



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: September 8, 2020 Effective Date: August 28, 2026
Revision Date: August 11, 2026 Expiration Date: February 28, 2027
Revision Type: Extension

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 construct, install, modify or reactivate the air emission source(s) more fully described in the site inventory list. This Facility is subject to all terms and conditions specified in this plan approval. Nothing in this plan approval 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 plan approval condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated as "State-Only" requirements.

Plan Approval No. 65-00979B

Federal Tax Id - Plant Code: 26-4578063-25

Owner Information

Name: LAUREL MOUNTAIN MIDSTREAM LLC
Mailing Address: 111 ENTERPRISE LN
CONNELLSVILLE, PA 15425-6617

Plant Information

Plant: LAUREL MTN MIDSTREAM OPR LLC/HERMINIE COMP STA
Location: 65 Westmoreland County 65956 South Huntingdon Township
SIC Code: 1389 Mining - Oil And Gas Field Services, Nec

Responsible Official

Name: ROBERT BIFFLE
Title: VP
Phone: (570) 996 - 4000 Email: robert.biffle@williams.com

Plan Approval Contact Person

Name: KEVIN KLINE
Title: ENV SPECIALIST
Phone: (724) 707 - 4870 Email: kevin.kline@williams.com

[Signature] _____

MARK R. GOROG, P.E., ENVIRONMENTAL PROGRAM MANAGER, SOUTHWEST REGION



Plan Approval Description

Air contamination sources and air cleaning devices authorized under this Plan Approval Number PA-65-00979B for Laurel Mountain Midstream Operating, LLC at their Hermine Compressor Station located in South Huntington Township, Westmoreland County.

CE-01 (Source 101) Caterpillar G3512LE 810 bhp Compressor Engine; Controlled by Miratech Ox Cat.
CE-04 (Source 104) Caterpillar G3516B 1,380 bhp Compressor Engine; Controlled by DCL America Ox Cat.
CE-05 (Source 105) Caterpillar G3516B 1,380 bhp Compressor Engine; Controlled by DCL America Ox Cat.
CE-09 (Source 109) Caterpillar G3612LE A3 3,550 bhp Compressor Engine; Controlled by Emit Technology Ox Cat.
CE-11 (Source 114) Caterpillar G3516B 1,380 bhp Compressor Engine; Controlled by DCL America Ox Cat. or equivalent
CE-12 (Source 115) Caterpillar G3516B 1,380 bhp Compressor Engine; Controlled by DCL America Ox Cat. or equivalent.
CE-13 (Source 116) Caterpillar G3516B 1,380 bhp Compressor Engine; Controlled by DCL America Ox Cat. or equivalent.
CE-14 (Source 117) Caterpillar G3612LE A4 3,750 bhp Compressor Engine; Controlled by DCL America Ox Cat. or equivalent.
EG-01 (Source 113) Emergency Generator Cummins QSB7 314 bhp Diesel; Hours of operations are limited to 500 hours per year.

DHY-01 (Source 402) TEG Dehydrator 01 35.0 MMSCFD; Controlled by Combustor rated at 4.0 MMBtu/hr.

BLR-01 (Source 201) TEG Reboiler 01 0.50 MMBtu/hr

COMB-01 (Source 201) Combustor 01 4.0 MMBtu/hr

DHY-02 (Source 401) TEG Dehydrator 02 150.0 MMSCFD; Controlled by combustor rated at 6.18 MMBtu/hr.

BLR-02 (Source 201) TEG Reboiler 02 2.67 MMBtu/hr

DHY-03 (Source 403) TEG Dehydrator 03 200.0 MMSCFD; Controlled by combustor rated at 6.18 MMBtu/hr

BLR-03 (Source 201) TEG Reboiler 03 1.71 MMBtu/hr

COMB-02 (Source 201) Combustor 02 6.18 MMBtu/hr

TKS-01 (Source 301) Storage Tank 150 bbl produced water; Uncontrolled

TKS-02 (Source 301) Storage Tank 150 bbl, produced water; Uncontrolled

TKS-03 (Source 301) Storage Tank 476 bbl, produced water; Uncontrolled

TLO (Source 302) Truck Load Out 40,352 bbl/yr; Uncontrolled

CRP (Source 118) Compressor Rod Packing; Work practice of routine replacement of compressor rod packing per 40 CFR Part 60 Subpart OOOOa.

SSM (Source 119) Start/Stop/Maintenance;

PNE (Source 501) Pneumatic Devices -26 units;

ECC (Source 502) Engine Crank Case Fugitives - 9 units

(Source 601) Venting and Blowdowns.

FUG (Source 701) Site Component Fugitive Emissions; Monthly AVO inspections and quarterly LDAR Program

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

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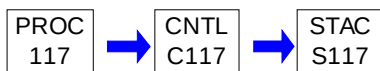
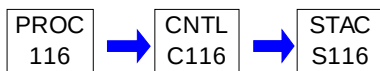
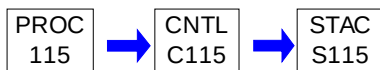
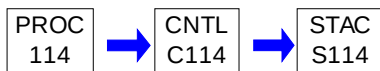
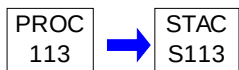
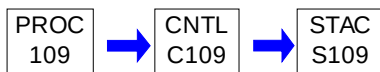
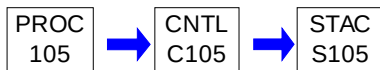
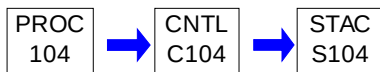
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**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	NATURAL GAS-FIRED COMPRESSOR ENGINE 1 (810 BHP) (CE-01)	N/A	Natural Gas
104	1380 BHP, CAT G3516B, COMP ENG 4(CE-04), SN JEF01375		
105	1380 BHP, CAT G3516B, COMPRESSOR ENG 5(CE-05), SN JEF01373		
109	3550 BHP,CAT G3612LE,COMPRESSOR ENG 9(CE-09), SN BKE00616		
113	CUMMINS EMERGENCY GENERATOR (314 HP) (EG-01)		
114	1380 BHP, CAT G3516B COMPRESSOR ENG (CE-11), SN N6E00559		
115	1380 BHP, CAT G3516B (CE-12), SN N6E00561		
116	1380 BHP, CATERPILLAR G3516B CE-13 ENG, SN N6E00560		
117	3450 BHP, CATERPILLAR G3612LE CE-14 ENGINE, SN BB200818		
118	COMPRESSOR ROD PACKING FUGITIVE EMISSIONS		
119	START/STOP/MAINTENANCE		
201	HEATERS/REBOILERS		
301	TANKS/VESSELS		
302	TRUCK LOADOUT OPERATIONS		
401	TEG DEHYDRATOR 150 MMSCF		
402	TEG DEHYDRATOR 35 MMSCF		
403	DEHYDRATION UNIT 03 200 MMSCFD		
501	PNEUMATIC DEVICES		
502	ENGINE CRANK CASE FUGITIVES		
601	VENTING/BLOWDOWNS		
701	FUGITIVES		
801	PIGGING OPERATIONS		
C101	ENGINE 1 OXIDATION CATALYST (CE-01)		
C104	ENGINE 4 OXIDATION CATALYST (CE-04)		
C105	ENGINE 5 OXIDATION CATALYST (CE-05)		
C109	ENGINE 9 OXIDATION CATALYST (CE-09)		
C114	ENGINE 11 OXIDATION CATALYST (CE-11)		
C115	ENGINE 12 OXIDATION CATALYST (CE-12)		
C116	ENGINE 13 OXIDATION CATALYST (CE-13)		
C117	ENGINE 14 OXIDATION CATALYST (CE-14)		
C401	FLARE 6.18 MMBTU/HR FOR TEG DEHY 150 MMSCF		
C402	FLARE 4.0 MMBTU/HR FOR TEG DEHY 35 MMSCF		
S101	CAT COMPRESSOR ENGINE 1 STACK (CE-01)		
S104	ENGINE 4 STACK (CE-04)		
S105	ENGINE 5 STACK (CE-05)		
S109	ENGINE 9 STACK (CE-09)		
S113	CUMMINS EMERGENCY GENERATOR (314 HP) STACK (EG-01)		
S114	ENGINE 11 STACK (CE-11)		
S115	ENGINE 12 STACK (CE-12)		

**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
S116	ENGINE 13 STACK (CE-13)		
S117	ENGINE 14 STACK (CE-14)		
S401	TEG DEHYDRATOR 150 MMSCF STACK		
S402	STACK FOR TEG DEHY 35 MMSCF		
Z118	COMPRESSOR ROD PACKING FUGITIVES		
Z119	START/STOP/MAINTENANCE		
Z201	HEATERS/REBOILERS STACK		
Z301	TANKS/VESSELS STACK		
Z302	TRUCK LOADOUT FUGITIVES		
Z501	PNEUMATIC DEVICES STACK		
Z502	ENGINE CRACK CASE FUGITIVES		
Z601	VENTING/BLOWDOWNS STACK		
Z701	FUGITIVES STACK		
Z801	PIGGING OPERATIONS STACK		

PERMIT MAPS

**PERMIT MAPS**

PROC
118 → STAC
Z118

PROC
119 → STAC
Z119

PROC
201 → STAC
Z201

PROC
301 → STAC
Z301

PROC
302 → STAC
Z302

PROC
401 → CNTL
C401 → STAC
S401

PROC
402 → CNTL
C402 → STAC
S402

PROC
403 → CNTL
C402 → STAC
S402

PROC
501 → STAC
Z501

PROC
502 → STAC
Z502

PROC
601 → STAC
Z601

PROC
701 → STAC
Z701

PROC
801 → STAC
Z801

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

Words and terms that are not otherwise defined in this plan approval 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 § 127.12b (a) (b)]**Future Adoption of Requirements**

The issuance of this plan approval does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act, or to achieve or maintain ambient air quality standards. The issuance of this plan approval shall not be construed to limit the Department's enforcement authority.

#003 [25 Pa. Code § 127.12b]**Plan Approval Temporary Operation**

This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided the following conditions are met.

(a) When construction, installation, modification, or reactivation is being conducted, the permittee shall provide written notice to the Department of the completion of the activity approved by this plan approval and the permittee's intent to commence operation at least five (5) working days prior to the completion of said activity. The notice shall state when the activity will be completed and when the permittee expects to commence operation. When the activity involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.

(b) Pursuant to 25 Pa. Code § 127.12b (d), temporary operation of the source(s) is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit under 25 Pa. Code Chapter 127, Subchapter F (relating to operating permits) or Subchapter G (relating to Title V operating permits) or to permit the evaluation of the air contaminant aspects of the source.

(c) This plan approval authorizes a temporary operation period not to exceed 180 days from the date of commencement of operation, provided the Department receives notice from the permittee pursuant to paragraph (a), above.

(d) The permittee may request an extension of the 180-day shakedown period if further evaluation of the air contamination aspects of the source(s) is necessary. The request for an extension shall be submitted, in writing, to the Department at least 30 days prior to the end of the initial 180-day shakedown period and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established. This temporary operation period will be valid for a limited time and may be extended for additional limited periods, each not to exceed 180 days.

(e) The notice submitted by the permittee pursuant to subpart (a) above, prior to the expiration of the plan approval, shall modify the plan approval expiration date on Page 1 of this plan approval. The new plan approval expiration date shall be 180 days from the date of commencement of operation.

#004 [25 Pa. Code § 127.12(a) (10)]**Content of Applications**

The permittee shall maintain and operate the sources and associated air cleaning devices in accordance with good engineering practice as described in the plan approval application submitted to the Department.

#005 [25 Pa. Code §§ 127.12(c) and (d) & 35 P.S. § 4013.2]**Public Records and Confidential Information**

(a) The records, reports or information obtained by the Department or referred to at public hearings shall be available to the public, except as provided in paragraph (b) of this condition.

(b) Upon cause shown by the permittee that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the act, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the

**SECTION B. General Plan Approval Requirements**

competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the act. The Department will implement this section consistent with sections 112(d) and 114(c) of the Clean Air Act (42 U.S.C.A. § 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to Federal, State or local representatives as necessary for purposes of administration of Federal, State or local air pollution control laws, or when relevant in a proceeding under the act.

#006 [25 Pa. Code § 127.12b]**Plan Approval Terms and Conditions**

[Additional authority for this condition is derived from 25 Pa. Code Section 127.13]

(a) This plan approval will be valid for a limited time, as specified by the expiration date contained on Page 1 of this plan approval. Except as provided in § § 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.

(b) If construction has commenced, but cannot be completed before the expiration of this plan approval, an extension of the plan approval must be obtained to continue construction. To allow adequate time for departmental action, a request for the extension shall be postmarked at least thirty (30) days prior to the expiration date. The request for an extension shall include the following:

- (i) A justification for the extension,
- (ii) A schedule for the completion of the construction

If construction has not commenced before the expiration of this plan approval, then a new plan approval application must be submitted and approval obtained before construction can commence.

(c) If the construction, modification or installation is not commenced within 18 months of the issuance of this plan approval or if there is more than an 18-month lapse in construction, modification or installation, a new plan approval application that meets the requirements of 25 Pa. Code Chapter 127, Subchapter B (related to plan approval requirements), Subchapter D (related to prevention of significant deterioration of air quality), and Subchapter E (related to new source review) shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

#007 [25 Pa. Code § 127.32]**Transfer of Plan Approvals**

(a) This plan approval may not be transferred from one person to another except when a change of ownership is demonstrated to the satisfaction of the Department and the Department approves the transfer of the plan approval in writing.

(b) Section 127.12a (relating to compliance review) applies to a request for transfer of a plan approval. A compliance review form shall accompany the request.

(c) This plan approval is valid only for the specific source and the specific location of the source as described in the application.

#008 [25 Pa. Code § 127.12(a)(4) & 35 P.S. § 4008 & § 114 of the CAA]**Inspection and Entry**

(a) 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.

(b) The permittee shall also allow the Department to have access at reasonable times to said sources and associated air cleaning devices with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act and regulations adopted under the act.

**SECTION B. General Plan Approval Requirements**

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

#009 [25 Pa. Code 127.13a]**Plan Approval Changes for Cause**

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

- (a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.
- (b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.
- (c) The permittee fails to submit a report required by this plan approval.
- (d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

#010 [25 Pa. Code §§ 121.9 & 127.216]**Circumvention**

- (a) The permittee, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.
- (b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, 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.

#011 [25 Pa. Code § 127.12c]**Submissions**

Reports, test data, monitoring data, notifications shall be submitted to the:

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

#012 [25 Pa. Code § 127.12(a)(9) & 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 facility. The permittee shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:
 - (1) The permittee shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:

**SECTION B. General Plan Approval Requirements**

- (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 the Environmental Protection Agency 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 plan approval 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.

#013 [25 Pa. Code § 121.7]**Prohibition of Air Pollution**

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

#014 [25 Pa. Code § 127.25]**Compliance Requirement**

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



SECTION C. Site Level Plan Approval Requirements

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §121.7]

Prohibition of air pollution.

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

002 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

(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) Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting.

(8) Coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in § § 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations).

(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.

**SECTION C. Site Level Plan Approval Requirements**

(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) The requirements contained in subsection (a) and 123.2 do not apply to fugitive emissions arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

003 [25 Pa. Code §123.13]**Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter from a process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute

004 [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.

005 [25 Pa. Code §123.21]**General**

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

006 [25 Pa. Code §123.31]**Limitations**

The Owner/Operator 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 of the property of the Facility.

007 [25 Pa. Code §123.41]**Limitations**

Visible air emissions are limited to less than 20% opacity in any three-minute period in any hour and to less than 60% at any time.

008 [25 Pa. Code §127.35]**Maximum achievable control technology standards for hazardous air pollutants.**

The standards established under §127.35 will be incorporated into the plan approval of each source within the category or subcategory for which a maximum achievable control technology (MACT) requirement has been established. The Department has the authority to require, in the plan approval, reasonable monitoring, recordkeeping and reporting requirements for sources which emit hazardous air pollutants.

009 [25 Pa. Code §129.14]**Open burning operations**

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

II. TESTING REQUIREMENTS.**# 010 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

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

**SECTION C. Site Level Plan Approval Requirements****III. MONITORING REQUIREMENTS.****# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Owner/Operator shall incorporate the leak detection requirements of 40 CFR Part 60 into a repair or maintenance program at the facility. Components subject to this program shall include but not be limited to valves, connectors, open ended lines, pressure relief valves, and meters.

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

The Owner/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 for visible stack emission, fugitive emission and potentially objectionable odors.

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

Records of each facility-wide inspection shall be maintained in a log and at the minimum include the date, time, name and title of the observer, along with any corrective action taken as a result.

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

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

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

The Owner/Operator shall maintain the following comprehensive and accurate records:

- a. The number of hours per month that each engine and dehydration unit operate.
- b. The amount of fuel used per month by each engine.
- c. Records including a description of testing methods, results, all engine operating data collected during tests, and a copy of the calculations performed to determine compliance with emission standards for each engine.
- d. Copies of the manufacturer's recommended maintenance schedule for each engine and catalyst.
- e. Records of any maintenance conducted on each dehydration unit, engine, and catalyst.
- f. The total sulfur content of the natural gas being fired in the engines.
- g. Records of a fractional gas analysis performed at least once annually on the inlet natural gas to the dehydrator gas at the facility.
- h. Records of facility-wide inspections including the date, time, name, and title of the observer, along with any corrective action taken as a result.
- i. Records of reciprocating packing maintenance intervals.

V. REPORTING REQUIREMENTS.**# 016 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall provide written notice to the Department upon deactivation of any active air contamination sources at the Facility. This notice shall:

- a. Identify the deactivated air contamination sources by make, model, and current Department permit number for operation;
- b. Include the date of deactivation; and
- c. Describe the method of deactivation.

**SECTION C. Site Level Plan Approval Requirements****# 017 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/operator shall provide EPA with the notifications required by 40 CFR § 60.7. Required notifications may include but are not necessarily limited to: date of commencement of construction (within 30 days after starting construction), actual start-up date (within 15 days after equipment start-up), physical or operational changes which may increase the emission rate of any air pollutant to which a standard applies (60 days or as soon as practicable before equipment start-up), and opacity observations (within 30 days).

018 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The Owner/Operator shall submit requests to extend the temporary operation period at least 15 days prior to the expiration date of any authorized period of temporary operation until the source(s), and modifications to existing source(s), covered by this authorization are incorporated into an issued SOOP for this facility.

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

The Owner/Operator of each stationary source emitting criteria pollutants (including but not limited to NO_x, CO, VOC [including formaldehyde], SO_x, PM₁₀, and PM_{2.5}), HAP, greenhouse gases (GHG) in the form of CO₂ equivalent (CO₂e), and GHG on a mass-basis 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 criteria pollutants, HAP (per the Department's Emissions Inventory Reporting Instructions), GHG in the form of CO₂e, and GHG on a mass-basis 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 shall be included. The statement shall also contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.

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

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

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

(c) The report shall describe the following:

1. name, permit or authorization number, and location of the facility,
2. nature and cause of the malfunction, emergency or incident,
3. date and time when the malfunction, emergency or incident was first observed,
4. expected duration of excess emissions,
5. estimated rate of emissions,
6. corrective actions or preventative measures taken.

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

**SECTION C. Site Level Plan Approval Requirements**

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

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

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

021 [25 Pa. Code §135.3]**Reporting**

Annual emission reporting shall be conducted as follows:

(a) The Owner or operator of a natural gas compressor station, processing plant, or transmission station shall submit to the Air Program Manager of the appropriate DEP Regional Office all requests, reports, applications, submittals, and other communications concerning applicable federal NSPS and NESHAP.

(b) In accordance with 40 CFR §§ 60.4 and 63.10, copies of all requests, reports, applications, submittals, and other communications shall also be submitted to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) accessible at <https://cdx.epa.gov> unless electronic reporting is not available, in which case a copy shall be sent to the following address:

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

(c) The annual report is required to be submitted either in electronic format, by hand-delivery, courier, or sent by certified mail, return receipt requested, to the Air Program Manager of the appropriate DEP Regional Office, the reporting period specified by the owner/operator shall be no later than one year from the start of operations of the facility, unless otherwise approved by the Department. The initial and subsequent annual reports shall be submitted within 60 days of the end of the reporting periods. General information required on all reports includes:

i. Company Name;

ii. Facility Site Name;

iii. The plan approval authorization number;

iv. Either:

(A) The address of the site; or

(B) A description of the site and the location using latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of 5 decimal degrees using the North American Datum of 1983;

(v) The beginning and ending dates of the reporting period;

(vi) Certification which must include:

(A) A list of noncomplying activities.

(B) A statement noting: "During calendar year (20XX), the facility has been in compliance with all applicable terms and conditions of Plan Approval 65-00979B, including monitoring, record keeping, reporting except for those noncomplying activities on the attached list.

(C) The Statement: "Based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."; and

(D) The signature of the certifying Responsible Official;

(vii) Identification of each source included in the report;

(viii) The identification of each term or condition of the plan approval that is the basis of the certification, the compliance status, and the methods used for determining the compliance status of the source, currently and over the reporting period as identified in this Plan Approval.

(ix) The records of the facility's emissions to demonstrate compliance with this Plan Approval.

**SECTION C. Site Level Plan Approval Requirements**

(d) In accordance with 25 Pa. Code § 135.3, the owner or operator of a facility shall submit to the Department via AES*Online or AES*XML at www.depgreenport.state.pa.us/ by March 1st of each year, a facility inventory report for the preceding calendar year for all sources regulated under this General Permit. The inventory report shall include all emissions information for all sources operated during the preceding calendar year from the annual report required in (c) above. Emissions data including, but not limited to, the following shall be reported:

- i. NO_x;
- ii. CO;
- iii. SO_x;
- iv. PM₁₀;
- v. PM_{2.5};
- vi. VOC;
- vii. Speciated HAP including, but not limited to, benzene, ethyl benzene, formaldehyde, n-hexane, toluene, isomers and mixtures of xylenes, and 2,2,4-trimethylpentane;
- viii. Total HAP;
- ix. CO₂;
- x. CH₄; and
- xi. N₂O

022 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]**Subpart A - General Provisions****Address.**

22. In accordance with 40 CFR §§60.4, 63.10 and 63.13; copies of all requests, reports, applications, submittals and other communications regarding affected sources shall be forwarded to the Department at the addresses listed below unless otherwise noted.

PADEP
Air Quality Program
400 Waterfront Drive
Pittsburgh, PA 15222-4745

VI. WORK PRACTICE REQUIREMENTS.**# 023 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

All air contamination sources and air cleaning devices authorized under this Plan Approval shall be operated per the manufacturer's specifications and maintained according to the manufacturer's recommended maintenance schedule.

VII. ADDITIONAL REQUIREMENTS.**# 024 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Upon determination by the Owner/Operator that the source(s) covered by this Plan Approval are in compliance with all conditions of the Plan Approval the Owner/Operator shall contact the Department's reviewing engineer and schedule the Initial Operating Permit Inspection.

025 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Upon completion of the Initial Operating Permit Inspection and determination by the Department that the source(s) covered by this Plan Approval are in compliance with all conditions of the Plan Approval, and at least 60 days prior to the expiration date of the Plan Approval, the Owner/Operator shall submit a State Only Operating Permit (SOOP) application.

026 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

If, at any time, the Department has cause to believe that air contaminant emissions from the sources listed in this Plan Approval may be in excess of the limitations specified in, or established pursuant to this plan approval or the permittee's

**SECTION C. Site Level Plan Approval Requirements**

operating permit, the permittee may be required to conduct test methods and procedures deemed necessary by the Department to determine the actual emissions rate. Such testing shall be conducted in accordance with 25 Pa. Code Chapter 139, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.

027 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

This Plan Approval (PA-65-00979B) supersedes and replaces all previous Plan Approvals and General Permits. Each air contamination source and air cleaning device authorized for installation and temporary operation under PA-65-00979A and GP5-65-00979E at this facility remains subject to all the conditions and requirements of their respective plan approvals unless superseded by an equivalent or more stringent requirement of this plan approval.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this plan approval including Section B (relating to Plan Approval General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

**SECTION D. Source Level Plan Approval Requirements**

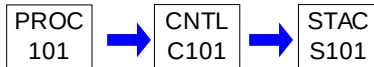
Source ID: 101

Source Name: NATURAL GAS-FIRED COMPRESSOR ENGINE 1 (810 BHP) (CE-01)

Source Capacity/Throughput:

N/A

Natural Gas

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner/Operator shall maintain records of hours of operation and fuel consumption for the Caterpillar G3512LE compressor engine.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

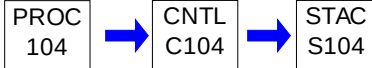
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 104

Source Name: 1380 BHP, CAT G3516B, COMP ENG 4(CE-04), SN JEF01375

Source Capacity/Throughput:

Conditions for this source occur in the following groups: G003 GP-5 65-00979E

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

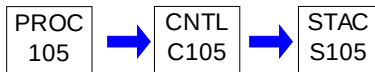
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 105

Source Name: 1380 BHP, CAT G3516B, COMPRESSOR ENG 5(CE-05), SN JEF01373

Source Capacity/Throughput:

Conditions for this source occur in the following groups: G003 GP-5 65-00979E

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

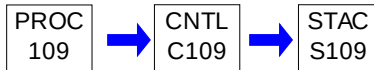
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 109

Source Name: 3550 BHP,CAT G3612LE,COMPRESSOR ENG 9(CE-09), SN BKE00616

Source Capacity/Throughput:

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

Visible emissions from each engine stack shall not exceed the following limitations:

- Equal to or greater than 10% for a period or periods aggregating more than three minutes in any one hour.
- Equal to or greater than 30% at any time.

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

Emissions from each G3612LE compressor engine shall be limited to the following:

At rated bhp and speed:

- NO_x – 0.50 g/bhp-hr
- CO – 0.14 g/bhp-hr
- NMNEHC – 0.19 g/bhp-hr*
- Formaldehyde– 0.030 g/bhp-hr

At all operating conditions excluding startup, shutdown, and malfunction:

- NO_x – 3.91 lb/hr
- CO – 1.07 lb/hr
- NMNEHC – 1.51 lb/hr*
- Formaldehyde– 0.21 lb/hr

* Based on US EPA Method 18/25A (or Department approved equivalent, does not include formaldehyde)

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

The Owner/Operator shall perform formaldehyde emission tests upon each Caterpillar G3612LE compressor engine according to the requirements of 25 Pa. Code Chapter 139. Initial emission testing is required within 180 days of startup of each compressor engine. EPA Method stack testing shall be conducted for the initial and any subsequent stack testing.

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

The Owner/Operator shall perform NO_x emission tests upon each Caterpillar G3612LE compressor engine according to the requirements of 25 Pa. Code Chapter 139, 40 CFR §60.4243, and 40 CFR §60.4244. Initial emission testing is required within 180 days of startup of each compressor engine. Subsequent NO_x testing shall be performed within twelve (12) months of initial stack testing and annually thereafter. EPA Method stack testing shall be conducted for the initial stack test and once every five years from the previous EPA Method test. Portable analyzer testing according to ASTM Method D6522-00 or other portable methods if approved by the Department and included in Table 2 to Subpart JJJJ of Part 60 are acceptable for intervening annual testing.

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

The Owner/Operator shall perform CO and VOC emission tests upon each G3612LE compressor engine according to the requirements of 40 CFR §§60.4243 and 60.4244. These requirements are included as compressor engine source group

**SECTION D. Source Level Plan Approval Requirements**

conditions. Initial emission testing is required within one hundred eighty (180) days of startup of each compressor engine. Subsequent testing shall be performed every 8,760 hours or 3 years, whichever comes first. EPA Method stack testing shall be conducted for the initial stack test and once every five years from the previous EPA Method test. Portable analyzer testing according to ASTM Methods D6522-00 and D6348-03, or other methods included in Table 2 to Subpart JJJJ of Part 60 are acceptable for intervening testing every 8,760 hours or 3 years.

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

In the event of an exceedance of the CO limit on a G3612LE compressor engine, the Owner/Operator shall perform maintenance on the oxidation catalyst or engine as necessary and subsequently perform CO and formaldehyde emission tests upon that engine.

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

Performance testing shall be conducted as follows:

- a. The Owner/Operator shall submit three copies of a pre-test protocol to the Department for review at least 45 days prior to the performance of any EPA reference method stack test. The Owner/Operator shall submit three copies of a one-time protocol to the Department for review for the use of a portable analyzer and may repeat portable analyzer testing without additional protocol approvals provided that the same method and equipment are used. All proposed performance test methods shall be identified in the pre-test protocol and approved by the Department prior to testing.
- b. The Owner/Operator shall notify the Regional Air Quality Manager at least 15 days prior to any performance test so that an observer may be present at the time of the test. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- c. Pursuant to 40 CFR Part 60.8(a), a complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program.
- d. Pursuant to 25 Pa. Code Section 139.53(b) 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 non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
 1. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
 2. Permit number(s) and condition(s) which are the basis for the evaluation.
 3. Summary of results with respect to each applicable permit condition.
 4. Statement of compliance or non-compliance with each applicable permit condition.
- e. Pursuant to 25 Pa. Code § 139.3 all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- f. All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.
- g. Pursuant to 25 Pa. Code Section 139.53(a)(1) and 139.53(a)(3) all submittals, besides notifications, shall be accomplished through PSIMS*Online available through <https://www.depgreenport.state.pa.us/ecommm/Login.jsp> when it becomes available. If internet submittal can not be accomplished, three copies of the submittal shall be sent to the Pennsylvania Department of Environmental Protection, Bureau of Air Quality, Division of Source Testing and Monitoring, 400 Market Street, 12th Floor Rachael Carson State Office Building, Harrisburg, PA 17105-8468 with deadlines verified through document postmarks.
- h. 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

**SECTION D. Source Level Plan Approval Requirements**

default.

008 [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 NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 1 of this section:

$$ER = (Cd * 1.912 * 10^{-3} * Q * T) / (HP-hr) \text{ (Eq. 1)}$$

Where:

ER = Emission rate of NO_x in g/HP-hr

Cd = Measured NO_x concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NO_x to grams per standard cubic meter at 20 degrees Celsius.

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:

$$ER = (Cd * 1.164 * 10^{-3} * Q * T) / (HP-hr) \text{ (Eq. 2)}$$

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.

**SECTION D. Source Level Plan Approval Requirements**

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:

$$ER = (Cd * 1.833 * 10^{-3} * Q * T) / (HP-hr) \text{ (Eq. 3)}$$

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.

$$RF_i = CM_i / CA_i \text{ (Eq. 4)}$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

CM_i = Measured concentration of compound i in ppmv as carbon.

CA_i = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i * C_{imeas} \text{ (Eq. 5)}$$

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.

$$C_{peq} = 0.6098 * C_{icorr} \text{ (Eq. 6)}$$

Where:

C_{peq} = Concentration of compound i in mg of propane equivalent per DSCM.

**SECTION D. Source Level Plan Approval Requirements****III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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.
 - i. All notifications submitted to comply with this subpart and all documentation supporting any notification.
 - ii. Maintenance conducted on the engine.
 - iii. 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.
 - iv. 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. N/A
- 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.
 - i. Name and address of the owner or operator;
 - ii. The address of the affected source;
 - iii. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
 - iv. Emission control equipment; and
 - v. 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.

V. REPORTING REQUIREMENTS.**# 010 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall meet the following notification, reporting, and recordkeeping requirements for each reciprocating compressor affected facility. [Additional authority for this condition is derived from 40 CFR 60.5420, Subpart OOOO]

- 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) If you own or operate a gas well, pneumatic controller or storage vessel affected facility you are not required to submit the notifications required in § 60.7(a)(1), (3), and (4).
 - 2) N/A
- 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 D. Source Level Plan Approval Requirements**

- 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) N/A
- 3) N/A
- 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 of 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) N/A
- 6) N/A
- 7) N/A
- 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) N/A
 - 2) N/A
 - 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) N/A
 - 5) N/A
 - 6) N/A
 - 7) N/A
 - 8) N/A
 - 9) N/A
 - 10) N/A

011 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The Owner/Operator shall demonstrate initial compliance with the standards for each reciprocating compressor affected facility by complying with paragraphs a. through d. of this section. The initial compliance period begins upon initial startup and ends no later than one year after the initial startup date for the reciprocating compressor affected facilities. [Additional authority for this condition is derived from 40 CFR 60.5410, Subpart OOOO]

- a. 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.
- b. You must submit the notifications required in 60.7(a)(1), (3), and (4).
- c. You must submit the initial annual report for your reciprocating compressor as required in § 60.5420(b).
- d. You must maintain the records as specified in § 60.5420(c)(3) for each reciprocating compressor affected facility.

012 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The Owner/Operator shall demonstrate continuous compliance with the standards for each reciprocating compressor affected facility by complying with paragraphs a. through c. of this section. [Additional authority for this condition is derived from 40 CFR §60.5415, Subpart OOOO]

- a. You must continuously monitor the number of hours of operation for each reciprocating compressor affected facility or

**SECTION D. Source Level Plan Approval Requirements**

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.

b. You must submit the annual report as required in § 60.5420(b) and maintain records as required in § 60.5420(c)(3).

c. 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.

013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]**Subpart A - General Provisions****Address.**

The Facility is subject New Source Performance Standards from 40 CFR Part 60 Subparts JJJJ and OOOO. In accordance with 40 CFR §60.4, copies of all requests, reports, applications, submittals and other communications regarding the engines shall be forwarded to both EPA and the Department at the addresses listed below unless otherwise noted.

Director	PADEP
Air Protection Section	Air Quality Program
Mail Code 3AP00	400 Waterfront Drive
US EPA, Region III	Pittsburgh, PA 15222-4745
1650 Arch Street	
Philadelphia, PA 19101-2029	

014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.7]**Subpart A - General Provisions****Notification and record keeping.**

The Owner/operator shall provide EPA with the notifications required by 40 CFR § 60.7. Required notifications may include but are not necessarily limited to: date of commencement of construction (within 30 days after starting construction), actual start-up date (within 15 days after equipment start-up), physical or operational changes (60 days or as soon as practicable before equipment start-up), and opacity observations (within 30 days).

VI. WORK PRACTICE REQUIREMENTS.**# 015 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

All air contamination sources and air cleaning devices authorized under this Plan Approval shall be operated per the manufacturer's specifications and maintained according to the manufacturer's recommended maintenance schedule.

Catalyst inlet temperature for the EMIT (or equivalent) oxidation catalysts installed on the Caterpillar G3612LE engines shall be maintained greater than 450°F and less than or equal to 1,350°F under all operating conditions excluding startup, shutdown, and malfunction.

016 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The Owner/Operator shall comply with the standards in paragraphs a. through d. of this section for each reciprocating compressor affected facility. [Additional authority for this condition is derived from 40 CFR 60.5385, Subpart OOOO]

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.

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.

**SECTION D. Source Level Plan Approval Requirements**

d. You must perform the required notification, recordkeeping, and reporting as required by § 60.5420.

017 [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?**

As an Owner/Operator of stationary SI ICE subject to the emission standards specified in §60.4233(e), you must demonstrate compliance according to one of the methods specified in paragraphs a. and b. of this condition.

a. 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 40 CFR §60.4243(a).

b. 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. N/A

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.

VII. ADDITIONAL REQUIREMENTS.**# 018 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

General provisions. Table 3 to 40 CFR Part 60 Subpart OOOO shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you. [Additional authority for this condition is derived from 40 CFR 60.5425]

019 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

All terms used in 40 CFR Part 60 Subpart OOOO shall have the meaning given in 40 CFR §60.5430 or else in the Clean Air Act and 40 CFR Part 60 Subparts A or VVa. [Additional authority for this condition is derived from 40 CFR 60.5430]

020 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Each reciprocating compressor driven by a Caterpillar G3612LE engine, approved to be installed under this plan approval, is subject to 40 CFR Part 60, Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution. [Additional authority for this condition is derived from 40 CFR 60.5365, Subpart OOOO]

021 [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?**

Each Caterpillar G3612LE compressor engine, approved to be installed under this plan approval, is subject to the requirements under 40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

022 [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?**

All terms used in 40 CFR Part 60 Subpart JJJJ shall have the meaning given in 40 CFR §60.4248 or else in the Clean Air Act and 40 CFR Part 60 Subpart A.

023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Am I subject to this subpart?**

**SECTION D. Source Level Plan Approval Requirements**

Each Caterpillar G3612LE compressor engine, approved to be installed under this plan approval, is subject to 40 CFR Part 60, Subpart ZZZZ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

024 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]

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

What parts of my plant does this subpart cover?

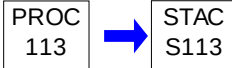
Each Caterpillar G3612LE compressor engine, approved to be installed under this plan approval, is a new stationary RICE located at an area source. Each of these compressor engines must meet the requirements of 40 CFR Part 63 Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart JJJJ. No further requirements apply for these engines under 40 CFR Part 63 Subpart ZZZZ.

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 113

Source Name: CUMMINS EMERGENCY GENERATOR (314 HP) (EG-01)

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200]****Subpart IIII - Standards of Performance for Stationary Compression 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 compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) 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) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

- (i) 2007 or later, for engines that are not fire pump engines,
- (ii) The model year listed in table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:

- (i) Manufactured after April 1, 2006 and are not fire pump engines, or
- (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(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 applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4202]**Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufa**

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

- (i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power

**SECTION D. Source Level Plan Approval Requirements**

in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

(c) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]

Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (d)(1) and (2) of this section.

(1) Reduce NOX emissions by 90 percent or more, or limit the emissions of NOX in the stationary CI internal combustion engine exhaust to 1.6 grams per KW-hour (1.2 grams per HP-hour).

(2) Reduce PM emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

**SECTION D. Source Level Plan Approval Requirements****# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206]****Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine**

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]**Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to**

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(d) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the Federal Aid Highway System may petition the Administrator for approval to use any fuels mixed with used lubricating oil that do not meet the fuel requirements of paragraphs (a) and (b) of this section. Owners and operators must demonstrate in their petition to the Administrator that there is no other place to use the lubricating oil. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]**Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?**

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

**SECTION D. Source Level Plan Approval Requirements**

- (3) Keeping records of engine manufacturer data indicating compliance with the standards.
- (4) Keeping records of control device vendor data indicating compliance with the standards.
- (5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.
- (c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.
- (d) If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.
- (1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.
- (2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.
 - (i) Identification of the specific parameters you propose to monitor continuously;
 - (ii) A discussion of the relationship between these parameters and NOX and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOX and PM emissions;
 - (iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
 - (iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
 - (v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
- (3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.
- (e) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone 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 year. For owners and operators of emergency engines meeting standards under §60.4205 but not §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

**SECTION D. Source Level Plan Approval Requirements****# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6580]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What is the purpose of subpart ZZZZ?**

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Am I subject to this subpart?**

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

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

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in § 63.6675, which includes operating according to the provisions specified in § 63.6640(f).

(1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §

**SECTION D. Source Level Plan Approval Requirements**

63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What parts of my plant does this subpart cover?**

This subpart applies to each affected source.

(a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) Existing stationary RICE.

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) New stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) Reconstructed stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.

(b) Stationary RICE subject to limited requirements. (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of § 63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

**SECTION D. Source Level Plan Approval Requirements**

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of § 63.6645(f) and the requirements of §§ 63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

**SECTION D. Source Level Plan Approval Requirements****II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]****Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?**

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

- (a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.
- (b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214]****Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?**

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

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

(ii) Maintenance conducted on the engine.

**SECTION D. Source Level Plan Approval Requirements**

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION D. Source Level Plan Approval Requirements**

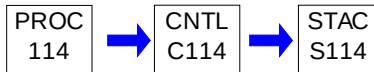
Source ID: 114

Source Name: 1380 BHP, CAT G3516B COMPRESSOR ENG (CE-11), SN N6E00559

Source Capacity/Throughput:

Conditions for this source occur in the following groups: G001 PA 65-00979B

G002 PA 65-00979B

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

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Emissions from each Caterpillar Model G3516B compressor engine shall be limited to the following:

At rated bhp and speed:

- a. NOx – 0.50 g/bhp-hr
- b. CO – 0.25 g/bhp-hr
- c. NMNEHC – 0.25 g/bhp-hr
- d. Formaldehyde– 0.05 g/bhp-hr

II. TESTING REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Plan Approval Requirements**

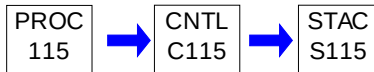
Source ID: 115

Source Name: 1380 BHP, CAT G3516B (CE-12), SN N6E00561

Source Capacity/Throughput:

Conditions for this source occur in the following groups: G001 PA 65-00979B

G002 PA 65-00979B

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

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Emissions from each Caterpillar Model G3516B compressor engine shall be limited to the following:

At rated bhp and speed:

- a. NOx – 0.50 g/bhp-hr
- b. CO – 0.25 g/bhp-hr
- c. NMNEHC – 0.25 g/bhp-hr
- d. Formaldehyde – 0.05 g/bhp-hr

II. TESTING REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

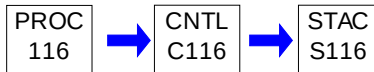
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 116

Source Name: 1380 BHP, CATERPILLAR G3516B CE-13 ENG, SN N6E00560

Source Capacity/Throughput:

Conditions for this source occur in the following groups: G001 PA 65-00979B
G002 PA 65-00979B

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

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Emissions from each Caterpillar Model G3516B compressor engine shall be limited to the following:

At rated bhp and speed:

- a. NOx – 0.50 g/bhp-hr
- b. CO – 0.25 g/bhp-hr
- c. NMNEHC – 0.25 g/bhp-hr
- d. Formaldehyde– 0.05 g/bhp-hr

II. TESTING REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 117

Source Name: 3450 BHP, CATERPILLAR G3612LE CE-14 ENGINE, SN BB200818

Source Capacity/Throughput:

Conditions for this source occur in the following groups: G002 PA 65-00979B

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

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Emissions from the Caterpillar, Model G3612LE A4compressor engine shall be limited to the following:

At rated bhp and speed:

- a. NOx – 0.30 g/bhp-hr
- b. CO – 0.25 g/bhp-hr
- c. NMNEHC – 0.25 g/bhp-hr
- d. Formaldehyde– 0.05 g/bhp-hr

II. TESTING REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

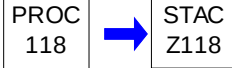
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 118

Source Name: COMPRESSOR ROD PACKING FUGITIVE EMISSIONS

Source Capacity/Throughput:

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.**# 001 [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?**

In accordance with §60.5410a(c), to achieve initial compliance with the standards for each reciprocating compressor affected facility the owner or operator must comply with the following:

- (1) If complying with §60.5385a(a)(1) or (2), during the initial compliance period, must continuously monitor the number of hours of operation or track the number of months since the last rod packing replacement.
- (2) N/A
- (3) submit the initial annual report for your reciprocating compressor as required in §60.5420a(b)(1) and (4).
- (4) maintain the records as specified in §60.5420a(c)(3) for each reciprocating compressor affected facility.

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.**# 002 [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?**

According to §60.5370a(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.

**SECTION D. Source Level Plan Approval Requirements****# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5397a]**

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What fugitive emissions GHG and VOC standards apply to the affected facility which is the collection of fugitive emissions components at a well site...which is the collection of fugitive emissions components at a compressor station?

In accordance with §60.5397a, for each affected facility under §60.5365a(i) and (j)(fugitive emissions at a well site or compressor station), you must reduce GHG (in the form of a limitation on emissions of methane) and VOC emissions by complying with the requirements of paragraphs (a) through (j) of §60.5397a.

004 [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?

In accordance with §60.5410a(j) to achieve initial compliance with the fugitive emission standards for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station, the owner or operator must:

- (1) develop a fugitive emissions monitoring plan as required in §60.5397a(b)(c), and (d).
- (2) conduct an initial monitoring survey as required in §60.5397a(f).
- (3) maintain the records specified in §60.5420a(c)(15).
- (4) repair each identified source of fugitive emissions for each affected facility as required in §60.5397a(h).
- (5) submit the initial annual report for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station as required in §60.5420a(b)(1) and (7).

005 [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?

In accordance with §60.5415a, the owner or operator must:

- a. conduct periodic monitoring surveys as required in §60.5397a(g).
- b. repair or replace each identified source of fugitive emissions as required in §60.5397a(h).
- c. maintain records as specified in §60.5420a and include §60.5420(c) (1), (c)(3), (c)(8), (c)(14), and (c)(15).
- d. submit the notifications as required in §60.5420a.
- e. submit annual reports for collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station as required in §60.5420a(b)(1) and (7).
- f. continuously monitor the number of hours of operation for each reciprocating compressor affected facility or track the number of months since initial startup or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.
- g. submit the annual reports as required in §60.5420a(b)(1) and (4) and maintain records as required in §60.5420a(c).
- h. replace the reciprocating compressor rod packing on or 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.

VII. ADDITIONAL REQUIREMENTS.

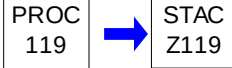
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 119

Source Name: START/STOP/MAINTENANCE

Source Capacity/Throughput:

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

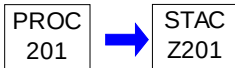
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 201

Source Name: HEATERS/REBOILERS

Source Capacity/Throughput:

Conditions for this source occur in the following groups: G004 GP-5 65-00979E

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

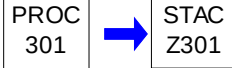
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 301

Source Name: TANKS/VESSELS

Source Capacity/Throughput:

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

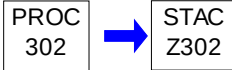
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 302

Source Name: TRUCK LOADOUT OPERATIONS

Source Capacity/Throughput:

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

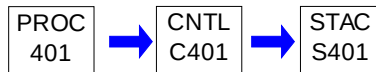
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 401

Source Name: TEG DEHYDRATOR 150 MMSCF

Source Capacity/Throughput:

Conditions for this source occur in the following groups: G004 GP-5 65-00979E

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 402

Source Name: TEG DEHYDRATOR 35 MMSCF

Source Capacity/Throughput:

Conditions for this source occur in the following groups: G004 GP-5 65-00979E

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 403

Source Name: DEHYDRATION UNIT 03 200 MMSCFD

Source Capacity/Throughput:

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

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Flash tank emissions shall be used to fuel the Dehydration Unit 3 reboiler burner to ensure compliance with particulate matter limitation of 25 Pa. Code §123.13(c) and the sulfur oxide limitation of 25 Pa. Code §123.21.

II. TESTING REQUIREMENTS.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Compliance with dehydration unit control efficiency shall be demonstrated through performance testing or through the use of manufacturer's or owner/operator's approved test results demonstrating compliance for an identical unit.

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The following dehydration unit records shall be included in the annual report, as applicable.

- 1) The records of the optimum or alternative glycol circulation rate in accordance with 40 CFR § 63.775(c)(7), if applicable;
- 2) (b) The records of any deviations and malfunctions in accordance with 40 CFR § 63.775(c)(6), if applicable.
- 3) The emissions from each glycol dehydration unit operated during the reporting period must be included in the emissions inventory report.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.774]

Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities Recordkeeping requirements.

For each glycol dehydration unit meeting the exemption criteria of §63.764(e), the owner or operator shall maintain the following records:

- (a) The location of the glycol dehydration unit; [§63.774(d)(1)]
- (b) The calculation for the optimum glycol circulation rate or the alternative glycol circulation rate in accordance with 40 CFR § 63.775(c)(7), if applicable;
- (c) The determination of the actual average benzene or BTEX emissions in accordance with 40 CFR § 63.774(d)(1), if applicable;
- (d) The emissions calculations for each glycol dehydrator in accordance with 25 Pa. Code § 135.5; and
- (e) Records of deviations and malfunctions in accordance with 40 CFR § 63.774(g), if applicable.

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

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

For each glycol dehydrator constructed and authorized to operate on or after August 8, 2018, with a methane emission rate of 200 tpy or greater, a VOC emission rate of 2.7 tpy or greater, a single HAP emission rate of 0.5 tpy or greater, or a total HAP emission rate of 1.0 tpy or greater, the owner or operator shall control methane, VOC, and HAP emissions from the glycol dehydrator still vent stream by at least 95% using an enclosed flare or other combustion device or other air cleaning device approved by the Department that meets the applicable requirements.

VII. ADDITIONAL REQUIREMENTS.

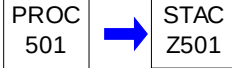
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 501

Source Name: PNEUMATIC DEVICES

Source Capacity/Throughput:

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

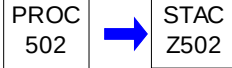
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 502

Source Name: ENGINE CRANK CASE FUGITIVES

Source Capacity/Throughput:

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

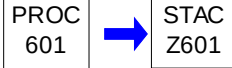
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 601

Source Name: VENTING/BLOWDOWNS

Source Capacity/Throughput:

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

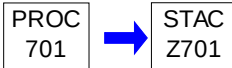
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 701

Source Name: FUGITIVES

Source Capacity/Throughput:

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.**# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

For quarterly inspections using a gas leak detector in accordance with 40 CFR Part 60, Appendix A-7, Method 21, the owner or operator may choose to adjust the detection instrument readings to account for the background organic concentration level.

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

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.

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

Within 60 days after the initial startup of a source, the owner or operator of the facility shall at a minimum, on a quarterly basis, conduct a LDAR program using either an optical gas imaging (OGI) camera, a gas leak detector that meets the requirements of 40 CFR Part 60, Appendix A-7, Method 21, or other leak detection monitoring devices approved by the Division of Source Testing.

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

No later than 30 days after an emission source commences operation, and at least monthly thereafter, the owner or operator of a facility shall conduct an AVO inspection.

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

Any fugitive emissions components that are difficult-to-monitor or unsafe-to-monitor must be identified in the monitoring plan.

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

Once a fugitive emission component has been repaired or replaced, the owner or operator must resurvey the component as soon as practicable, but no later than 30 calendar days after the leak is repaired.

(A) For repairs that cannot be made during the monitoring survey when the leak is initially found, either a digital photograph must be taken of the component or the component must be tagged for identification purposes.

(B) A leak is considered repaired if:

(1) There are no detectable emissions consistent with Section 8.3.2 of 40 CFR Part 60, Appendix A-7, Method 21;

(2) A leak concentration of less than 500 ppm as methane is detected when the gas leak detector probe inlet is placed at the surface of the component;

**SECTION D. Source Level Plan Approval Requirements**

- (3) There is no visible leak image when using an OGI camera calibrated at a detection sensitivity level of 60 grams/hour; or
- (4) There is no bubbling at the leak interface using a soap solution bubble test specified in Section 8.3.3 of 40 CFR Part 60, Appendix A-7, Method 21.

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

For fugitive emissions components, the owner or operator shall maintain the following records in accordance with 40 CFR Part 60.5420a, including information on:

- (a) The fugitive emissions monitoring plan in accordance with 40 CFR § 60.5397a(b) through (d).
- (b) Records of each monitoring survey which must include:
- (i) The facility name and location;
 - (ii) The Plan Approval number;
 - (iii) The date, start time, and end time of the survey;
 - (iv) The name of the operator(s) performing the survey;
 - (v) The monitoring instrument used;
 - (vi) The ambient temperature, sky conditions, and maximum wind speed at the time of the survey;
 - (vii) Any deviations from the monitoring plan or a statement that there were none; and
 - (viii) Documentation of each fugitive emission including:
- (A) The identification of each component from which fugitive emissions were detected;
- (B) The instrument reading of each fugitive emissions component that meets the leak definition in Condition 1(b)(iv)(C) of this section;
- (C) The status of repair of each component including:
- (1) The repair methods applied in each attempt to repair the component;
 - (2) The tagging or digital photographing of each component not repaired during the monitoring survey in which the fugitive emissions were discovered;
 - (3) The reasons a component was placed on delay of repair;
 - (4) The date of successful repair of the component; and
 - (5) The information on the instrumentation or method used to resurvey the component after repair, if it was not completed during the monitoring survey in which the fugitive emissions were discovered.

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

The owner or operator may request, in writing, an extension of the LDAR inspection interval from the Air Program Manager of the appropriate DEP Regional Office.

009 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

In the required annual report, the records of each monitoring survey conducted during the reporting period shall be included.

010 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The emissions from fugitive emissions components during the reporting period must be included in the emissions inventory report.

**SECTION D. Source Level Plan Approval Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 011 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

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.

012 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The detection devices must be operated and maintained in accordance with manufacturer-recommended procedures, as required by the test method, or a Department-approved method.

013 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Any leak detected from a fugitive emission component shall be repaired by the owner or operator of the facility as expeditiously as practicable. A first attempt at repair must be attempted within 5 calendar days of detection, and repair must be completed no later than 15 calendar days after the leak is detected unless:

- (A) The owner or operator must purchase parts, in which case the repair must be completed no later than 10 calendar days after the receipt of the purchased parts; or
- (B) The repair or replacement is technically infeasible, would require a vent blowdown, a compressor station, processing plant or transmission station shutdown, or would be unsafe to repair during operation of the unit, in which case the repair or replacement must be completed during the next scheduled compressor station, processing plant or transmission station shutdown, after a planned vent blowdown or within 2 years, whichever is earlier.

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

The Department determined that the VOC and methane emissions remaining after the implementation of BAT requirements, including LDAR, are of minor significance with regard to causing air pollution, and will not, on their own, be preventing or interfering with the attainment or maintenance of an ambient air quality standard.

015 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

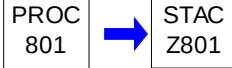
A leak is defined as: Any positive indication, whether audible, visual, or odorous, determined during an AVO inspection.

**SECTION D. Source Level Plan Approval 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 plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: G001 PA 65-00979B

Group Description: New Caterpillar Model G3516B Engines authorized by PA-65-00979B (CE-11, CE-12, CE-13)

Sources included in this group

ID	Name
114	1380 BHP, CAT G3516B COMPRESSOR ENG (CE-11), SN N6E00559
115	1380 BHP, CAT G3516B (CE-12), SN N6E00561
116	1380 BHP, CATERPILLAR G3516B CE-13 ENG, SN N6E00560

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Emissions from each Caterpillar Model G3516B compressor engine shall be limited to the following:

At rated bhp and speed:

- a. NO_x – 0.50 g/bhp-hr
- b. CO – 0.25 g/bhp-hr
- c. NMNEHC – 0.25 g/bhp-hr
- d. Formaldehyde– 0.05 g/bhp-hr

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: G002 PA 65-00979B

Group Description: All New Engines authorized by PA-65-00979B (CE-11, CE-12, CE-13, CE-14)

Sources included in this group

ID	Name
114	1380 BHP, CAT G3516B COMPRESSOR ENG (CE-11), SN N6E00559
115	1380 BHP, CAT G3516B (CE-12), SN N6E00561
116	1380 BHP, CATERPILLAR G3516B CE-13 ENG, SN N6E00560
117	3450 BHP, CATERPILLAR G3612LE CE-14 ENGINE, SN BB200818

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

Visible emissions from each engine stack shall not exceed the following limitations:

- 1) Equal to or greater than 10% for a period or periods aggregating more than three minutes in any one hour.
- 2) Equal to or greater than 30% at any time.

(Compliance with this BAT limit ensures compliance with 25 Pa. Code 123.41.)

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

Pipeline quality natural gas shall be used for fuel in the engines to ensure compliance with the particulate matter emission limitation of 25 Pa. Code §127.13(c) and the sulfur oxide limitation of 25 Pa. Code §127.21.

003 [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?

Each compressor engine, approved to be installed under this plan approval, is subject to the requirements under 40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

004 [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?**

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 subpart JJJJ for their stationary SI ICE.

(Compliance with the BAT emission limitations for NO_x, CO, and VOC ensure compliance with the Subpart JJJJ Table 1 emission limits)

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?**

As an Owner/Operator of stationary SI ICE subject to the emission standards specified in §60.4233(e), you must demonstrate compliance according to one of the methods specified in paragraphs a. and b. of this condition:

- a. 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 40 CFR §60.4243(a).
- b. 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:
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

**SECTION E. Source Group Plan Approval Restrictions.**

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.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Am I subject to this subpart?**

Each compressor engine, approved to be installed under this plan approval, is subject to 40 CFR Part 63, Subpart ZZZZ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What parts of my plant does this subpart cover?**

Each compressor engine, approved to be installed under this plan approval, is a new stationary RICE located at an area source. Each of these compressor engines must meet the requirements of 40 CFR Part 63 Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart JJJJ. No further requirements apply for these engines under 40 CFR Part 63 Subpart ZZZZ.

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

The Owner/Operator shall perform formaldehyde (HCHO) emission tests upon each compressor engine according to the requirements of 25 Pa. Code Chapter 139 and 40 CFR Part 63 appendix A, Method 320.

009 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Initial emission testing is required within 180 days of startup of each compressor engine. EPA Method stack testing shall be conducted for the initial and any subsequent stack testing.

010 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The Owner/Operator shall perform NO_x, CO, and VOC (NMNEHC) emission tests upon each compressor engine at the facility according to the requirements of 25 Pa. Code Chapter 139, 40 CFR §§60.4243, and 60.4244 using 40 CFR Part 60, Appendix A-4, Methods 7E, 10, ALT-106, or approved equivalent method, respectively.

40 CFR Part 60 and Part 63 requirements are included as compressor engine conditions in this plan approval.

011 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Subsequent NO_x, CO, VOC (NMNEHC) and formaldehyde testing shall be performed on each engine every 8,760 hours or 3 years, whichever comes first. For certified engines that are operated and maintained in accordance with manufacturer's specifications, the continuous compliance performance testing requirements every 8,760 hours of operation or every three years are waived.

012 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Portable analyzer testing according to ASTM Methods D6522-00 and D6348-03, or other methods included in Table 2 to Subpart JJJJ of Part 60 are acceptable for intervening testing every 8,760 hours or 3 years.

013 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Subsequent NO_x and CO testing shall be performed within twelve (12) months of initial stack testing and annually, thereafter. Portable analyzer testing according to ASTM Method D6522-00 or other portable methods if approved by the Department and included in Table 2 to Subpart JJJJ of Part 60 are acceptable for intervening annual testing.

**SECTION E. Source Group Plan Approval Restrictions.****# 014 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

EPA Method stack testing shall be conducted for the initial stack test and at minimum once every five years from the previous EPA Method test for NO_x, CO, VOC (NMNEHC), and formaldehyde

015 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Performance testing shall be conducted as follows:

The Owner/Operator shall submit three copies of a pre-test protocol to the Department for review at least 45 days prior to the performance of any EPA reference method stack test. The Owner/Operator shall submit three copies of a one-time protocol to the Department for review for the use of a portable analyzer and may repeat portable analyzer testing without additional protocol approvals provided that the same method and equipment are used. All proposed performance test methods shall be identified in the pre-test protocol and approved by the Department prior to testing.

The Owner/Operator shall notify the Regional Air Quality Manager at least 15 days prior to any performance test so that an observer may be present at the time of the test. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.

Pursuant to 40 CFR Part 60.8(a), a complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program.

Pursuant to 25 Pa. Code Section 139.53(b) 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 non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:

- A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
- Permit number(s) and condition(s) which are the basis for the evaluation.
- Summary of results with respect to each applicable permit condition.
- Statement of compliance or non-compliance with each applicable permit condition.

Pursuant to 25 Pa. Code § 139.3 all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

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

Pursuant to 25 Pa. Code Section 139.53(a)(1) and 139.53(a)(3) all submittals, besides notifications, shall be accomplished through PSIMS*Online available through <https://www.depgreenport.state.pa.us/ecommm/Login.jsp> when it becomes available. If internet submittal cannot be accomplished, three copies of the submittal shall be sent to the Pennsylvania Department of Environmental Protection, Bureau of Air Quality, Division of Source Testing and Monitoring, 400 Market Street, 12th Floor Rachael Carson State Office Building, Harrisburg, PA 17105-8468 with deadlines verified through document postmarks.

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.

016 [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)

**SECTION E. Source Group Plan Approval Restrictions.**

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 NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 1 of this section:

$$ER = (Cd \cdot 1.912 \cdot 10^{-3} \cdot Q \cdot T) / (HP\text{-}hr) \text{ (Eq. 1)}$$

Where:

ER = Emission rate of NO_x in g/HP-hr

Cd = Measured NO_x concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NO_x to grams per standard cubic meter at 20 degrees Celsius.

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:

$$ER = (Cd \cdot 1.164 \cdot 10^{-3} \cdot Q \cdot T) / (HP\text{-}hr) \text{ (Eq. 2)}$$

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:

$$ER = (Cd \cdot 1.833 \cdot 10^{-3} \cdot Q \cdot T) / (HP\text{-}hr) \text{ (Eq. 3)}$$

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.

**SECTION E. Source Group Plan Approval Restrictions.**

$$RF_i = CM_i/CA_i \text{ (Eq. 4)}$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

CM_i = Measured concentration of compound i in ppmv as carbon.

CA_i = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i * C_{imeas} \text{ (Eq. 5)}$$

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.

$$C_{peq} = 0.6098 * C_{icorr} \text{ (Eq. 6)}$$

Where:

C_{peq} = Concentration of compound i in mg of propane equivalent per DSCM.

III. MONITORING REQUIREMENTS.**# 017 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall conduct periodic monitoring every 2,500 hours of operation unless prior written Department approval specifies otherwise.

IV. RECORDKEEPING REQUIREMENTS.**# 018 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall maintain the following comprehensive and accurate records:

- The make, model, serial number and manufacturer's engine certificate or vendor guarantees of each engine.
- The number of hours of operation per month that each engine operated.
- The amount of fuel used per month by each engine.
- Emission calculations for each engine.
- Records including a description of testing methods, results, all engine operating data collected during tests, and a copy of the calculations performed to determine compliance with emission standards for each internal combustion engine.
- Copies of the report that demonstrates that the engines were operating at rated bhp and speed conditions during performance testing.
- Copies of the manufacturer's maintenance instructions and recommended maintenance schedule for each engine and catalyst.
- Records of any maintenance conducted on each engine and catalyst.
- Records of catalyst inlet temperature readings performed once each month on each engine operated during the month.
- Records of facility-wide inspections including the date, time, name, and title of the observer, along with any corrective action taken as a result.

019 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

For each reciprocating compressor, the owner or operator shall maintain records in accordance with 40 CFR § 60.5420a. as applicable.

020 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The emissions calculation for each reciprocating compressor must be kept in accordance with 25 Pa. Code § 135.5.

021 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

All records required must be maintained onsite for a minimum of 5 years and may be maintained in electronic format.

**SECTION E. Source Group Plan Approval Restrictions.****# 022 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The owner or operator of the facility shall generate and maintain records that clearly demonstrate to the Department that the facility is not a Title V facility and that the facility is in compliance with facility-wide emission limitations. At a minimum, the records shall be maintained on a monthly basis, and the actual emissions shall be calculated on a 12-month rolling sum. The Department reserves the right to request additional information necessary to determine compliance with the Plan Approval.

023 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The owner or operator of the facility shall keep records of all written notifications required under permit conditions.

V. REPORTING REQUIREMENTS.**# 024 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/operator shall provide EPA with the notifications required by 40 CFR § 60.7. Required notifications may include but are not necessarily limited to: date of commencement of construction (within 30 days after starting construction), actual start-up date (within 15 days after equipment start-up), physical or operational changes (60 days or as soon as practicable before equipment start-up), and opacity observations (within 30 days).

025 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

In the required annual report, the information about each reciprocating compressor operated during the reporting period shall be submitted in accordance with 40 CFR §60.5420a(b)(4), as applicable.

026 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The emissions from each reciprocating compressor operating during the reporting period must be included in the emissions inventory report including the emissions from scheduled and unscheduled blowdowns.

027 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]**Subpart A - General Provisions
Address.**

The facility is subject New Source Performance Standards from 40 CFR Part 60 Subpart JJJJ and 40 CFR Part 63 Subpart ZZZZ. In accordance with 40 CFR §§ 60.4 and 63.10, copies of all requests, reports, applications, submittals, and other communications shall be submitted to the Department at the addressee listed below and unless otherwise noted to the U.S. EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) accessible at <https://cdx.epa.gov> unless electronic reporting is not available, in which case a copy shall be sent to the following address:

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

PADEP
Air Quality Program
400 Waterfront Drive
Pittsburgh, PA 15222-4745

028 [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.

**SECTION E. Source Group Plan Approval Restrictions.**

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. N/A
- 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.

VI. WORK PRACTICE REQUIREMENTS.**# 029 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall limit the engine's time spent at idle during startup or shutdown to a period appropriate for the operation of the engine and air pollution control equipment consistent with good air pollution control practices, not to exceed 30 minutes, during which time the emissions standards do not apply.

030 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The Owner/Operator shall install, operate, and maintain a non-resettable hour meter on each engine.

031 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The Owner/Operator shall perform maintenance on the oxidation catalyst or engine as necessary to meet CO and formaldehyde (HCHO) limits.

032 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The owner or operator of a reciprocating compressor must meet the applicable requirements of 40 CFR § 60.5385a. as follows:

You must reduce GHG (in the form of a limitation on emissions of methane) and VOC emissions by complying 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, or you must comply with paragraph (a)(3) of this section.

(1) On or 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 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.

(3) Collect the methane and VOC emissions from the rod packing using a rod packing emissions collection system that operates under negative pressure and route the rod packing emissions to a process through a closed vent system that meets the requirements of §60.5411a(a) and (d).

**SECTION E. Source Group Plan Approval Restrictions.**

- (b) You must demonstrate initial compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5410a(c).
- (c) You must demonstrate continuous compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5415a(c).
- (d) You must perform the reporting as required by §60.5420a(b)(1) and (4) and the recordkeeping as required by §60.5420a(c)(3), (6) through (9), and (17), as applicable

**# 033 [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.

VII. ADDITIONAL REQUIREMENTS.

**# 034 [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?**

All terms used in 40 CFR Part 60 Subpart JJJJ shall have the meaning given in 40 CFR §60.4248 or else in the Clean Air Act and 40 CFR Part 60 Subpart A.

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: G003 GP-5 65-00979E

Group Description: Engines Authorized by GP-5 65-00979E (2011 version)

Sources included in this group

ID	Name
104	1380 BHP, CAT G3516B, COMP ENG 4(CE-04), SN JEF01375
105	1380 BHP, CAT G3516B, COMPRESSOR ENG 5(CE-05), SN JEF01373

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Engines that commenced construction prior to January 1, 1990, shall comply with all requirements of the above-referenced Plan Approval except Condition 13.b.

b. Engines that commenced construction after January 1, 1990, but before March 10, 1997, and that have NO_x emissions that do not exceed twenty (20) tons per year per engine, shall comply with all requirements of the above-referenced Plan Approval except Condition 13.b.

c. Engines that commenced construction after January 1, 1990, but before March 10, 1997, and that have NO_x emissions over twenty (20) tons per year per engine, shall comply with all requirements of the above-referenced Plan Approval, including Condition 13.b.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Internal combustion engines for which construction commenced after March 10, 1997, and which have rated capacity equal to or greater than 100 bhp but no greater than 1500 bhp.

These internal combustion engines shall be equipped and operated with air cleaning devices that reduce emissions to levels equal to or less than:

i. NO_x at rated bhp and operating at rated speed -two grams per bhp-hour (gms/bhp-hr);

ii. VOC at rated bhp and operating at rated speed - two gms/bhp-hr;

iii. CO at rated bhp and operating at rated speed - two gms/bhp-hr; and,

iv. At operating conditions less than rated capacity, internal combustion engines shall, on a pounds-per-hour basis, emit no more than they emit at rated bhp and rated speed.

v. Visible emissions in excess of the following limitations:

A. Equal to or greater than 10% for a period or periods aggregating more than 3 minutes in any one hour.

B. Equal to or greater than 30% at any time.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The above-referenced General Permit cannot be used to vacate or supersede best available technology or other emission limitations or requirements established through the air quality permitting process.

**SECTION E. Source Group Plan Approval Restrictions.****II. TESTING REQUIREMENTS.****# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

a. The Department shall require verification of NO_x emissions from the facility if the NO_x emissions are estimated to be equal to or greater than ninety (90) tons per year. The verification may include: vendor guarantees, performance testing in accordance with applicable provisions of 25 Pa. Code Chapter 139 (relating to sampling and testing), portable analyzers, recent on-site test data on similar engines, or any other means approved by the Department.

b. When a new internal combustion engine is installed in accordance with Conditions 2 and 13.b., compliance with the emission limitation shall be demonstrated to the satisfaction of the Department. The demonstration may include: vendor guarantees, performance testing in accordance with applicable provisions of 25 Pa. Code Chapter 139, results from portable analyzers, recent on-site test data on similar engines, or any other means approved by the Department.

i. For a new internal combustion engine installed in accordance with Conditions 2 and 13.b. and that has a rated capacity equal to or less than 500 bhp, vendor guarantees shall be sufficient to fulfill this requirement. However, when the NO_x emissions from the facility are estimated to be equal to or greater than ninety (90) tons per year, the Department reserves the right to require an additional verification of emission rates, which may include source testing.

ii. For a new internal combustion engine installed in accordance with Conditions 2 and 13.b. and that has a rated capacity greater than 500 bhp, but no greater than 1500 bhp, the permittee shall perform stack testing in accordance with 25 Pa. Code Chapter 139, within one hundred eighty (180) days after the start up of the above referenced engines. A Department-approved portable analyzer may be used in lieu of initial stack testing. The submittal of the initial testing will be extended to one year, should the permittee elect to demonstrate compliance, in lieu of testing, through an alternate means. Alternate means may include parametric monitoring of engine parameters to confirm that engine emissions are within the emission limitations.

In addition to the stack testing required by this condition, within twelve (12) months after the initial stack testing, and annually thereafter, the permittee shall perform NO_x emissions tests upon each of the respective engines as stated in Condition 13.b. herein using a portable analyzer approved by the Department. The Department may alter the frequency of annual portable analyzer tests based on the results. The Department may also waive all or parts of this requirement if the permittee demonstrates compliance, in lieu of testing, through alternate means satisfactory to the Department. The Department reserves the right to require stack tests in accordance with EPA reference methods should the data from the portable analyzer warrant. The purpose of this testing is to demonstrate compliance with the emission limitations required for new engines.

iii. If, at any time, the Department has cause to believe that air contaminant emissions from the facility covered by the above-referenced Plan Approval are in excess of the limitations specified in, or established pursuant to, any applicable regulation contained in 25 Pa. Code, Subpart C, Article III, the Department shall require the permittee to conduct tests deemed necessary to demonstrate compliance. The permittee shall perform such testing in accordance with the applicable provisions of 25 Pa. Code Chapter 139 (relating to sampling and testing) and in accordance with any restrictions or limitations established by the Department at the time the permittee is notified, in writing, of the testing requirement. 17. Monitoring, Recordkeeping and Reporting

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

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

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

i. The number of hours per calendar year that each engine or piece of equipment operated.

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



SECTION E. Source Group Plan Approval Restrictions.

- b. When a new internal combustion engine is installed in accordance with Conditions 2 and 13.b. and is required to conduct a performance test, the permittee shall maintain records or report the following:
- i. Records including a description of testing methods, results, all engine operating data collected during the tests, and a copy of the calculations performed to determine compliance with emission standards.
 - ii. Copies of the report that demonstrates that the engines were operating at rated bhp and rated speed conditions during performance testing.
 - iii. Submittal of reports in accordance with the requirements and schedules outlined under the Testing Requirement of this group (formerly Condition 16.a. of the General Permit GP-5, 3/17/2011).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The emission limitations stated under restrictions in this Group (formerly Conditions 13.a.i, 13.b., and 13.c. of the GP-5, 3/17/2011) shall apply at all times except during periods of start-up and shut-down, provided, however, that the duration of start-up and shut-down do not exceed one hour per occurrence.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: G004 GP-5 65-00979E

Group Description: Dehydration Units Authorized by GP-5 65-00979E (2011 version)

Sources included in this group

ID	Name
201	HEATERS/REBOILERS
401	TEG DEHYDRATOR 150 MMSCF
402	TEG DEHYDRATOR 35 MMSCF

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

i. Visible emissions in excess of the limitations specified in 25 Pa. Code §123.41 (relating to limitations) as follows:

A. Equal to or greater than 20% for a period or periods aggregating more than 3 minutes in any one hour.

B. Equal to or greater than 60% at any time.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Glycol dehydrators for which construction commenced after March 10, 1997, and which have a total uncontrolled potential emission rate of VOC in excess of ten tons per year.

A Glycol Dehydrator is exempt from the requirements of this condition if it can be shown using GRI-GLYCalc TM computer software, or an alternative method as approved by the Department that total uncontrolled potential emission rate of VOC emissions from the unit is equal to or less than 10 (ten) tons per year and the unit can be operated without creating malodors as prescribed in Condition 13.c.v.

i. The VOC emissions from the dehydrator still vent stream shall be controlled by at least 85% either with a condenser, a flare or other air cleaning device, or any alternative methods as approved by the Department. This control efficiency requirement must be demonstrated to the satisfaction of the Department.

ii. A Glycol Dehydrator using a condenser as an air cleaning device shall daily achieve an average final exhaust temperature of less than 110 degrees Fahrenheit (110°F).

iii. A Glycol Dehydrator using a flare as an air cleaning device shall ensure destruction of VOC emissions to the flare stack by maintaining the heat content of the flare gas above 300 BTU/scf, and by documenting daily visual observations of the continuous presence of a flame.

iv. Visible emissions from a Glycol Dehydrator using a flare shall not exceed the following limitations:

A. Equal to or greater than 10% for a period or periods aggregating more than 3 minutes in any one hour.

B. Equal to or greater than 30% at any time.

v. A Glycol Dehydrator shall not emit malodorous air contaminants in such a manner that the malodors are detectable outside the facility property.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION E. Source Group Plan Approval Restrictions.****III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

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

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

- i. The number of hours per calendar year that each engine or piece of equipment operated.
- ii. The amount of fuel used per calendar year in each engine or piece of equipment.

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

When a new dehydrator is installed in accordance with Conditions 2 and 13.c., the permittee shall maintain the following:

- i. A record of the results of any testing conducted to determine compliance with Condition 13.c.
- ii. If a Glycol Dehydrator using a condenser as an air cleaning device is installed, a record of final exhaust temperature and time observed shall be recorded twice per week on different days during daylight hours.
- iii. If a Glycol Dehydrator using a flare as an air cleaning device is installed, a record of daily visual observations of the continuous presence of a flame shall be recorded.
- iv. The date of any maintenance and repair of the required air cleaning device and duration of uncontrolled emissions during such activities.
- d. For a Glycol unit for which exemptions from Conditions 2 and 13.c. are being claimed, the permittee shall maintain the following records:
 - i. VOC emissions using GRI-GLYCalc™ computer software or an alternative method as approved by the Department.
 - ii. A record of actual throughput per day and the glycol circulation rate. These records shall be retained for a minimum of two years and shall be made available to the Department upon request. The Department reserves the right to expand the list contained in this condition as it may reasonably prescribe pursuant to the provisions of Section 4 of the Pennsylvania Air Pollution Control Act (35 P. S. §§ 4004), and as it may deem necessary to determine compliance with any condition contained herein.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this Plan Approval facility.

**SECTION G. Emission Restriction Summary.**

No emission restrictions listed in this section of the permit.

**SECTION H. Miscellaneous.**

Air contaminated sources and air cleaning devices authorized under this Plan Approval PA-65-00979B are as follows:

CE-01: Caterpillar G3512LE 810 bhp, Compressor Engine; Controlled by Miratech Ox Cat.
CE-04: Caterpillar G3516B 1,380 bhp Compressor Engine; Controlled by DCL America Ox Cat.
CE-05: Caterpillar G3516B 1,380 bhp Compressor Engine; Controlled by DCL America Ox Cat.
CE-09: Caterpillar G3612LE A3 3,550 bhp Comp. Engine; Controlled by Emit Technology Ox Cat.
CE-11: Caterpillar G3516B 1,380 bhp Compressor Engine; Controlled by DCL America Ox Cat. or equivalent.
CE-12: Caterpillar G3516B 1,380 bhp Compressor Engine; Controlled by DCL America Ox Cat. or equivalent.
CE-13: Caterpillar G3516B 1,380 bhp Compressor Engine; Controlled by DCL America Ox Cat. or equivalent.
CE-14: Caterpillar G3612LE A4 3,750 bhp Comp. Engine; Controlled by DCL America Ox Cat. or equivalent.
EG-01: Emergency Diesel Gen. Cummins QSB7 314 bhp; Controlled by limiting hour of operation to 500 hours/year.

DHY-01: TEG Dehydrator 01 rated at 35.0 MMSCFD; Controlled by a Combustor rated at 4.0 MMBtu/hr
BLR-01: TEG Reboiler 01 rated at 0.50 MMBTU/hr
COMB-01: Combustor rated at 4.0 MMBTU/hr

DHY-02: TEG Dehydrator 02 rated at 150.0 MMBTU/hr; Controlled by a combustor rated at 6.18 MMBtu/hr
BLR-02: TEG Reboiler 02 rated at 2.67 MMBTU/hr

DHY-03: TEG Dehydrator 03 rated at 200.0 MMBTU/hr; Controlled by a combustor rated at 6.18 MMBtu/hr
BLR-03: TEG Reboiler 03 rated at 1.71 MMBTU/hr
COMB-02: Combustor 02 rated at 6.18 MMBTU/hr

TKS-01: Storage Tank 1, 150 bbl, Produced Water; uncontrolled
TKS-02: Storage Tank 2, 150 bbl, Produced Water: uncontrolled
TKS-03: Storage Tank 3, 476 bbl, Produced Water; uncontrolled
TLO: Truck Load Out; uncontrolled

PIG: Pigging Operations

CRP: Compressor Rod Packing: Work practice of routine replacement of compressor rod packing per 40 CFR Part 60 Subpart OOOOa.

SSM: Startup/Shutdown/Maintenance

PNE: Pneumatic Devices;

ECC: Engine Crankcase;

FUG: Site Component Fugitive Emissions; Monthly AVO inspections and quarterly LDAR Program.

The following sources are removed:

Source ID - CE-06 Caterpillar G3516B 1,380 bhp Comp. Engine
Source ID - CE-07 Caterpillar G3516B 1,380 bhp Comp. Engine
Source ID - CE-08 Caterpillar G3516B 1,380 bhp Comp. Engine
Source ID - CE-10 Caterpillar G3612LE 3,550 bhp Comp. Engine



***** End of Report *****
