each scale and multiply by 100 to express the calibration drift as a percentage. If any calibration drift assessment shows a negative drift of more than 10 percent from the initial calibration value, then all equipment monitored since the last calibration with instrument readings below the appropriate leak definition and above the leak definition multiplied by (100 minus the percent of negative drift/divided by 100) must be re-monitored. If any calibration drift assessment shows a positive drift of more than 10 percent from the initial calibration value, then, at the owner/operator's discretion, all equipment since the last calibration with instrument readings above the appropriate leak definition and below the leak definition multiplied by (100 plus the percent of positive drift/divided by 100) may be re-monitored.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5410a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

How do I demonstrate initial compliance with the standards for my well, centrifugal compressor, reciprocating compressor, pneumatic controller, pneumatic pump,...unit affected facilities at onshore natural gas processing plants?

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You must determine initial compliance with the standards for each affected facility using the requirements in paragraphs (a) through (j) of this section. The initial compliance period begins on August 2, 2016, or upon initial startup, whichever is later, and ends no later than 1 year after the initial startup date for your affected facility or no later than 1 year after August 2, 2016. The initial compliance period may be less than one full year.

(a) - (e) Not applicable

(f) For affected facilities at onshore natural gas processing plants, initial compliance with the methane and VOC standards is demonstrated if you are in compliance with the requirements of § 60.5400a.

(g) - (j) Not applicable

[81 FR 35898, June 3, 2016, as amended at 82 FR 25733, June 5, 2017]

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5415a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

How do I demonstrate continuous compliance with the standards for my well, centrifugal compressor, reciprocating compressor, pneumatic controller, pneumatic pump,...and affected facilities at onshore natural gas processing plants?

(a) - (e) Not applicable

(f) For affected facilities at onshore natural gas processing plants, continuous compliance with methane and VOC requirements is demonstrated if you are in compliance with the requirements of § 60.5400a.

(g) - (h) Not applicable

[81 FR 35898, June 3, 2016, as amended at 82 FR 25733, June 5, 2017]

VII. ADDITIONAL REQUIREMENTS.

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5360a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What is the purpose of this subpart?

(a) This subpart establishes emission standards and compliance schedules for the control of the pollutant greenhouse gases (GHG). The greenhouse gas standard in this subpart is in the form of a limitation on emissions of methane from affected facilities in the crude oil and natural gas source category that commence construction, modification, or reconstruction after September 18, 2015. This subpart also establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO2) emissions from affected facilities in the crude oil and natural gas source category that commence construction, modification or reconstruction after September 18, 2015. The effective date of the rule is August 2, 2016.

(b)Prevention of Significant Deterioration (PSD) and title V thresholds for Greenhouse Gases.

(1) For the purposes of 40 CFR 51.166(b)(49)(ii), with respect to GHG emissions from affected facilities, the “pollutant that is subject to the standard promulgated under section 111 of the Act” shall be considered to be the pollutant that otherwise is subject to regulation under the Act as defined in 40 CFR 51.166(b)(48) and in any State Implementation Plan (SIP) approved by the EPA that is interpreted to incorporate, or specifically incorporates, § 51.166(b)(48).

(2) For the purposes of 40 CFR 52.21(b)(50)(ii), with respect to GHG emissions from affected facilities, the “pollutant that is subject to the standard promulgated under section 111 of the Act” shall be considered to be the pollutant that otherwise is subject to regulation under the Clean Air Act as defined in 40 CFR 52.21(b)(49).

(3) For the purposes of 40 CFR 70.2, with respect to greenhouse gas emissions from affected facilities, the “pollutant that is subject to any standard promulgated under section 111 of the Act” shall be considered to be the pollutant that otherwise is “subject to regulation” as defined in 40 CFR 70.2.

(4) For the purposes of 40 CFR 71.2, with respect to greenhouse gas emissions from affected facilities, the “pollutant that

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is subject to any standard promulgated under section 111 of the Act" shall be considered to be the pollutant that otherwise is "subject to regulation" as defined in 40 CFR 71.2.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5365a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

Am I subject to this subpart?

You are subject to the applicable provisions of this subpart if you are the owner or operator of one or more of the onshore affected facilities listed in paragraphs (a) through (j) of this section for which you commence construction, modification, or reconstruction after September 18, 2015.

(a) - (e) Not applicable

(f) The group of all equipment within a process unit is an affected facility.

(1) Addition or replacement of equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(2) Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§ 60.5400a, 60.5401a, 60.5402a, 60.5421a, and 60.5422a if it is located at an onshore natural gas processing plant. Equipment not located at the onshore natural gas processing plant site is exempt from the provisions of §§ 60.5400a, 60.5401a, 60.5402a, 60.5421a, and 60.5422a.

(3) The equipment within a process unit of an affected facility located at onshore natural gas processing plants and described in paragraph (f) of this section are exempt from this subpart if they are subject to and controlled according to subparts VVa, GGG, or GGGa of this part.

(g) - (j) Not applicable

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5370a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

When must I comply with this subpart?

(a) You must be in compliance with the standards of this subpart no later than August 2, 2016 or upon startup, whichever is later.

(b) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The provisions for exemption from compliance during periods of startup, shutdown and malfunctions provided for in 40 CFR 60.8(c) do not apply to this subpart.

(c) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.

 # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5402a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What are the alternative means of emission limitations for GHG and VOC equipment leaks from onshore natural gas processing plants?

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in GHG and VOC emissions at least equivalent to the reduction in GHG and VOC emissions achieved under any design, equipment, work practice or operational standard, the Administrator will publish, in the Federal Register, a notice permitting the use of that alternative means for the purpose of compliance with that standard. The notice may condition permission on requirements

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related to the operation and maintenance of the alternative means.

(b) Any notice under paragraph (a) of this section must be published only after notice and an opportunity for a public hearing.

(c) The Administrator will consider applications under this section from either owners or operators of affected facilities, or manufacturers of control equipment.

(d) An application submitted under paragraph (c) of this section must meet the following criteria:

(1) The applicant must collect, verify and submit test data, covering a period of at least 12 months, necessary to support the finding in paragraph (a) of this section.

(2) The application must include operation, maintenance and other provisions necessary to assure reduction in methane and VOC emissions at least equivalent to the reduction in methane and VOC emissions achieved under the design, equipment, work practice or operational standard in paragraph (a) of this section by including the information specified in paragraphs (d)(1)(i) through (x) of this section.

(i) A description of the technology or process.

(ii) The monitoring instrument and measurement technology or process.

(iii) A description of performance based procedures (i.e. method) and data quality indicators for precision and bias; the method detection limit of the technology or process.

(iv) The action criteria and level at which a fugitive emission exists.

(v) Any initial and ongoing quality assurance/quality control measures.

(vi) Timeframes for conducting ongoing quality assurance/quality control.

(vii) Field data verifying viability and detection capabilities of the technology or process.

(viii) Frequency of measurements.

(ix) Minimum data availability.

(x) Any restrictions for using the technology or process.

(3) The application must include initial and continuous compliance procedures including recordkeeping and reporting.

 # 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5425a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

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

SECTION E. Source Group Restrictions.

Group Name: § 65 SUBPART D

Group Description: Consolidated Federal Air Rule Subpart D - Process Vents

Sources included in this group

ID	Name
110	GAS PROCESSING PLANT VENTING

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

MarkWest shall comply with 60.660(d) by complying with the provisions of 40 CFR 65 Subpart D (listed in #002 of this section), as applicable, to satisfy the requirements of 40 CFR 60.662 through 60.665 and 60.668.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR § 65.60 Applicabilty
The provisions of this subpart and of subpart A of this part apply to regulated material emissions from process vents where a referencing subpart references the use of this subpart.

§ 65.61 Definitions.

All terms used in this subpart shall have the meaning given them in the Act and in subpart A of this part. If a term is defined in both subpart A of this part and in other subparts that reference the use of this subpart, the term shall have the meaning given in subpart A of this part for purposes of this subpart.

§ 65.62 Process vent group determination.

(a) Group status. The owner or operator of a process vent shall determine the group status (i.e., Group 1, Group 2A, or Group 2B) for each process vent. Group 1 process vents require control, and Group 2A and 2B process vents do not. Group 2A process vents require parameter monitoring, and Group 2B process vents do not. The owner or operator shall report the

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group status of each process vent as specified in § 65.5(c)(2).

(b) Group 1. A process vent is considered Group 1 if it meets at least one of the following specifications:

(1) The owner or operator designates the process vent as Group 1.

(2) At representative operating conditions expected to yield the lowest TRE index value for the process vent, the TRE index value is less than or equal to 1.0, the flow rate is greater than or equal to 0.011 standard cubic meter per minute (0.40 standard cubic foot per minute), and the concentration is greater than or equal to the applicable criterion in table 1 of this subpart. Procedures for determining the TRE index value, flow rate, and concentration are specified in § 65.64.

(c) Group 2A. A process vent is considered Group 2A if, at representative operating conditions expected to yield the lowest TRE index value, it has a TRE index value of greater than 1.0 and less than or equal to 4.0, a flow rate of greater than or equal to 0.011 standard cubic meter per minute (0.40 standard cubic foot per minute), and a concentration greater than or equal to the applicable table 1 criterion. Procedures for determining the TRE index value, flow rate, and concentration are specified in § 65.64.

(d) Group 2B. A process vent is considered Group 2B if, at representative operating conditions expected to yield the lowest TRE index value, it has a TRE index value of greater than 4.0; or a flow rate of less than 0.011 standard cubic meter per minute (0.40 standard cubic foot per minute); or a concentration less than the applicable criterion in table 1 of this subpart. Procedures for determining the TRE index value, flow rate, and concentration are specified in § 65.64.

§ 65.63 Performance and group status change requirements.

(a) Group 1 performance requirements. Except for the additional requirement for halogenated vent streams as provided in paragraph (b) of this section, the owner or operator of a Group 1 process vent shall comply with the requirements of either paragraph (a)(1), (2), or (3) of this section.

(1) Flare. Reduce emissions of regulated material using a flare meeting the applicable requirements of § 65.142(b).

(2) 98 percent or 20 parts per million standard. Reduce emissions of regulated material or TOC by at least 98 weight-percent or to a concentration of less than 20 parts per million by volume, whichever is less stringent. For combustion devices, the emission reduction or concentration shall be calculated on a dry basis, and corrected to 3 percent oxygen. The owner or operator shall meet the requirements in § 65.142(b) and paragraphs (a)(2)(i) and/or (a)(2)(ii) of this section.

(i) Compliance with paragraph (a)(2) of this section may be achieved by using any combination of recovery and/or control device to meet the 20 parts per million by volume concentration standard; or by using any combination of recovery and/or control device to meet the 98 weight percent reduction standard, if the recovery device meets the conditions of paragraph (a)(2)(ii) of this section.

(ii) An owner or operator may use a recovery device alone or in combination with one or more control devices to reduce emissions of total regulated material by 98 weight-percent if all of the following conditions are met:

(A) For process vents referenced to this part by 40 CFR part 63, subpart G, the recovery device (and any control device that operates in combination with the recovery device to reduce emissions of total regulated material by 98 weight-percent) was installed before December 31, 1992.

(B) The recovery device that will be used to reduce emissions of total regulated material by 98 weight-percent is the last recovery device before emission to the atmosphere.

(C) The recovery device alone or in combination with one or more control devices is capable of reducing emissions of total regulated material by 98 weight-percent but is not capable of reliably reducing emissions of total regulated material to a concentration of 20 parts per million by volume.

(D) If the owner or operator disposed of the recovered material, the recovery device would be considered a control device and comply with the requirements of this subpart and § 65.142(b) for control devices.

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(3) TRE index value. Achieve and maintain a TRE index value greater than 1.0 at the outlet of the final recovery device, or prior to release from the process vent to the atmosphere if no recovery device is present. If the TRE index value is greater than 1.0, the process vent shall meet the provisions for a Group 2A or 2B process vent specified in either paragraph (c), (d), (e), or (f) of this section, whichever is applicable.

(b) Halogenated Group 1 performance requirement. Halogenated Group 1 process vents that are combusted shall be controlled according to paragraph (b)(1) or (2) of this section. The owner or operator shall either designate the Group 1 process vent as a halogenated Group 1 process vent or shall determine whether the process vent is halogenated using the procedures specified in § 65.64(g). If determined, the halogen concentration in the vent stream shall be recorded and reported in the Initial Compliance Status Report as specified in § 65.160(d). If the owner or operator designates the process vent as a halogenated Group 1 process vent, then this shall also be recorded and reported in the Initial Compliance Status Report.

(1) Halogen reduction device following combustion. If a combustion device is used to comply with paragraph (a)(2) of this section for a halogenated process vent, then the process vent exiting the combustion device shall be ducted to a halogen reduction device including, but not limited to, a scrubber before it is discharged to the atmosphere, and the halogen reduction device shall meet the requirements of paragraph (b)(1)(i) or (ii) of this section, as applicable. The halogenated process vent shall not be combusted using a flare.

(i) Except as provided in paragraph (b)(1)(ii) of this section, the halogen reduction device shall reduce overall emissions of hydrogen halides and halogens by 99 percent or shall reduce the outlet mass of total hydrogen halides and halogens to less than 0.45 kilogram per hour (0.99 pound per hour), whichever is less stringent. The owner or operator shall meet the requirements in § 65.142(b).

(ii) If a scrubber or other halogen reduction device was installed prior to December 31, 1992, the device shall reduce overall emissions of hydrogen halides and halogens by 95 percent or shall reduce the outlet mass of total hydrogen halides and halogens to less than 0.45 kilogram per hour (0.99 pound per hour), whichever is less stringent. The owner or operator shall meet the requirements in § 65.142(b).

(2) Halogen reduction device prior to combustion. A halogen reduction device, such as a scrubber, or other technique may be used to reduce the process vent halogen atom mass emission rate to less than 0.45 kilogram per hour (0.99 pound per hour) prior to any combustion control device and thus make the process vent nonhalogenated; the process vent must comply with the requirements of paragraph (a)(1) or (2) of this section. The mass emission rate of halogen atoms contained in organic compounds prior to the combustor shall be determined according to the procedures in § 65.64(g). The owner or operator shall maintain the record specified in § 65.160(d) and submit the report specified in § 65.165(d).

(c) Performance requirements for Group 2A process vents with recovery devices. For Group 2A process vents, where the owner or operator is using a recovery device to maintain a TRE index value greater than 1.0, the owner or operator shall maintain a TRE index value greater than 1.0 and comply with the requirements for recovery devices in § 65.142(b).

(d) Performance requirements for Group 2A process vents without recovery devices. For Group 2A process vents where the owner or operator is not using a recovery device to maintain a TRE index value greater than 1.0, determine the appropriate parameters to be monitored and submit the information as specified in paragraphs (d)(1), (2), and (3) of this section. Such information shall be submitted for approval to the Administrator as part of a title V permit application or by separate notice. The owner or operator shall monitor as specified in § 65.65(a), maintain the record specified in § 65.66(e), and submit reports as specified in § 65.67(c).

(1) Parameter monitoring. A description of the parameter(s) to be monitored to ensure the owner or operator of a process vent achieves and maintains the TRE above 1.0. and an explanation of the criteria used to select the parameter(s).

(2) Demonstration methods and procedures. A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the process, the schedule for this demonstration, and a statement that the owner or operator will establish a range for the monitored parameter as part of the Initial Compliance Status Report required in § 65.5(d), unless this information has already been included in the operating permit application.

(3) Monitoring, recordkeeping, and reporting frequency. The frequency and content of monitoring, recording, and reporting if monitoring and recordkeeping are not continuous, or if reports of daily average values when the monitored parameter value

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is outside the range established in the operating permit or Initial Compliance Status Report will not be included in periodic reports required under § 65.5(e). The rationale for the proposed monitoring, recording, and reporting system shall be included.

(e) Group 2B performance requirements. For Group 2B process vents, the owner or operator shall maintain a TRE index greater than 4.0, a flow rate less than 0.011 scmm, or a concentration less than the applicable criteria in table 1 to this subpart.

(f) Group 2A or 2B process change requirements. Whenever process changes are made that could reasonably be expected to change a Group 2A or 2B process vent to a Group 1 vent, the owner or operator shall recalculate the TRE index value, flow, or TOC or organic hazardous air pollutant (HAP) concentration according to paragraph (f)(1), (2), or (3) of this section as specified for each process vent as necessary to determine whether the process vent is Group 1, Group 2A, or Group 2B and shall maintain the applicable records specified in § 65.66(d) and submit the applicable reports specified in § 65.67(b). The owner or operator shall perform the group status determination as soon as practical after the process change and within 180 days after the process change. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of paragraph (f) of this section, process changes do not include process upsets; unintentional, temporary process changes; and changes that are within the range on which the original TRE index value calculation was based.

(1) Flow rate. The flow rate shall be determined as specified in the sampling site and flow rate determination procedures in § 65.64(b) and (d) or by using best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in § 65.64(i).

(2) Concentration. The TOC or organic HAP concentration shall be determined as specified in § 65.64(b) and (c) or by using best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in § 65.64(i).

(3) TRE index value. The TRE index value shall be recalculated based on measurements of process vent flow rate, TOC, and/or organic HAP concentrations, and heating values as specified in § 65.64(b), (c), (d), (e), (f), (g), and (h) as applicable, or based on best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in § 65.64(i).

(4) Group status change to Group 1. Where the process change causes the group status to change to Group 1, the owner or operator shall comply with the Group 1 process vent provisions in paragraph (a) of this section and, if they apply, the halogenated Group 1 process vent provisions in paragraph (b) of this section upon initial startup after the change and thereafter unless the owner or operator demonstrates to the Administrator that achieving compliance will take longer than making the process change. If this demonstration is made to the Administrator's satisfaction, the owner or operator shall comply as expeditiously as practical, but in no event later than 3 years after the emission point becomes Group 1, and shall comply with the following procedures to establish a compliance date:

(i) The owner or operator shall submit to the Administrator for approval a compliance schedule, along with a justification for the schedule.

(ii) The compliance schedule shall be submitted with the operating permit application or amendment or by other appropriate means.

(iii) The Administrator shall approve the compliance schedule or request changes within 120 calendar days of receipt of the compliance schedule and justification.

(5) Group status change to Group 2A. Whenever a process change causes the process vent group status to change to Group 2A, the owner or operator shall comply with the provisions of paragraph (c) or (d) of this section upon completion of the group status determination of the process vent.

(6) Group status change to Group 2B. Whenever a process change causes the process vent group status to change to Group 2B, the owner or operator shall comply with the provisions of paragraph (e) of this section as soon as practical after the process change.

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§ 65.64 Group determination procedures.

(a) General. The provisions of this section provide calculation and measurement methods for parameters that are used to determine group status.

(b)

(1) Sampling site. For purposes of determining TOC or HAP concentration, process vent volumetric flow rate, heating value, or TRE index value as specified under paragraph (c), (d), (e), (f), or (h) of this section, the sampling site shall be located after the last recovery device (if any recovery devices are present) but prior to the inlet of any control device that is present, and prior to release to the atmosphere.

(2) Sampling site when a halogen reduction device is used prior to a combustion device. An owner or operator using a scrubber or other halogen reduction device to reduce the process vent halogen atom mass emission rate to less than 0.45 kilogram per hour (0.99 pound per hour) prior to a combustion control device in compliance with § 65.63(b)(2) shall determine the halogen atom mass emission rate prior to the combustor and after the scrubber or other halogen reduction device according to the procedures in paragraph (g) of this section.

(3) Sampling site selection method. Method 1 or 1A of appendix A of 40 CFR part 60, as appropriate, shall be used for selection of the sampling site. No traverse site selection method is needed for process vents smaller than 0.10 meter (4 inches) in nominal inside diameter.

(c) TOC or HAP concentration. The TOC or HAP concentrations used for TRE index value calculations in paragraph (h) of this section shall be determined based on paragraph (c)(1) or (i) of this section, or any other method or data that have been validated according to the protocol in Method 301 of appendix A of 40 CFR part 63. For concentrations needed for comparison with the appropriate concentration in table 1 of this subpart, TOC or HAP concentration shall be determined based on paragraph (c)(1), (c)(2), or (i) of this section or any other method or data that have been validated according to the protocol in Method 301 of appendix A of 40 CFR part 63. The owner or operator shall record the TOC or HAP concentration as specified in § 65.66(c).

(1) Method 18. The procedures specified in paragraph (c)(1)(i) and (ii) of this section shall be used to calculate parts per million by volume concentration using Method 18 of appendix A of 40 CFR part 60.

(i) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15-minute intervals during the run.

(ii) The concentration of either TOC (minus methane and ethane) or organic HAP emissions shall be calculated using the following two procedures, as applicable.

(A) The TOC concentration (CTOC) is the sum of the concentrations of the individual components and shall be computed for each run using Equation 64-1 of this section:

[See 40 CFR Part 65 Subpart D for equation]

Where:

CTOC = Concentration of TOC (minus methane and ethane), dry basis, parts per million by volume.

x = Number of samples in the sample run.

n = Number of components in the sample.

Cji = Concentration of sample component j of the sample i, dry basis, parts per million by volume.

(B) The total organic HAP concentration (CHAP) shall be computed according to the equation in paragraph (c)(1)(ii)(A) of this section except that only the organic HAP species shall be summed.

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(2) Method 25A. The following procedures shall be used to calculate parts per million by volume concentration using Method 25A of appendix A of 40 CFR part 60:

(i) Method 25A of appendix A of 40 CFR part 60 shall be used only if a single organic compound of regulated material is greater than 50 percent of total organic HAP or TOC, by volume, in the process vent.

(ii) The process vent composition may be determined by either process knowledge, test data collected using an appropriate EPA method, or a method or data validated according to the protocol in Method 301 of appendix A of 40 CFR part 63. Examples of information that could constitute process knowledge include calculations based on material balances, process stoichiometry, or previous test results provided the results are still relevant to the current process vent conditions.

(iii) The organic compound used as the calibration gas for Method 25A of appendix A of 40 CFR part 60 shall be the single organic compound of regulated material present at greater than 50 percent of the total organic HAP or TOC by volume.

(iv) The span value for Method 25A of appendix A of 40 CFR part 60 shall be equal to the appropriate concentration value in table 1 to this subpart.

(v) Use of Method 25A of appendix A of 40 CFR part 60 is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(vi) The owner or operator shall demonstrate that the concentration of TOC including methane and ethane measured by Method 25A of appendix A of 40 CFR part 60 is below one-half the appropriate value in table 1 to this subpart to be considered a Group 2B vent with an organic HAP or TOC concentration below the appropriate value in table 1 to this subpart.

(d) Volumetric flow rate. The process vent volumetric flow rate (QS) in standard cubic meters per minute at 20 °C (68 °F) shall be determined as specified in paragraphs (d)(1) and (2) of this section and shall be recorded as specified in § 65.66(b):

(1) Use Method 2, 2A, 2C, or 2D of appendix A of 40 CFR part 60, as appropriate. If the process vent tested passes through a final steam jet ejector and is not condensed, the stream volumetric flow shall be corrected to 2.3 percent moisture; or

(2) The engineering assessment procedures in paragraph (i) of this section can be used for determining volumetric flow rates.

(e) Heating value. The net heating value shall be determined as specified in paragraphs (e)(1) and (2) of this section or by using the engineering assessment procedures in paragraph (i) of this section.

(1) The net heating value of the process vent shall be calculated using Equation 64-2 of this section:

[See 40 CFR Part 65 Subpart D for equation]

Where:

HT = Net heating value of the sample, megajoule per standard cubic meter, where the net enthalpy per mole of process vent is based on combustion at 25 °C and 760 millimeters of mercury, but the standard temperature for determining the volume corresponding to 1 mole is 20 °C as in the definition of QS (process vent volumetric flow rate).

K1 = Constant, 1.740 × 10-7 (parts per million)-1 (gram-mole per standard cubic meter) (megajoule per kilocalorie), where standard temperature for (gram-mole per standard cubic meter) is 20 °C.

n = Number of components in the sample.

Dj = Concentration on a wet basis of compound j in parts per million as measured by procedures indicated in paragraph (e)(2) of this section. For process vents that pass through a final steam jet and are not condensed, the moisture is assumed to be 2.3 percent by volume.

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Hj = Net heat of combustion of compound j, kilocalorie per gram-mole, based on combustion at 25 °C and 760 millimeters of mercury. The heat of combustion of process vent components shall be determined using American Society for Testing and Materials (ASTM) D2382-76 (incorporated by reference as specified in § 65.13) if published values are not available or cannot be calculated.

(2) The molar composition of the process vent (Dj) shall be determined using the following methods:

(i) Method 18 of appendix A of 40 CFR part 60 to measure the concentration of each organic compound.

(ii) American Society for Testing and Materials (ASTM) D1946-77 (incorporated by reference as specified in § 65.13) to measure the concentration of carbon monoxide and hydrogen.

(iii) Method 4 of appendix A of 40 CFR part 60 to measure the moisture content of the stack gas.

(f) TOC or HAP emission rate. The emission rate of TOC (minus methane and ethane) (ETOC) and/or the emission rate of total organic HAP (EHAP) in the process vent as required by the TRE index value equation specified in paragraph (h) of this section, shall be calculated using Equation 64.3 of this section:

[See 40 CFR Part 65 Subpart D for equation]

Where:

E = Emission rate of TOC (minus methane and ethane) (ETOC) or emission rate of total organic HAP (EHAP) in the sample, kilograms per hour.

K2 = Constant, 2.494 × 10-6 (parts per million) (gram-mole per standard cubic meter) (kilogram per gram) (minutes per hour), where standard temperature for (gram-mole per standard cubic meter) is 20 °C.

n = Number of components in the sample.

Cj = Concentration on a dry basis of organic compound j in parts per million as measured by Method 18 of appendix A of 40 CFR part 60 as indicated in paragraph (c) of this section. If the TOC emission rate is being calculated, Cj includes all organic compounds measured minus methane and ethane; if the total organic HAP emission rate is being calculated, only organic HAP compounds are included.

Mj = Molecular weight of organic compound j, gram/gram-mole.

Qs = Process vent flow rate, dry standard cubic meter per minute, at a temperature of 20 °C.

(g) Halogenated vent determination. In order to determine whether a process vent is halogenated, the mass emission rate of halogen atoms contained in organic compounds shall be calculated according to the procedures specified in paragraphs (g)(1) and (2) of this section. A process vent is considered halogenated if the mass emission rate of halogen atoms contained in the organic compounds is equal to or greater than 0.45 kilogram per hour (0.99 pound per hour).

(1) The process vent concentration of each organic compound containing halogen atoms (parts per million by volume, by compound) shall be determined based on one of the following procedures:

(i) Process knowledge that no halogen or hydrogen halides are present in the process vent; or

(ii) Applicable engineering assessment as discussed in paragraph (i)(3) of this section; or

(iii) Concentration of organic compounds containing halogens measured by Method 18 of appendix A of 40 CFR part 60; or

(iv) Any other method or data that have been validated according to the applicable procedures in Method 301 of appendix A of 40 CFR part 63.

(2) Equation 64-4 of this section shall be used to calculate the mass emission rate of halogen atoms:

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[See 40 CFR Part 65 Subpart D for equation]

Where:

E = Mass of halogen atoms, dry basis, kilogram per hour.

K2 = Constant, 2.494 × 10- 6 (parts per million)-1 (kilogram-mole per standard cubic meter) (minute per hour), where standard temperature is 20 °C.

Q = Flow rate of gas stream, dry standard cubic meters per minute, determined according to paragraph (d) or (i) of this section.

n = Number of halogenated compounds j in the gas stream.

j = Halogenated compound j in the gas stream.

m = Number of different halogens i in each compound j of the gas stream.

i = Halogen atom i in compound j of the gas stream.

Cj = Concentration of halogenated compound j in the gas stream, dry basis, parts per million by volume.

Lji = Number of atoms of halogen i in compound j of the gas stream.

Mji = Molecular weight of halogen atom i in compound j of the gas stream, kilogram per kilogram-mole.

(h) TRE index value. The owner or operator shall calculate the TRE index value of the process vent using the equations and procedures specified in paragraphs (h)(1) through (3) of this section, as applicable, and shall maintain the records specified in § 65.66(a) or § 65.66(d)(4), as applicable.

(1) TRE index value equation. Equation 64-5 of this section shall be used to calculate the TRE index:

[See 40 CFR Part 65 Subpart D for equation]

Where:

TRE = TRE index value.

A, B, C, D, E, and F = Parameters presented in tables 2 and 3 of this subpart that include the following variables:

Q = Process vent flow rate, standard cubic meters per minute, at a standard temperature of 20 °C, as calculated according to paragraph (d) or (i) of this section.

H = Process vent net heating value, megajoules per standard cubic meter, as calculated according to paragraph (e) or (i) of this section.

ETOC = Emission rate of TOC (minus methane and ethane), kilograms per hour, as calculated according to paragraph (f) or (i) of this section.

EHAP = Emission rate of total organic HAP, kilograms per hour, as calculated according to paragraph (f) or (i) of this section.

(2) Nonhalogenated process vents. The owner or operator of a nonhalogenated process vent shall calculate the TRE index value using either one of the following procedures, as applicable:

(i) TRE calculations: Part 60 regulated sources. Use the parameters in table 2 to this subpart and calculate the TRE index value twice, once using the appropriate equation (depending on the heating value and flow rate of the process vent) in

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equations 15 through 30 and once using the appropriate equation (depending on the heating value of the process vent) in equations 31 and 32. Select the lowest TRE index value.

(ii) TRE calculations: Part 63 regulated sources. Use the equation and parameters in table 3 to this subpart and calculate the TRE index value using equations 34, 35, and 36 for process vents at existing sources; or equations 38, 39, and 40 for process vents at new sources. Select the lowest TRE index value.

(3) Halogenated process vents. The owner or operator of a halogenated process vent stream as determined according to procedures specified in paragraph (g) of this section shall calculate the TRE index value using either one of the following procedures, as applicable:

(i) TRE Calculations: Part 60 regulated sources. Use the parameters in table 2 to this subpart and calculate the TRE index value using the appropriate equation chosen from equations 1 through 14 depending on the heating value and flow rate of the process vent.

(ii) TRE calculations: Part 63 regulated sources. Use the appropriate parameters in table 3 to this subpart and calculate the TRE index value using equation 33 or 37 depending on whether the process vent is at a new or existing source.

(i) Engineering assessment. For purposes of TRE index value determination, engineering assessment may be used to determine process vent flow rate, net heating value, TOC emission rate, and total organic HAP emission rate for the representative operating condition expected to yield the lowest TRE index value. Engineering assessments shall meet the requirements of paragraphs (i)(1) through (4) of this section. If process vent flow rate or process vent organic HAP or TOC concentration is being determined for comparison with the 0.011 scmm (0.40 standard cubic foot) flow rate or the applicable concentration value in table 1 to this subpart, engineering assessment may be used to determine the flow rate or concentration for the representative operating condition expected to yield the highest flow rate or concentration.

(1) If the TRE index value calculated using such engineering assessment and the TRE index value equation in paragraph (h) of this section is greater than 4.0, then the owner or operator is not required to perform the measurements specified in paragraphs (c) through (g) of this section.

(2) If the TRE index value calculated using such engineering assessment and the TRE index value equation in paragraph (h) of this section is less than or equal to 4.0, then the owner or operator is required either to perform the measurements specified in paragraphs (c) through (g) of this section for group determination or to consider the process vent a Group 1 process vent and comply with the requirement (or standard) specified in § 65.63(a) and, if applicable, § 65.63(b).

(3) Engineering assessment includes, but is not limited to, the examples specified in paragraphs (i)(3)(i) through (iv) of this section.

(i) Previous test results provided the tests are representative of current operating practices at the process unit.

(ii) Bench-scale or pilot-scale test data representative of the process under representative operating conditions.

(iii) Maximum flow rate, TOC emission rate, organic HAP emission rate, organic HAP or TOC concentration, or net heating value limit specified or implied within a permit limit applicable to the process vent.

(iv) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to, the following examples:

(A) Use of material balances based on process stoichiometry to estimate maximum TOC or organic HAP concentrations;

(B) Estimation of maximum flow rate based on physical equipment design such as pump or blower capacities;

(C) Estimation of TOC or organic HAP concentrations based on saturation conditions; and

(D) Estimation of maximum expected net heating value based on the stream concentration of each organic compound or, alternatively, as if all TOC in the stream were the compound with the highest heating value.

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(4) All data, assumptions, and procedures used in the engineering assessment shall be documented. The owner or operator shall maintain the records specified in § 65.66(a), (b), (c), or (d), as applicable.

§ 65.65 Monitoring.

(a) An owner or operator of a Group 2A process vent maintaining a TRE index value greater than 1.0 without a recovery device shall monitor based on the approved plan as specified in § 65.63(d).

(b) As required in § 65.63(a) and (c), an owner or operator of a Group 2A process vent maintaining a TRE index value greater than 1.0 with a recovery device or a Group 1 process vent shall comply with § 65.142(b).

§ 65.66 Recordkeeping provisions.

(a) TRE index value records. The owner or operator shall maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the process vent according to the procedures of § 65.64(h), including those records associated with halogen vent stream determination. Documentation of engineering assessments shall include all data, assumptions, and procedures used for the engineering assessments, as specified in § 65.64(i). As specified in § 65.67(a), the owner or operator shall include this information in the Initial Compliance Status Report.

(b) Flow rate records. Each owner or operator who elects to demonstrate that a process vent is Group 2B based on a flow rate less than 0.011 standard cubic meter per minute (0.40 standard cubic foot per minute) shall record the flow rate as measured using the sampling site and flow rate determination procedures specified in § 65.64(b) and (d) or determined through engineering assessment as specified in § 65.64(i). As specified in § 65.67(a), the owner or operator shall include this information in the Initial Compliance Status Report.

(c) Concentration records. Each owner or operator who elects to demonstrate that a process vent is Group 2B based on a concentration less than the applicable criteria in table 1 to this subpart shall record the organic HAP or TOC concentration as measurement using the sampling site and HAP or TOC concentration determination procedures specified in § 65.64(b) and (c) or determined through engineering assessment as specified in § 65.64(i). As specified in § 65.67(a), the owner or operator shall include this information in the Initial Compliance Status Report.

(d) Process change records. The owner or operator shall keep up-to-date, readily accessible records as specified in the following and shall report this information as specified in § 65.67(b):

(1) If the process vent is Group 2B on the basis of flow rate being less than 0.011 scmm (0.40 standard cubic foot), then the owner or operator shall keep records of any process changes as defined in § 65.63(f) that increase the process vent flow rate and any recalculation or measurement of the flow rate pursuant to § 65.63(f).

(2) If the process vent is Group 2B on the basis of organic HAP or TOC concentration being less than the applicable value in table 1 to this subpart, then the owner or operator shall keep records of any process changes as defined in § 65.63(f) that increase the organic HAP or TOC concentration of the process vent and any recalculation or measurement of the concentration pursuant to § 65.63(f).

(3) If the process vent is Group 2A or Group 2B on the basis of the TRE index value being greater than 1.0, then the owner or operator shall keep records of any process changes as defined in § 65.63(f) and any recalculation of the TRE index value pursuant to § 65.63(f).

(4) As a result of a process change, if a process vent that was Group 2B on any basis becomes a Group 2B process vent only on the basis of having a TRE greater than 4.0, then the owner or operator shall keep records of the TRE index value determination performed according to the sample site and TRE index value determination procedures of § 65.64(b)(1) and (h) or determined through engineering assessment as specified in § 65.64(i).

(e) Other Group 2A records. An owner or operator of a Group 2A process vent maintaining a TRE index value greater than 1.0 without a recovery device shall record the parameters monitored based on the approved plan as specified in § 65.63(d).

§ 65.67 Reporting provisions.

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(a) Initial compliance status report. The owner or operator shall submit as part of the Initial Compliance Status Report specified in § 65.5(d) the information recorded in § 65.66(a), (b), and (c), as applicable.

(b) Process change.

(1) Whenever a process change, as described in § 65.63(f), is made that causes a Group 2A or 2B process vent to become a Group 1 process vent or a Group 2B process vent to become a Group 2A process vent, the owner or operator shall either submit a report within 60 days after the performance test or group determination or submit a report included as part of the next periodic report. The report shall include the following information:

(i) A description of the process change;

(ii) The results of the recalculation of the flow rate, organic HAP or TOC concentration, and/or TRE index value required under § 65.63(f) and recorded under § 65.66(d); and

(iii) A statement that the owner or operator will comply with the provisions of § 65.63 by the schedules specified in § 65.63(f)(4) through (6).

(2) For process vents that become Group 1 process vents after a process change requiring a performance test to be conducted for the control device being used as specified in subpart G of this part, the owner or operator shall specify that the performance test has become necessary due to a process change. This specification shall be made in the notification to the Administrator of the intent to conduct a performance test as provided in § 65.164(b)(1).

(3) Whenever a process change as described in § 65.63(f) is made that changes the group status of a process vent from Group 1 to Group 2A, or from Group 1 to Group 2B, or from Group 2A to Group 2B, the owner or operator shall include a statement in the next periodic report after the process change that a process change has been made and the new group status of the process vents.

(4) The owner or operator is not required to submit a report of a process change if one of the following conditions is met:

(i) The change does not meet the definition of a process change in § 65.63(f); or

(ii) For a Group 2B process vent, the vent stream flow rate is recalculated according to § 65.63(f) and the recalculated value is less than 0.011 standard cubic meter per minute (0.40 standard cubic foot per minute); or

(iii) For a Group 2B process vent, the organic HAP or TOC concentration of the vent stream is recalculated according to § 65.63(f), and the recalculated value is less than the applicable value in table 1 to this subpart; or

(iv) For a Group 2B process vent, the TRE index value is recalculated according to § 65.63(f) and the recalculated value is greater than 4.0.

(c) Parameters for Group 2A without a recovery device. An owner or operator of a Group 2A process vent maintaining a TRE index value greater than 1.0 without using a recovery device shall report the information specified in the approved plan under § 65.63(d).

[See 40 CFR 65 Subpart D for Tables 1-3]

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

SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.

SECTION G. Emission Restriction Summary.

Source Id	Source Description
103A	840 BHP WAUKESHA F3524GSI COMP ENG UNIT 5701, SN 5283701374

Emission Limit			Pollutant
0.500	GRAMS/HP-Hr	per engine	CO
0.930	Lbs/Hr	per engine	CO
8.110	Tons/Yr	for the total of the 2 refrigerant compressors	CO
0.068	Lbs/Hr	per engine	Formaldehyde
0.300	GRAMS/HP-Hr	per engine	NOX
500.000	PPMV	as SO2, dry basis	SOX
0.040	gr/DRY FT3		TSP
0.200	GRAMS/HP-Hr	per engine	VOC
0.370	Lbs/Hr	per engine	VOC
3.240	Tons/Yr	for the total of the 2 refrigerant compressors	VOC

103B	840 BHP WAUKESHA F3524GSI COMP ENG UNIT 5702, SN 5283701373

Emission Limit			Pollutant
0.500	GRAMS/HP-Hr	per engine	CO
0.930	Lbs/Hr	per engine	CO
8.110	Tons/Yr	for the total of the 2 refrigerant compressors	CO
0.068	Lbs/Hr	per engine	Formaldehyde
0.300	GRAMS/HP-Hr	per engine	NOX
500.000	PPMV	as SO2, dry basis	SOX
0.040	gr/DRY FT3		TSP
0.200	GRAMS/HP-Hr	per engine	VOC
0.370	Lbs/Hr	per engine	VOC
3.240	Tons/Yr	for the total of the 2 refrigerant compressors	VOC

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Emission Limit			Pollutant
0.040	Lbs/MMBTU	7-H-1768 Deethanizer II HMO Heater	CO
0.041	Lbs/MMBTU	6-H-852a Fractionator HMO Heater	CO
0.050	Lbs/MMBTU	2-H-802 Depropanizer I HMO Heater	CO
0.051	Lbs/MMBTU	6-H-851 Fractionator HMO Heater	CO
9.300	Tons/Yr	2-H-802 Depropanizer I HMO Heater, 12-month rolling total	CO
10.640	Tons/Yr	7-H-1768 Deethanizer II HMO Heater, 12-month rolling total	CO
11.637	Tons/Yr	6-H-852a Fractionator HMO Heater, 12-month rolling total	CO
26.760	Tons/Yr	6-H-851 Fractionator HMO Heater, 12-month rolling total	CO
0.035	Lbs/MMBTU	6-H-851 Fractionator HMO Heater	NOX
0.040	Lbs/MMBTU	6-H-852a Fractionator HMO Heater	NOX
0.040	Lbs/MMBTU	7-H-1768 Deethanizer II HMO Heater	NOX
0.050	Lbs/MMBTU	2-H-802 Depropanizer I HMO Heater	NOX
9.300	Tons/Yr	2-H-802 Depropanizer I HMO Heater, 12-month rolling total	NOX
10.640	Tons/Yr	7-H-1768 Deethanizer II HMO Heater, 12-month rolling total	NOX

SECTION G. Emission Restriction Summary.

Source Id	Source Description

11.353	Tons/Yr	6-H-852a Fractionator HMO Heater	NOX
18.270	Tons/Yr	6-H-851 Fractionator HMO Heater, 12-month rolling total	NOX
4.000	Lbs/MMBTU	of heat input.	SOX
0.400	Lbs/MMBTU	of heat input.	TSP

111 OLYMPIAN EMERGENCY GENERATOR

Emission Limit			Pollutant
500.000	PPMV	as SO2, dry basis	SOX
0.040	gr/DRY FT3		TSP

114A 1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4701, SN 5283701468

Emission Limit			Pollutant
0.250	GRAMS/HP-Hr		CO
0.010	GRAMS/HP-Hr		Formaldehyde
0.200	GRAMS/HP-Hr		NOX
500.000	PPMV	as SO2, dry basis	SOX
0.040	gr/DRY FT3		TSP
0.160	GRAMS/HP-Hr		VOC

114B 1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4702, SN 5283701448

Emission Limit			Pollutant
0.250	GRAMS/HP-Hr		CO
0.010	GRAMS/HP-Hr		Formaldehyde
0.200	GRAMS/HP-Hr		NOX
500.000	PPMV	as SO2, dry basis	SOX
0.040	gr/DRY FT3		TSP
0.160	GRAMS/HP-Hr		VOC

114C 1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4703, SN 5283701397

Emission Limit			Pollutant
0.250	GRAMS/HP-Hr		CO
0.010	GRAMS/HP-Hr		Formaldehyde
0.200	GRAMS/HP-Hr		NOX
500.000	PPMV	as SO2, dry basis	SOX
0.040	gr/DRY FT3		TSP
0.160	GRAMS/HP-Hr		VOC

114D 1480 BHP WAUKESHA L7042GSI COMP ENG UNIT 4704, SN 5283701443

Emission Limit			Pollutant
0.250	GRAMS/HP-Hr		CO
0.010	GRAMS/HP-Hr		Formaldehyde
0.200	GRAMS/HP-Hr		NOX
500.000	PPMV	as SO2, dry basis	SOX

SECTION G. Emission Restriction Summary.

Source Id	Source Description

0.040	gr/DRY FT3	TSP
0.160	GRAMS/HP-Hr	VOC

Site Emission Restriction Summary

Emission Limit	Pollutant

SECTION H. Miscellaneous.

(a) The Capacity/Throughput numbers listed in Section A, the Site Inventory List, and provided in Section D of this permit for individual sources are for informational purposes only and are not to be considered enforceable limits. Enforceable limits are listed in the Restrictions section in Section D (i.e., for each source) and in Section E (i.e., for sources included in the source group). The emission limitations contained in Section G of this permit are also for informational purposes only and are not to be considered enforceable limits.

(b) Source specifications and details (as of November 2018)

(b.1) Source 107 comprises of the following process heaters:

(1) H-5602 Bluestone I Deethanization Heater, 9.9 mmbtu/hr
(2) H-5801 Bluestone I Regen Heater, 3 mmbtu/hr
(3) 2-H-101 Bluestone II Regen Heater, 5.38 mmbtu/hr
(4) 2-H-102 Deethanization I Regen Heater, 2.6 mmbtu/hr
(5) 2-H-801 Bluestone II HMO Heater, 18.52 mmbtu/hr
(6) 2-H-802 Depropanizer I HMO Heater, 42.4 mmbtu/hr
(7) 3-H-741 Bluestone III Regen Heater, 6.84 mmbtu/hr
(8) 3-H-781 Bluestone III HMO Heater, 13.68 mmbtu/hr
(9) 6-H-851 Fractionation HMO Heater, 119.2 mmbtu/hr
(10) 6-H-852a Fractionation HMO Heater, 64.8 mmbtu/hr
(11) 7-H-1768 Deethanizer II HMO Heater, 60.7 mmbtu/hr
(12) 7-H-1775 Deethanizer II Regen Heater, 4.53 mmbtu/hr

(b.2) Source 108 is emissions escaping during loading of products (natural gasoline) onto trucks or railcars for transport. This source also include emissions due to combustion of residual propane and butane/gasoling (B-G) mix in empty rail cars prior repair.

(b.3) Source 109 is a 10,000-bbl natural gasoline storage tank.

(b.4) Source 110 represents fugitive emissions from components (i.e., connectors, flanges, pump seals, compressors, PSVs (pressure safety valves), & valves) from natural gas processing plants at the facility. In total, there are 3 demethanizers (i.e., cryogenic processing), 3 deethanizers, 1 depropanizer, 1 debutanizer (i.e., fractionator), & 1 butane splitter in operation.

(1) Bluestone 1: 1 demethanizer, 1 deethanizer. (i.e., 1 depropanizer not in use)
(2) Bluestone 2: 1 demethanizer, 1 deethanizer. (i.e., 1 depropanizer not in use)
(3) Bluestone 3: 1 demethanizer
(4) Deethanizer 3: 1 deethanizer
(5) Fractionation: 1 depropanizer, 1 debutanizer, 1 butane splitter

(b.5) Source 112 consists of electric compressor engines.

Unlike the natural gas-fired compressor engines, Source 112 does not emit natural gas combustion gases. However, as part of a natural gas processing facility, Source 112 is subject to § 40 CFR 60 Subpart OOOO and therefore included as a permitted source. There are 28 electric compressor engines (i.e., most to drive small pumps).

(b.6) Source 601 represents fugitive emissions from maintenance blowdowns for equipment/engines.

(b.7) Source 801 represents fugitive emissions from pig launchers and receivers (i.e., for cleaning & inspecting pipelines).

(b.8) Control C108 - used throughout the site including Sources 108, 109, 110, 114, and for emergency use. This control/flare is referred internally as 'D702 Flare'.

(b.9) Control C110 - temporary flare brought in by a third party; used to combust residual propane & butane/gasoline (B-G) mixture in empty rail cars prior repair.

(c) The following sources are insignificant and there will be no requirements for these sources:

(c.1) There are 5 pressurized tanks numbered 9401, 9402, 9403, 9404, 9405

(1) Tanks contain either propane or BG mix (butane gas mix)
(2) Specs/dimensions:
- Tank capacity: 60,000 gallons
- Overall tank length: 90 '

SECTION H. Miscellaneous.

- Tank diameters: 10', 11' 7/8", 11' 1/8" , 11' 0"

(3) Operating conditions:

- Maximum allowable working pressure (MAWP) is 250 psi at 125°F.
- Operating pressure range for BG tanks is 10-150 psi
- Operating pressure range for propane tanks is 80-150 psi

(d) Definitions

(d.1) Ozone season - from May through September

(e) This permit was administratively amended on March 15, 2023 to incorporate the change of responsible official to Richard P. Kline.

****** End of Report ******