

DRAFT PERMIT

CLASS II AIR QUALITY PERMIT

DRAFT PERMIT No. 103029

PERMITTEE:	El Paso Natural Gas Company, LLC
FACILITY:	Haystack Compressor Station
PLACE ID:	240503
DATE ISSUED:	Date Pending
EXPIRY DATE:	Date Pending

SUMMARY

This Class II air quality permit is issued to El Paso Natural Gas Company, LLC, the Permittee, for the construction and operation of the Haystack Compressor Station. The facility will be located in Chino Valley, AZ in Yavapai at coordinates 34°47'46.71"N, 112°22'16.04"W.

The uncontrolled emissions of carbon monoxide (CO) from this facility are greater than the major source thresholds in Arizona Administrate Code (A.A.C.) R18-2-101(75). However, the Permittee is required to install an oxidation catalyst device to reduce emissions below major source thresholds. Therefore, a Class II synthetic minor permit is required for this facility in accordance with A.A.C. R18-2-302.B.2.a.

This permit is issued in accordance with Arizona Revised Statutes (ARS) 49-426. It contains requirements from Title 18, Chapter 2 of the A.A.C. and Title 40 of the Code of Federal Regulations. All definitions, terms, and conditions used in this permit conform to those in the Arizona Administrative Code R18-2-101 et. seq. (A.A.C.) and Title 40 of the Code of Federal Regulations (CFR), except as otherwise defined in this permit.

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ATTACHMENT "A": GENERAL PROVISIONS

I. PERMIT EXPIRATION AND RENEWAL

- A. This permit is valid for a period of five (5) years from the date of issuance. [A.R.S. 40 CFR 49-426.F, A.A.C. R18-2-306.A.1]
- **B.** The Permittee shall submit an application for renewal of this permit at least six (6) months, but not more than eighteen (18) months, prior to the date of permit expiration.

[A.A.C. R18-2-304.D.2]

II. COMPLIANCE WITH PERMIT CONDITIONS

A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona Revised Statutes (A.R.S.) Title 49, Chapter 3, and the air quality rules under Title 18, Chapter 2 of the Arizona Administrative Code. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.

[A.A.C. R18-2-306.A.8.a]

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

[A.A.C. R18-2-306.A.8.b]

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE

A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[A.A.C. R18-2-306.A.8.c]

- **B.** The permit shall be reopened and revised under any of the following circumstances:
 - 1. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; and

[A.A.C. R18-2-321.A.1.c]

2. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

[A.A.C. R18-2-321.A.1.d]

C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening



shall be made as expeditiously as practicable. Permit reopenings shall not result in a resetting of the five-year permit term.

[A.A.C. R18-2-321.A.2]

IV. POSTING OF PERMIT

1.

A. The Permittee shall post this permit or a certificate of permit issuance on location where the equipment is installed in such a manner as to be clearly visible and accessible. All equipment covered by this permit shall be clearly marked with one of the following: [A.A.C. R18-2-315.A]

L .

[A.A.C. R18-2-315.A.1]

2. Serial number or other equipment ID number that is also listed in the permit to identify that piece of equipment.

[A.A.C. R18-2-315.A.2]

[A.A.C. R18-2-315.B]

B. A copy of the complete permit shall be kept on site.

Current permit number; or

V. FEE PAYMENT

The Permittee shall pay fees to the Director pursuant to A.R.S. 40 CFR 49-426(E) and A.A.C. R18-2-326.

[A.A.C. R18-2-306.A.9 and -326]

VI. EMISSIONS INVENTORY QUESTIONNAIRE

A. The Permittee shall complete and submit to the Director an emissions inventory questionnaire no later than June 1 every three years beginning June 1, 2021. At the Director's request, the Permittee may be required to complete and submit emissions inventory questionnaires in addition to the triennial emissions inventory questionnaire. The Director shall notify the Permittee in writing of the decision to require additional emissions inventory questionnaires.

[A.A.C. R18-2-327.A.1.b]

B. The emissions inventory questionnaire shall be on an electronic or paper form provided by the Director and shall include the information required by A.A.C. R18-2-327.A.3 for the previous calendar year.

[A.A.C. R18-2-327.A.3]

C. The Permittee shall submit to the Director an amendment to an emissions inventory questionnaire, containing the documentation required by A.A.C. R18-2-327.A.3, whenever the Permittee discovers or receives notice, within two years of the original submittal, that incorrect or insufficient information was submitted to the Director by a previous emissions inventory questionnaire. The amendment shall be submitted to the Director within 30 days of discovery or receipt of notice. If the incorrect or insufficient information resulted in an incorrect annual emissions fee, the Director shall require that additional payment be made or shall apply an amount as a credit to a future annual emissions fee. The submittal of an amendment shall not subject the Permittee to an enforcement action or a civil or criminal



penalty if the original submittal of incorrect or insufficient information was not due to willful neglect.

[A.A.C. R18-2-327.A.4]

VII. COMPLIANCE CERTIFICATION

A. The Permittee shall submit a compliance certification to the Director annually which describes the compliance status of the source with respect to each permit condition. The certification shall be submitted no later than February 15th, and shall report the compliance status of the source during the period between January 1st and December 31st of the previous year.

[A.A.C. R18-2-309.2.a]

- **B.** The compliance certifications shall include the following:
 - 1. Identification of each term or condition of the permit that is the basis of the certification;

[A.A.C. R18-2-309.2.c.i]

- 2. Identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period; [A.A.C. R18-2-309.2c.ii]
- 3. Status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certifications shall identify each deviation (including any deviations reported pursuant to Condition XII.B of this Attachment) during the period covered by the certification and take it into account for consideration in the compliance certification

[A.A.C. R18-2-309.2.c.iii]

4. Other facts the Director may require in determining the compliance status of the source.

[A.A.C. R18-2-309.2.c.iv]

C. A progress report on all outstanding compliance schedules shall be submitted every six months beginning six months after permit issuance.

[A.A.C. R18-2-309.5.d]

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

Any document required to be submitted by this permit, including reports, shall contain 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.

[A.A.C. R18-2-309.3]

IX. INSPECTION AND ENTRY

Upon presentation of proper credentials, the Permittee shall allow the Director or the authorized representative of the Director to:



- A. Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit; [A.A.C. R18-2-309.4.a]
- **B.** Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

[A.A.C. R18-2-309.4.b]

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

[A.A.C. R18-2-309.4.c]

D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

[A.A.C. R18-2-309.4.d]

E. Record any inspection by use of written, electronic, magnetic and photographic media. [A.A.C. R18-2-309.4.e]

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

If this source becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

[A.A.C. R18-2-304.D.3]

XI. ACCIDENTAL RELEASE PROGRAM

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the time line specified in 40 CFR Part 68.

[40 CFR Part 68]

XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting

[A.A.C. R18-2-310.01.A, B, and C]

- 1. Excess emissions shall be reported as follows:
 - a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:

[A.A.C. R18-2-310.01.A]

(1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XII.A.1.b below.

[A.A.C. R18-2-310.01.A.1]



(2) Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XII.A.1.a(1) above.

[A.A.C. R18-2-310.01.A.2]

b. The report shall contain the following information:

(1) Identity of each stack or other emission point where the excess emissions occurred;

[A.A.C. R18-2-310.01.B.1]

(2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;

[A.A.C. R18-2-310.01.B.2]

- (3) Time and duration, or expected duration, of the excess emissions; [A.A.C. R18-2-310.01.B.3]
- (4) Identity of the equipment from which the excess emissions emanated;

[A.A.C. R18-2-310.01.B.4]

(5) Nature and cause of the emissions;

[A.A.C. R18-2-310.01.B.5]

(6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;

[A.A.C. R18-2-310.01.B.6]

(7) Steps that were or are being taken to limit the excess emissions; and

[A.A.C. R18-2-310.01.B.7]

(8) If the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures governing source operation during periods of startup or malfunction.

[A.A.C. R18-2-310.01.B.8]

- 2. In the case of continuous or recurring excess emissions, the notification requirements shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XII.A.1 above. [A.A.C. R18-2-310.01.C]
- **B.** Permit Deviations Reporting



The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the applicable requirement contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or timeframe shall govern. Where the applicable requirement does not address the timeframe for reporting deviations, the Permittee shall submit reports of deviations according to the following schedule:

1. Notice that complies with Condition XII.A above is prompt for deviations that constitute excess emissions;

[A.A.C. R18-2-306.A.5.b.i]

2. Notice that is submitted within two working days of discovery of the deviation is prompt for deviations of permit conditions identified by Condition I.B.1 of Attachment "B";

[A.A.C. R18-2-306.A.5.b.ii]

3. Except as provided in Conditions XII.B.1 and 2, prompt notification of all other types of deviations shall be annually, concurrent with the annual compliance certifications required in Section VII, and can be submitted via myDEQ, the Arizona Department of Environmental Quality's online portal.

[A.A.C. R18-2-306.A.5.b.ii]

- **C.** Emergency Provision
 - 1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[A.A.C. R18-2-306.E.1]

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if Condition XII.C.3 below is met.

[A.A.C. R18-2-306.E.2]

3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

[A.A.C. R18-2-306.E.3]

a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;

[A.A.C. R18-2-306.E.3.a]

b. The permitted facility was being properly operated at the time of the emergency;

[A.A.C. R18-2-306.E.3.b]



c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

[A.A.C. R18-2-306.E.3.c]

d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

[A.A.C. R18-2-306.E.3.d]

4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

[A.A.C. R18-2-306.E.4]

5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[A.A.C. R18-2-306.E.5]

- **D.** Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown
 - 1. Applicability

A.A.C. R18-2-310 establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

- a. Promulgated pursuant to Sections 111 or 112 of the Act; [A.A.C. R18-2-310.A.1] [State Enforceable Only]
- b. Promulgated pursuant to Titles IV or VI of the Clean Air Act; [A.A.C. R18-2-310.A.2] [State Enforceable Only]

c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA; [A.A.C. R18-2-310.A.3]

[State Enforceable Only]

d. Contained in A.A.C. R18-2-715.F; or

[A.A.C. R18-2-310.A.4] [State Enforceable Only]

- e. Included in a permit to meet the requirements of A.A.C. R18-2-406.A.5. [A.A.C. R18-2-310.A.5] [State Enforceable Only]
- 2. Affirmative Defense for Malfunctions



Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. When emissions in excess of an applicable emission limitation are due to a malfunction, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

[A.A.C. R18-2-310.B] [State Enforceable Only]

a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the Permittee;

> [A.A.C. R18-2-310.B.1] [State Enforceable Only]

b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

[A.A.C. R18-2-310.B.2] [State Enforceable Only]

c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the Permittee satisfactorily demonstrated that the measures were impracticable;

> [A.A.C. R18-2-310.B.3] [State Enforceable Only]

d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

[A.A.C. R18-2-310.B.4] [State Enforceable Only]

e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

[A.A.C. R18-2-310.B.5] [State Enforceable Only]

f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

[A.A.C. R18-2-310.B.6] [State Enforceable Only]

g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;

[A.A.C. R18-2-310.B.7]



[State Enforceable Only]

h. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;

[A.A.C. R18-2-310.B.8] [State Enforceable Only]

i. All emissions monitoring systems were kept in operation if at all practicable; and

[A.A.C. R18-2-310.B.9] [State Enforceable Only]

j. The Permittee's actions in response to the excess emissions were documented by contemporaneous records.

[A.A.C. R18-2-310.B.10] [State Enforceable Only]

3. Affirmative Defense for Startup and Shutdown

a. Except as provided in Condition XII.D.3 below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

> [A.A.C. R18-2-310.C.1] [State Enforceable Only]

(1) The excess emissions could not have been prevented through careful and prudent planning and design;

[A.A.C. R18-2-310.C.1.a] [State Enforceable Only]

(2) If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;

[A.A.C. R18-2-310.C.1.b] [State Enforceable Only]

(3) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

[A.A.C. R18-2-310.C.1.c] [State Enforceable Only]



(4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

[A.A.C. R18-2-310.C.1.d] [State Enforceable Only]

(5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

[A.A.C. R18-2-310.C.1.e] [State Enforceable Only]

(6) During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;

> [A.A.C. R18-2-310.C.1.f] [State Enforceable Only]

(7) All emissions monitoring systems were kept in operation if at all practicable; and

[A.A.C. R18-2-310.C.1.g] [State Enforceable Only]

(8) Contemporaneous records documented the Permittee's actions in response to the excess emissions.

[A.A.C. R18-2-310.C.1.h] [State Enforceable Only]

b. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to Condition XII.D.2 above.

[A.A.C. R18-2-310.C.2] [State Enforceable Only]

4. Affirmative Defense for Malfunctions During Scheduled Maintenance

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to Condition XII.D.2 above.

[A.A.C. R18-2-310.D] [State Enforceable Only]

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XII.D.2 or XII.D.3, the Permittee shall demonstrate, through submission of the data and information required by this Condition XII.D and Condition XII.A.1 above, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of the excess emissions.

[A.A.C. R18-2-310.E] [State Enforceable Only]



XIII. RECORDKEEPING REQUIREMENTS

- **A.** The Permittee shall keep records of all required monitoring information including, but not limited to, the following:
 - 1. The date, place as defined in the permit, and time of sampling or measurements; [A.A.C. R18-2-306.A.4.a.i] 2. The date(s) any analyses were performed; [A.A.C. R18-2-306.A.4.a.ii] 3. The name of the company or entity that performed the analyses; [A.A.C. R18-2-306.A.4.a.iii] A description of the analytical techniques or methods used; 4. [A.A.C. R18-2-306.A.4.a.iv] 5. The results of analyses; and [A.A.C. R18-2-306.A.4.a.v] The operating conditions as existing at the time of sampling or measurement. 6. [A.A.C. R18-2-306.A.4.a.vi]
- **B.** The Permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[A.A.C. R18-2-306.A.4.b]

XIV. DUTY TO PROVIDE INFORMATION

A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.

[A.A.C. R18-2-304.G and -306.A.8.e]

B. If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

[A.A.C. R18-2-304.H]

XV. PERMIT AMENDMENT OR REVISION

The Permittee shall apply for a permit amendment or revision for changes to the facility which does not qualify for a facility change without revision under Section XVII below, as follows:



А.	Facility Changes that Require a Permit Revision;	[A.A.C. R18-2-317.01]
B.	Administrative Permit Amendment;	[A.A.C. R18-2-318]
C.	Minor Permit Revision; and	[A.A.C. R18-2-319]
D.	Significant Permit Revision.	[A.A.C. R18-2-320]

The applicability and requirements for such action are defined in the above referenced regulations.

XVI. FACILITY CHANGE WITHOUT A PERMIT REVISION

A. Except for a physical change or change in the method of operation at a Class II source requiring a permit revision under A.A.C. R18-2-317.01, or a change subject to logging or notice requirements in Condition XVI.B, a change at a Class II source shall not be subject to revision, notice, or logging requirements under this Section.

[A.A.C. R18-2-317.02.A]

B. The following changes may be made if the source keeps on site records of the changes according to Condition XVI.H below:

[A.A.C. R18-2-317.02.B]

- 1. Implementing an alternative operating scenario, including raw materials changes; [A.A.C. R18-2-317.02.B.1]
- 2. Changing process equipment, operating procedures, or making any other physical change if the permit requires the change to be logged;

[A.A.C. R18-2-317.02.B.2]

3. Engaging in any new insignificant activity listed in A.A.C. R18-2-101.68 but not listed in the permit;

[A.A.C. R18-2-317.02.B.3]

- 4. Replacing an item of air pollution control equipment listed in the permit with an identical (same model, different serial number) item. The Director may require verification of efficiency of the new equipment by performance tests; and [A.A.C. R18-2-317.02.B.4]
- 5. A change that results in a decrease in actual emissions if the source wants to claim credit for the decrease in determining whether the source has a net emissions increase for any purpose. The logged information shall include a description of the change that will produce the decrease in actual emissions. A decrease that has not been logged is creditable only if the decrease is quantifiable, enforceable, and otherwise qualifies as a creditable decrease.

A.A.C. R18-2-317.02.B.5]

C. The following changes may be made if the source provides written notice to the Department in advance of the change as provided below:



[A.A.C. R18-2-317.02.C]

1. Replacing an item of air pollution control equipment listed in the permit with one that is not identical but that is substantially similar and has the same or better pollutant removal efficiency: seven days. The Director may require verification of efficiency of the new equipment by performance tests;

[A.A.C. R18-2-317.02.C.1]

2. A physical change or change in the method of operation that increases actual emissions more than 10% of the major source threshold for any conventional pollutant but does not require a permit revision: seven days;

[A.A.C. R18-2-317.02.C.2]

3. Replacing an item of air pollution control equipment listed in the permit with one that is not substantially similar but that has the same or better efficiency: 30 days. The Director may require verification of efficiency of the new equipment by performance tests;

[A.A.C. R18-2-317.02.C.3]

4. A change that would trigger an applicable requirement that already exists in the permit: 30 days unless otherwise required by the applicable requirement;

[A.Â.C. R18-2-317.02.C.4]

5. A change that amounts to reconstruction of the source or an affected facility: seven days. For purposes of this subsection, reconstruction of a source or an affected facility shall be presumed if the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new source or affected facility and the changes to the components have occurred over the 12 consecutive months beginning with commencement of construction; and

[A.A.C. R18-2-317.02.C.5]

- 6. A change that will result in the emissions of a new regulated air pollutant above an applicable regulatory threshold but that does not trigger a new applicable requirement for that source category: 30 days. For purposes of this requirement, an applicable regulatory threshold for a conventional air pollutant shall be 10% of the applicable major source threshold for that pollutant.
- **D.** For each change under Condition XVI.C, the written notice shall be by certified mail or hand delivery and shall be received by the Director the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change as possible. The written notice shall include:

		[A.A.C. R18-2-31/.02.D]
1.	When the proposed change will occur,	[A.A.C. R18-2-317.02.D.1]
2.	A description of the change,	[A.A.C. R18-2-317.02.D.2]



Any change in emissions of regulated air pollutants, and 3.

[A.A.C. R18-2-317.02.D.3]

- 4. Any permit term or condition that is no longer applicable as a result of the change. [A.A.C. R18-2-317.02.D.4]
- E. The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section, other than implementation of an alternate operating scenario under Condition XVI.B.1.

[A.A.C. R18-2-317.02.F]

F. Notwithstanding any other part of this Section, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the Permittee under this Section over the term of the permit, constitutes a change under subsection A.A.C. R18-2-317.01.A.

[A.A.C. R18-2-317.02.G]

G. A copy of all logs required under Condition XVI.B shall be filed with the Director within 30 days after each anniversary of the permit issuance date. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.

[A.A.C. R18-2-317.02.I]

H. Logging Requirements

[Arizona Administrative Code, Appendix 3]

- 1. Each log entry required by a change under Condition XVI.B shall include at least the following information:
 - A description of the change, including: a.
 - A description of any process change; (1)
 - (2)A description of any equipment change, including both old and new equipment descriptions, model numbers, and serial numbers, or any other unique equipment ID number; and
 - (3) A description of any process material change.
 - b. The date and time that the change occurred.
 - The provisions of Condition XVI.B that authorizes the change to be made c. with logging.
 - d. The date the entry was made and the first and last name of the person making the entry.
- 2. Logs shall be kept for five (5) years from the date created. Logging shall be performed in indelible ink in a bound log book with sequentially number pages, or in any other form, including electronic format, approved by the Director.

XVII. TESTING REQUIREMENTS



A. The Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.

[A.A.C. R18-2-312.A]

B. Operational Conditions during Performance Testing

Performance tests shall be conducted under such conditions as the Director shall specify to the plant operator based on representative performance of the source. The Permittee shall make available to the Director such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard. [A.A.C. R18-2-312.C]

C. Performance Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.

[A.A.C. R18-2-312.B]

D. Test Plan

At least 14 working days prior to performing a test, the Permittee shall submit a test plan to the Director, which must include the following, in addition to all other applicable requirements, as identified in the Arizona Testing Manual:

[A.A.C. R18-2-312.B]

- 1. Test duration;
- 2. Test location(s);
- 3. Test method(s); and
- 4. Source operation and other parameters that may affect test results.
- **E.** Stack Sampling Facilities

The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

[A.A.C. R18-2-312.E]

- 1. Sampling ports adequate for test methods applicable to the facility;
- 2. Safe sampling platform(s);
- 3. Safe access to sampling platform(s); and
- 4. Utilities for sampling and testing equipment.
- **F.** Interpretation of Final Results



Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control, compliance may, upon the Director's approval, be determined using the arithmetic mean of the results of the other two runs. If the Director or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes: forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation, which demonstrates good cause, must be submitted.

[A.A.C. R18-2-312.F]

G. Report of Final Test Results

A written report of the results of performance tests conducted pursuant to 40 CFR 60 or 40 CFR 63, shall be submitted to the Director within 60 days after the test is performed. A written report of the results of all other performance tests shall be submitted within 4 weeks after the test is performed, or as otherwise provided in the Arizona Testing Manual. All performance testing reports shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

[A.A.C. R18-2-312.A and B]

H. Extension of Performance Test Deadline

For performance testing required under Condition XVII.A above, the Permittee may request an extension to a performance test deadline due to a force majeure event as follows: [A.A.C. R18-2-312.J]

1. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Director in writing as soon as practicable following the date the Permittee first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline. The notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall be given as soon as practicable.

[A.A.C. R18-2-312.J.1]

2. The Permittee shall provide to the Director a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the Permittee proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure event occurs.



[A.A.C. R18-2-312.J.2]

3. The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Director. The Director shall notify the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable.

[A.A.C. R18-2-312.J.3]

4. Until an extension of the performance test deadline has been approved by the Director under Conditions XVII.H.1, 2, and 3 above, the Permittee remains subject to the requirements of Section XVII.

[A.A.C. R18-2-312.J.4]

5. For purposes of this Section XVII, a "force majeure event" means an event that will be or has been caused by circumstances beyond the control of the Permittee, its contractors, or any entity controlled by the Permittee that prevents it from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the Permittee's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the Permittee.

[A.A.C. R18-2-312.J.5]

XVIII. PROPERTY RIGHTS

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

[A.A.C. R18-2-306.A.8.d]

XIX. SEVERABILITY CLAUSE

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

[A.A.C. R18-2-306.A.7]

XX. PERMIT SHIELD

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements identified in the portions of this permit subtitled "Permit Shield". The permit shield shall not apply to minor revisions pursuant to Condition XV.C of this Attachment and any facility changes without a permit revision pursuant to Section XVI of this Attachment.

[A.A.C. R18-2-317.F, - 320, and -325]

XXI. PROTECTION OF STRATOSPHERIC OZONE

If this source becomes subject to the provisions of 40 CFR Part 82, then the Permittee shall comply with these provisions accordingly.

[40 CFR Part 82]

XXII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS



For all equipment subject to a New Source Performance Standard or a National Emission Standard for Hazardous Air Pollutants, the Permittee shall comply with all applicable requirements contained in Subpart A of Title 40, Chapter 60 and Chapter 63 of the Code of Federal Regulation.

[40 CFR Part 60 Subpart A and Part 63 Subpart A]



ATTACHMENT "B": SPECIFIC CONDITIONS

I. FACILITY-WIDE REQUIREMENTS

- A. Opacity
 - 1. Instantaneous Surveys and Six-Minute Observations
 - a. Instantaneous Surveys

Any instantaneous survey required by this permit shall be determined by either option listed in Conditions I.A.1.a(1) and (2):

[A.A.C. R18-2-311.B]

- (1) Alternative Method ALT-082 (Digital Camera Operating Technique)
 - (a) The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.
 - (b) The results of all instantaneous surveys and six-minute observations shall be obtained within two (2) hours.
- (2) EPA Reference Method 9 Certified Observer.

[A.A.C. R18-2-306.A.3.c]

b. Six-Minute Observations

Any six-minute observation required by this permit shall be determined by either option listed in Conditions I.A.1.b(1) and (2):

[A.A.C. R18-2-311.B]

- (1) Alternative Method ALT-082 (Digital Camera Operating Technique)
 - (a) The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.
 - (b) The results of all instantaneous surveys and six-minute observations shall be obtained within two (2) hours.
- (2) EPA Reference Method 9.
- c. The Permittee shall have on site or on call a person certified in EPA Reference Method 9 unless all six-minute Method 9 observations required by this permit are conducted as a six-minute Alternative Method ALT-082 (Digital Camera Operating Technique) and all instantaneous visual surveys required by this permit are conducted as an instantaneous ALT-082 camera survey. Any six-minute Method 9 observation required by this permit can be conducted as a six-minute Alternative Method ALT-082 and



any instantaneous visual survey required by this permit can be conducted as an instantaneous ALT-082 camera survey.

[A.A.C. R18-2-306.A.3.c]

2. Monitoring, Recordkeeping, and Reporting Requirements

[A.A.C. R18-2-306.A.3.c]

- a. At the frequency specified in the following sections of this permit, the Permittee shall conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources.
- b. If the visible emissions on an instantaneous basis appears less than or equal to the applicable opacity standard, then the Permittee shall keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.
- c. If the visible emissions on an instantaneous basis appears greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the visible emissions.
 - (1) If the six-minute observation of the visible emissions is less than or equal to the applicable opacity standard, then the Permittee shall record the name of the observer, the date on which the sixminute observation was made, and the results of the six-minute observation.
 - (2) If the six-minute observation of the visible emissions is greater than the applicable opacity standard, then the Permittee shall do the following:
 - (a) Adjust or repair the controls or equipment to reduce opacity to less than or equal to the opacity standard;
 - (b) Record the name of the observer, the date on which the six-minute observation was made, the results of the six-minute observation, and all corrective action taken; and
 - (c) Report the event as an excess emission for opacity in accordance with Condition XII.A of Attachment "A".
 - (d) Conduct another six-minute observation to document the effectiveness of the adjustments or repairs completed.
- **B.** Recordkeeping and Reporting Requirements
 - 1. Deviations from the following Attachment "B" permit conditions shall be promptly reported in accordance with Condition XII.B.2 above of Attachment "A":

[A.A.C. R18-2-306.A.5.b]



- a. II.C of Attachment "B";
- 2. The Permittee shall submit reports of all monitoring activities required in Attachment "B" along with the compliance certifications required by Section VII of Attachment "A."

[A.A.C. R18-2-306.A.5.a]

II. COMPRESSOR ENGINE REQUIREMENTS

A. Applicability

This Section applies to the compressor engine listed in Attachment "C."

- **B.** Emission Standards
 - 1. The Permittee shall operate and maintain the compressor engine that achieves the emission standards as required by 40 CFR 60 Subpart JJJJ over the entire life of the engine.

[40 CFR 60.4234]

2. The Permittee shall comply with the emission standards listed in Table 1 of 40 CFR 60 Subpart JJJJ for the compressor engine.

[40 CFR 60.4233(e)]

3. <u>The Permittee shall not allow the emissions of CO from the compressor engine to</u> exceed 12 lb/hr.

[A.A.C. R18-2-306.01.A and -331.A.3.a] [Material permit conditions are indicated by underline and italics]

C. Air Pollution Control Requirements

<u>At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate an oxidation catalyst to minimize CO emissions from the compressor engine and comply with the applicable emission limitations and standards of Condition II.B.3 above.</u>

[A.A.C. R 18-2-306.01.A and -331.A.3.e] [Material permit conditions are indicated by underline and italics]

- **D.** Compliance Requirements
 - 1. The Permittee shall keep records of conducted maintenance to demonstrate compliance and also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply. If the Permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the compressor engine will not be considered out of compliance.

[40 CFR 60.4243(a)(1)]

2. The Permittee shall demonstrate compliance with II.B.2 by purchasing an engine certified according to procedures specified in Condition II.D.1.

[40 CFR 60.4243(b)]



E. Notification, Reporting, and Recordkeeping Requirements

The Permittee shall meet the following recordkeeping requirements:

[40 CFR 60.4245(a)]

- 1. Records of all notifications submitted to comply with this Section and all documentation supporting any notification.
- 2. Maintenance conducted on the engine.
- 3. 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.
- **F.** Monitoring Requirements

<u>The Permittee shall calibrate, operate and maintain a portable CO analyzer for</u> periodic stack testing in accordance with ASTM D6522, incorporated by reference in 40 CFR 60.17.

[A.A.C. R18-2-306.A.3.c and 331.A.3.c] [Material Permit condition indicated by underline and italics]

- **G.** Performance Testing Requirements
 - 1. The Permittee shall conduct an initial performance test on the compressor engine for CO emissions within 60 days of achieving the capability to operate at its maximum capacity, but no later than 180 days after initial start-up to demonstrate compliance with the emission limit in Condition II.B.3 above. The Permittee shall use EPA Reference Method 10 for determining CO emissions for the initial performance test.

[A.A.C. R18-2-306.A.3.c and -312]

2. The Permittee shall conduct subsequent performance test on the compressor engine for CO emissions between 11 and 13 months from the previous performance test to demonstrate compliance with the emission limit in Condition II.B.3 above. The Permittee shall use the portable analyzer in Condition II.F above for determining CO emissions for subsequent performance tests.

[A.A.C. R18-2-306.A.3.c and -312]

3. If the CO emission result from any periodic stack test with the portable analyzer or a performance test conducted in accordance with Condition II.G.1 or 2 above exceeds the emission limit in Condition II.B.3 above, the Permittee shall conduct a performance test using EPA Reference Method 10 for determining CO emissions within 60 days.

[A.A.C. R18-2-312]

H. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR $60.4234 \ 60.4233(e), \ 60.4243(a)(1), \ 60.4243(b), \ and \ 60.4245(a).$

[A.A.C. R18-2-325]



III. NSPS SUBPART OOOOb REQUIREMENTS

- **A.** Super Emitter Events
 - 1. Applicability

Subsection III.A applies to any emissions event of the facility that is detected using remote detection methods and has quantified emission rate of 100 kg/hr of methane or greater.

[40 CFR 60.5371b]

- 2. Investigation Requirements
 - a. Within 5 calendar days of receiving a notification from the EPA of a superemitter event, the Permittee shall initiate a super-emitter event investigation. The investigation must be conducted and completed within 15 days of receiving the notification from the EPA. The Permittee shall maintain records of its super-emitter event investigations and report the findings from the investigation according to the requirements of Condition III.A.3.a below.

[40 CFR 60.5371b(d)]

b. If the facility is not within 50 meters from the latitude and longitude provided in the notification, report this result to the EPA under Condition III.A.3.a below. The super-emitter event investigation is deemed complete.

[40 CFR 60.5371b(d)(1)]

- c. If the facility is within 50 meters from the latitude and longitude provided in the notification, the Permittee shall investigate to determine the source of super-emitter event. The investigation may include but is not limited to the actions specified below in Conditions III.A.2.c(1) through (5) below: [40 CFR 60.5371b(d)(2)]
 - (1) Review any maintenance activities or process activities from the affected facilities subject to regulation under this subpart, starting from the date of detection of the super-emitter event as identified in the notification, until the date of investigation, to determine if the activities indicate any potential source(s) of the super-emitter event emissions.

[40 CFR 60.5371b(d)(2)(i)]

(2) Review all monitoring data from control devices from the affected facilities subject to regulation under this subpart from the initial date of detection of the super-emitter event as identified in the notification until the date of receiving the notification from the EPA. Identify any malfunctions of control devices or periods when the control devices were not in compliance with applicable requirements and that indicate a potential source of the super-emitter event emissions.

[40 CFR 60.5371b(d)(2)(iI)]



(3) If the Permittee conducted a fugitive emissions survey or periodic screening event in accordance with Conditions III.D.2 through 4 below or 40 CFR 60.5398b(b) between the initial date of detection of the super-emitter event as identified in the notification and the date the notification from the EPA was received, review the results of the survey to identify any potential source(s) of the super-emitter event emissions.

[40 CFR 60.5371b(d)(2)(iii)]

(4) If the Permittee conducts continuous monitoring with advanced methane detection technology in accordance with 40 CFR 60.5398b(c), review the monitoring data collected on or after the initial date of detection of the super-emitter event as identified in the notification, until the date of receiving the notification from the EPA.

[40 CFR 60.5371b(d)(2)(iv)]

(5) Screen the entire oil and natural gas facility with OGI, Method 21 of appendix A-7 to this part, or an alternative test method(s) approved per 40 CFR 60.5398b(d), to determine if a super-emitter event is present.

[40 CFR 60.5371b(d)(2)(v)]

d. If the source of the super-emitter event was found to be from fugitive emission components at a well site, centralized production facility, or compressor station subject to this subpart, the Permittee shall comply with the repair requirements under Conditions III.D.2 through 4 below and the associated recordkeeping and reporting requirements under Conditions III.D.6.b and III.D.7.b below.

[40 CFR 60.5371b(d)(3)]

3. Reporting Requirements

a. The Permittee shall submit the results of the super-emitter event investigation conducted under Condition III.A.2.a to the EPA in accordance with Condition III.A.3.b below. If the super-emitter event (i.e., emission at 100 kg/hr of methane or more) is ongoing at the time of the initial report, submit the additional information in accordance with Condition III.A.3.c. The Permittee shall attest to the information included in the report as specified in Condition III.A.3.d below.

[40 CFR 60.5371b(e)]

b. Within 15 days of receiving a notification from the EPA, the Permittee shall submit a report of the super-emitter event investigation conducted under Condition III.A.2 through the Super-Emitter Program Portal. The Permittee shall include the applicable information in Conditions III.A.3.b(1) through (8) below in the report. If the Permittee identified a demonstrable error in the notification, the report may include a statement of the demonstrable error.

[40 CFR 60.5371b(e)(1)]



- (1) Notification Report ID of the super-emitter event notification. [40 CFR 60.5371b(e)(1)(i)]
- (2) Identification of whether the Permittee is an oil and natural gas facility within 50 meters from the latitude and longitude provided in the EPA notification. If the Permittee does not own or operate an oil and natural gas facility within 50 meters from the latitude and longitude provided in the EPA notification, the Permittee is not required to report the information in Conditions III.A.3.b(3) through (8).

[40 CFR 60.5371b(e)(1)(ii)]

- (3) General identification information for the facility, including, facility name, the physical address, applicable ID Number (*e.g.*, EPA ID Number, API Well ID Number), the Permittee or responsible official (where applicable) and their email address. [40 CFR 60.5371b(e)(1)(iii)]
- (4) Identification of whether there is an affected facility or associated equipment subject to regulation under this subpart at this oil and natural gas facility.

[40 CFR 60.5371b(e)(1)(iv)]

(5) Indication of whether the Permittee was able to identify the source of the super-emitter event. If the Permittee indicates they were unable to identify the source of the super-emitter event, the Permittee shall certify that all applicable investigations specified in Conditions III.A.2.c(1) through (5) have been conducted for all affected facilities and associated equipment subject to this subpart that are at this oil and natural gas facility, and the Permittee has determined that the affected facilities and associated equipment are not the source of the super-emitter event. If the Permittee indicates that the Permittee was not able to identify the source of the super-emitter event, the Permittee is not required to report the information in Conditions III.A.3.b(6) through (8).

[40 CFR 60.5371b(e)(1)(v)]

(6) The source(s) of the super-emitter event.

[40 CFR 60.5371b(e)(1)(vi)]

(7) Identification of whether the source of the super-emitter event is equipment subject to regulation under this subpart. If the source of the super-emitter event is equipment subject to regulation under this subpart, identify the applicable regulation(s) under this subpart.

[40 CFR 60.5371b(e)(1)(vii)]

(8) Indication of whether the super-emitter event is ongoing at the time of the initial report submittal (*i.e.*, emissions at 100 kg/hr of methane or more).

[40 CFR 60.5371b(e)(1)(vii)]



- (a) If the super-emitter event is not ongoing at the time of the initial report submittal, provide the actual (or if unknown) estimated date and time the super-emitter event ended. [40 CFR 60.5371b(e)(1)(viii)(A)]
- (b) If the super-emitter event is ongoing at the time of the initial report submittal, provide a short narrative of the plan to end the super-emitter event, including the targeted end date for the efforts to be completed and the super-emitter event ended.

[40 CFR 60.5371b(e)(1)(viii)(B)]

- c. If the super-emitter event is ongoing at the time of the initial report submittal, within 5 business days of the date the super-emitter event ends, the Permittee shall update the initial report through the Super-Emitter Program Portal to provide the end date and time of the super-emitter event. [40 CFR 60.5371b(e)(2)]
- d. The Permittee shall sign the following attestation when submitting data into the Super-Emitter Program Portal: "I certify that the information provided in this report regarding the specified super-emitter event was prepared under my direction or supervision. I further certify that the investigations were conducted, and this report was prepared pursuant to the requirements of 40 CFR 60.5371b(d) and (e). Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that knowingly false statements may be punishable by fine or imprisonment."

[40 CFR 60.5371b(e)(3)]

4. Permit Shield

Compliance with the conditions of this subsection shall be deemed compliance with 40 CFR 60.5371b, 60.5371b(d), 60.5371b(d)(1), 60.5371b(d)(2), 60.5371b(d)(2)(iI), 60.5371b(d)(2)(iii), 60.5371b(d)(2)(iv), 60.5371b(d)(2)(i), 60.5371b(d)(2)(v), 60.5371b(d)(3), 60.5371b(e), 60.5371b(e)(1), 60.5371b(e)(1)(i), 60.5371b(e)(1)(ii), 60.5371b(e)(1)(iii), 60.5371b(e)(1)(iv), 60.5371b(e)(1)(v), 60.5371b(e)(1)(vi), 60.5371b(e)(1)(vii), 60.5371b(e)(1)(viii)(B), 60.5371b(e)(1)(viii)(A), 60.5371b(e)(2), and 60.5371b(e)(3).

- **B.** Reciprocating Compressor Requirements
 - 1. Applicability

Subsection III.B applies the reciprocating compressor listed in Attachment "C".

2. Emission Standards



The Permittee shall not exceed 2 scfm per individual cylinder for the volumetric flow rate of each cylinder, measured in accordance with Condition III.B.3.d or e below. If the individual cylinders are manifolded to a single open-ended vent line, the volumetric flow rate must not exceed the sum of the individual cylinders multiplied by 2 scfm. The Permittee shall conduct measurements of the volumetric flow rate in accordance with the schedule specified Conditions III.B.3.a and b below. If the volumetric flow rate exceeds 2 scfm per cylinder, the rod packing or packings must be repaired or replaced as provided in Condition III.B.3.c below.

[40 CFR 60.5385b(a)]

- 3. Monitoring Requirements
 - The Permittee shall conduct the first volumetric flow rate measurements a. from the reciprocating compressor rod packing vent on or before 8,760 hours of operation, after startup.

[40 CFR 60.5385b(a)(1)]

b. The Permittee shall conduct subsequent volumetric flow rate measurements from the reciprocating compressor rod packing vent on or before 8,760 hours of operation after the previous measurement which demonstrates compliance with the applicable volumetric flow rate of 2 scfm per cylinder (or a combined volumetric flow rate greater than the number of compression cylinders multiplied by 2 scfm), or on or before 8,760 hours of operation after last rod packing replacement, whichever date is later.

[40 CFR 60.5385b(a)(2)]

The Permittee shall repair or replace the rod packing within 90 calendar c. days after the date of the volumetric emissions measurement that exceeded 2 scfm per cylinder. The Permittee shall conduct follow-up volumetric flow rate measurements from compressor vents using the methods specified in Condition III.B.3.d below within 15 days after the repair (or rod packing replacement) to document that the rate has been reduced to less than 2 scfm per cylinder. Delay of repair will be allowed if the conditions in Condition III.B.3.c(1) or (2) below are met.

[40 CFR 60.5385b(a)(3)]

(1)If the repair (or rod packing replacement) is technically infeasible, would require a vent blowdown, a compressor station shutdown, or would be unsafe to repair during operation of the unit, the repair (or rod packing replacement) must be completed during the next scheduled compressor station shutdown for maintenance, after a scheduled vent blowdown, or within 2 years of the date of the volumetric emissions measurement that exceeds the applicable required flow rate per cylinder, whichever is earliest. A vent blowdown is the opening of one or more blowdown valves to depressurize major production and processing equipment, other than a storage vessel.

[40 CFR 60.5385b(a)(3)(i)]



(2) If the repair requires replacement of the rod packing or a part, but the replacement cannot be acquired and installed within the repair timelines specified under this section due to the condition specified in Condition III.B.3.c(2)(a) below, the repair must be completed in accordance with Condition III.B.3.c(2)(b) below and documented in accordance with Conditions III.B.9.b(8) through (10).

[40 CFR 60.5385b(a)(3)(ii)]

- (a) Rod packing or part supplies had been sufficiently stocked but are depleted at the time of the required repair. [40 CFR 60.5385b(a)(3)(ii)(A)]
- (b) The required rod packing or part replacement must be ordered no later than 10 calendar days after the reciprocating compressor is added to the delay of repair list due to parts unavailability. The repair must be completed as soon as practicable, but no later than 30 calendar days after receipt of the replacement rod packing or part, unless the repair requires a compressor station shutdown. If the repair requires a compressor station shutdown, the repair must be completed in accordance with the timeframe specified in Condition III.B.3.c(1) above.

[40 CFR 60.5385b(a)(3)(ii)(B)]

d. The Permittee shall determine the volumetric flow rate per cylinder from the reciprocating compressor as specified in Condition III.B.3.d(1) or (2) below.

[40 CFR 60.5385b(b)]

(1) For reciprocating compressor rod packing equipped with an openended vent line on compressors in operating or standby pressurized mode, determine the volumetric flow rate of the rod packing using one of the methods specified in Conditions III.B.3.d(1)(a) through (c) below.

[40 CFR 60.5385b(b)(1)]

(a) Determine the volumetric flow rate at standard conditions from the open-ended vent line using a high-volume sampler according to methods set forth in Condition III.B.7.c below.

[40 CFR 60.5385b(b)(1)(i)]

(b) Determine the volumetric flow rate at standard conditions from the open-ended vent line using a temporary or permanent meter, according to methods set forth in Condition III.B.7.b below.

[40 CFR 60.5385b(b)(1)(ii)]



(c) Any of the methods set forth in Condition III.B.7.a below to screen for leaks and emissions. Emissions are detected whenever a leak is detected according to any of the methods in Condition III.B.7.a below. If emissions are detected using the methods set forth in Condition III.B.7.a below, then the Permittee shall use one of the methods specified in Condition III.B.3.d(1)(a) and (b) to determine the volumetric flow rate per cylinder. If emissions are not detected using the methods in Condition III.B.7.a below, then the Permittee may assume that the volumetric flow rate is zero.

[40 CFR 60.5385b(b)(1)(iii)]

(2) For reciprocating compressor rod packing not equipped with an open-ended vent line on compressors in operating or standby pressurized mode, the Permittee shall determine the volumetric flow rate of the rod packing using the methods specified in Conditions III.B.3.d(2)(a) and (b) below.

[40 CFR 60.5385b(b)(2)]

(a) The Permittee shall use the methods described in Condition III.B.7.a below to conduct leak detection of emissions from the rod packing case into an open distance piece, or, for compressors with a closed distance piece, the Permittee shall conduct annual leak detection of emissions from the rod packing vent, distance piece vent, compressor crank case breather cap, or other vent emitting gas from the rod packing.

[40 CFR 60.5385b(b)(2)(i)]

(b) The Permittee shall measure emissions found in Condition III.B.3.d(1)(a) above using a meter or highvolume sampler according to methods set forth in Condition III.B.7.b or c below.

[40 CFR 60.5385b(b)(2)(ii)]

e. For conducting measurements on manifolded groups of reciprocating compressor affected facilities, the Permittee shall determine the volumetric flow rate from reciprocating compressor rod packing vent as specified in Conditions III.B.3.e(1) and (2) below.

[40 CFR 60.5385b(c)]

(1) Measure at a single point in the manifold downstream of all compressor vent inputs and, if practical, prior to comingling with other non-compressor emission sources.

[40 CFR 60.5385b(c)(1)]

(2) Determine the volumetric flow rate per cylinder at standard conditions from the common stack using one of the methods specified in Conditions III.B.3.e(2)(a) through (d) below.

[40 CFR 60.5385b(c)(2)]



- (a) A temporary or permanent flow meter according to the methods set forth in in Condition III.B.7.b below. [40 CFR 60.5385b(c)(2)(i)]
- (b) A high-volume sampler according to methods set forth Condition III.B.7.c below.

[40 CFR 60.5385b(c)(2)(ii)]

(c) An alternative method, as set forth in Condition III.B.7.d below.

[40 CFR 60.5385b(c)(2)(iii)]

(d) Any of the methods set forth in Condition III.B.7.a below to screen for emissions. Emissions are detected whenever a leak is detected when using any of the methods in Condition III.B.7.a below. If emissions are detected using the methods set forth in Condition III.B.7.a below, then the Permittee shall use one of the methods specified in Conditions III.B.3.e(2)(a) through (c) to determine the volumetric flow rate per cylinder. If emissions are not detected using the methods in Condition III.B.7.a below, then the Permittee may assume that the volumetric flow rate is zero.

[40 CFR 60.5385b(c)(2)(iv)]

4. Alternative Standards

As an alternative to complying with the GHG and VOC standards in Conditions III.B.2 and III.B.3.a through III.B.3.e, the Permittee can meet the requirements specified in Condition III.B.4.a or b below:

[40 CFR 60.5385b(d)]

a. Collect the methane and VOC emissions from the reciprocating compressor rod packing using a rod packing emissions collection system that is operated to route the rod packing emissions to a process. In order to comply with this option, the Permittee shall equip the reciprocating compressor with a cover that meets the requirements of Condition III.E.3 below. The cover must be connected through a closed vent system that meets the requirements of Conditions III.E.2 and 4 below.

[40 CFR 60.5385b(d)(1)]

b. As an alternative to conducting the required volumetric flow rate measurements under Condition III.B.2 above, the Permittee can choose to comply by replacing the rod packing on or before 8,760 hours of operation after initial startup, on or before 8,760 hours of operation after the previous flow rate measurement, or on or before 8,760 hours of operation after the date of the most recent compressor rod packing replacement, whichever date is later.

[40 CFR 60.5385b(d)(3)]

5. Initial Compliance Requirements



To demonstrate initial compliance with the GHG and VOC standards the reciprocating compressor as required by Condition III.B.2 above, the Permittee shall comply with Condition III.B.5.a through d below.

[40 CFR 60.5385b(e) and 40 CFR 60.5410b(e)]

a. If the Permittee complies with Condition III.B.2 above by maintaining volumetric flow rate at or below 2 scfm per cylinder (or a combined cylinder volumetric flow rate greater than the number of compression cylinders multiplied by 2 scfm) as required by Condition III.B.2 above, the Permittee shall maintain volumetric flow rate at or below 2 scfm and the Permittee shall conduct the initial annual volumetric flow rate measurement as required by Condition III.B.3.a above.

[40 CFR 60.5410b(e)(1)]

b. If the Permittee complies with Condition III.B.2 above by collecting the methane and VOC emissions from the reciprocating compressor rod packing using a rod packing emissions collection system as required Condition III.B.4.a, the Permittee shall equip the reciprocating compressor with a cover that meets the requirements of Condition III.E.3 below, route emissions to a process through a closed vent system that meets the requirements of Conditions III.E.2 and 4 below, and the Permittee shall conduct the initial inspections required in Conditions III.E.7.a and b below.

[40 CFR 60.5410b(e)(2)]

c. The Permittee shall submit the initial annual report for the reciprocating compressor as required Condition III.B.8 below as applicable. [40 CFR 60.5410b(e)(6)]

d. The Permittee shall maintain the records as specified in Condition III.B.9 below as applicable

[40 CFR 60.5410b(e)(7)]

6. Continuous Compliance Requirements

For each reciprocating compressor affected facility complying with Conditions III.B.2 above and III.B.3.d and e above, the Permittee shall demonstrate continuous compliance according to Conditions III.B.6.a, e, and f below. For each reciprocating compressor affected facility complying with Condition III.B.4.a, the Permittee shall demonstrate continuous compliance according to Conditions III.B.6.b, e, and f below. For each reciprocating compressor affected facility complying with Conditions III.B.6.b, e, and f below. For each reciprocating compressor affected facility complying with Conditions III.B.6.b, e, and f below. For each reciprocating compressor affected facility complying with Condition III.B.4.b above, the Permittee shall demonstrate continuous compliance according to Condition III.B.6.c through f below.

[40 CFR 60.5385b(f) and 40 CFR 60.5415b(g)]

a. The Permittee shall maintain the volumetric flow rate at or below 2 scfm per cylinder (or at or below the combined volumetric flow rate determined by multiplying the number of cylinders by 2 scfm), and the Permittee shall conduct the required volumetric flow rate measurement of the reciprocating compressor rod packing vents in accordance with Condition



above on or before 8,760 hours of operation after the last volumetric flow rate measurement which demonstrated compliance with the applicable volumetric flow rate.

[40 CFR 60.5415b(g)(1)]

b. The Permittee shall operate the rod packing emissions collection system to route emissions to a control device or to a process through a closed vent system and continuously comply with the cover and closed vent requirements of Condition III.E.5 below.

[40 CFR 60.5415b(g)(2)]

c. The Permittee shall continuously monitor the number of hours of operation for each reciprocating compressor affected facility since initial startup, since May 7, 2024, since the previous flow rate measurement, or since the date of the most recent reciprocating compressor rod packing replacement, whichever date is latest.

[40 CFR 60.5415b(g)(3)]

- d. The Permittee shall replace the reciprocating compressor rod packing on or before the total number of hours of operation reaches 8,760 hours. [40 CFR 60.5415b(g)(4)]
- e. The Permittee shall submit the annual reports as required in Condition III.B.8 below as applicable.

[40 CFR 60.5415b(g)(5)]

f. The Permittee shall maintain records as required in Condition III.B.9 below as applicable.

[40 CFR 60.5415b(g)(6)]

7. Testing Requirements

a. The Permittee shall use one of the methods described in Condition III.B.7.a(1) and (2) to screen for emissions or leaks from the reciprocating compressor rod packing when complying with Condition III.B.3.d(1)(c) above.

[40 CFR 60.5386b(a)]

(1) The Permittee shall use an OGI instrument to screen for emissions from reciprocating rod packing in accordance with the elements of Condition III.D.2.b(7) below. Any visible emissions observed by the OGI instrument from reciprocating rod packing vent is a leak.

[40 CFR 60.5386b(a)(1)]

(2) Use Method 21 in appendix A-7 of 40 CFR 60 according to 40 CFR 60.5403b(b)(1) and (2). For the purposes of this section, an instrument reading of 500 parts per million by volume (ppmv) above background or greater is a leak.

[40 CFR 60.5386b(a)(2)]



b. The Permittee shall determine natural gas volumetric flow rate using a rate meter which meets the requirement in Method 2D in appendix A-1 of 40 CFR 60. Rate meters must be calibrated on an annual basis according to the requirements in Method 2D.

[40 CFR 60.5386b(b)]

c. The Permittee shall use a high-volume sampler to measure emissions of the reciprocating compressor rod packing in accordance with Conditions III.B.7.c(1) through (7) below.

[40 CFR 60.5386b(c)]

(1) The Permittee shall use a high-volume sampler designed to capture the entirety of the emissions from the applicable vent and measure the entire range of methane concentrations being emitted as well as the total volumetric flow at standard conditions. The Permittee shall develop a standard operating procedure for this device and document these procedures in the appropriate monitoring plan. In order to get reliable results, persons using this device should be knowledgeable in its operation and the requirements in this section.

[40 CFR 60.5386b(c)(1)]

(2) This procedure may involve hazardous materials, operations, and equipment. This procedure may not address all of the safety problems associated with its use. It is the responsibility of the user of this procedure to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to performing this procedure.

[40 CFR 60.5386b(c)(2)]

(3) The high-volume sampler must include a methane gas sensor(s) which meets the requirements in Conditions III.B.7.c(3)(a) through (c) below.

[40 CFR 60.5386b(c)(3)]

(a) The methane sensor(s) must be selective to methane with minimal interference, less than 2.5 percent for the sum of responses to other compounds in the gas matrix. The Permittee shall document the minimal interference though empirical testing or through data provided by the manufacturer of the sensor.

[40 CFR 60.5386b(c)(3)(i)]

- (b) The methane sensor(s) must have a measurement range over the entire expected range of concentrations. [40 CFR 60.5386b(c)(3)(ii)]
- (c) The methane sensor(s) must be capable of taking a measurement once every second, and the data system must be capable of recording these results for each sensor at all times during operation of the sampler.


[40 CFR 60.5386b(c)(3)(iii)]

(4) The high-volume sampler must be designed such that it is capable of sampling sufficient volume in order to capture all emissions from the applicable vent. The high-volume sampler must include a flow measurement sensor(s) which meets the requirements of Conditions III.B.7.c(4)(a) and (b) below.

[40 CFR 60.5386b(c)(4)]

- (a) The flow measurement sensor must have a measurement range over the entire expected range of flow rates sampled. If needed multiple sensors may be used to capture the entire range of expected flow rates. [40 CFR 60.5386b(c)(4)(i)]
- (b) The flow measurement sensor(s) must be capable of taking a measurement once every second, and the data system must be capable of recording these results for each sensor at all times during operation of the sampler.

[40 CFR 60.5386b(c)(4)(ii)]

(5) The Permittee shall calibrate the methane sensor(s) according to the procedures in Conditions III.B.7.c(5)(a)(i) and (ii) below, and flow measurement sensors must be calibrated according to the procedures in Condition III.B.7.c(5)(b).

[40 CFR 60.5386b(c)(5)]

For Methane Sensor Calibration: (a)

[40 CFR 60.5386b(c)(5)(i)]

(i) Initially and on a semi-annual basis, determine the linearity at four points through the measurement range for each methane sensor using methane gaseous calibration cylinder standards. At each point, the difference between the cylinder value and the sensor reading must be less than 5 percent of the respective calibration gas value. If the sensor does not meet this requirement, perform corrective action on the sensor, and do not use the sampler until these criteria can be met.

[40 CFR 60.5386b(c)(5)(i)(A)]

Prior to and at the end of each testing day, (ii) challenge each sensor at two points, a low point, and a mid-point, using methane gaseous calibration cylinder standards. At each point, the difference between the cylinder value and the sensor reading must be less than 5 percent of the respective calibration gas value. If the sensor does not meet this requirement, perform



corrective action on the sensor and do not use the sampler again until these criteria can be met. If the post-test calibration check fails at either point, invalidate the data from all tests performed subsequent to the last passing calibration check. [40 CFR 60.5386b(c)(5)(i)(B)]

(b) Flow measurement sensors must meet the requirements in Method 2D in appendix A-1 of 40 CFR 60. Rate meters must be calibrated on an annual basis according to the requirements in Method 2D. If the flow sensor relies on ancillary temperature and pressure measurements to correct the flow rate to standard conditions, the temperature and pressure sensors must also be calibrated on an annual basis. Standard conditions are defined as 20 °C (68 °F) and 760 mm Hg (29.92 in. Hg).

[40 CFR 60.5386b(c)(5)(ii)]

(6) The Permittee shall conduct sampling of the reciprocating compressor rod packing in accordance with the procedures in Conditions III.B.7.c(6)(a) through (e) below.

[40 CFR 60.5386b(c)(6)]

(a) The instrument must be operated consistent with manufacturer recommendations; users are encouraged to develop a standard operating procedure to document the exact procedures used for sampling.

[40 CFR 60.5386b(c)(6)(i)]

(b) Identify the rod packing, vent to be measured and record the signal to noise ratio (S/N) of the engine. Collect a background methane sample in ppmv for a minimum of one minute and record the result along with the date and time.

[40 CFR 60.5386b(c)(6)(ii)]

(c) Approach the vent with the sample hose and adjust the sampler so that the Permittee is measuring at the full flow rate. Then, adjust the flow rate to ensure the measured methane concentration is within the calibrated range of the methane sensor and minimum methane concentration is at least 2 ppmv higher than the background concentration. Sample for a period of at least one minute and record the average flow rate in standard cubic feet per minute and the methane sample concentration in ppmv, along with the date and time. Standard conditions are defined as 20 °C (68 °F) and 760 mm Hg (29.92 in. Hg). [40 CFR 60.5386b(c)(6)(iii)]



(d) Calculate the leak rate according to the following equation:

[40 CFR 60.5386b(c)(6)(iv)]

$$Q = V\left(\frac{CH4_S - CH4_B}{1000000}\right)$$

Where:

 $CH4_B$ = background methane concentration, ppmv $CH4_S$ = methane sample concentration, ppmv V = Average flow rate of the sampler, scfm Q = Methane emission rate, scfm

- (e) The Permittee shall collect at least three separate oneminute measurements and determine the average leak rate. The relative percent difference of these three separate samples should be less than 10 percent. [40 CFR 60.5386b(c)(6)(v)]
- (7) If the measured natural gas flow determined as specified in Condition III.B.7.c(6) above exceeds 70.0 percent of the manufacturer's reported maximum sampling flow rate the Permittee shall either use a temporary or permanent flow meter according to Condition III.B.7.b above or use another method meeting the requirements in III.B.7.d Condition below to determine the leak or flow rate.

[40 CFR 60.5386b(c)(7)]

d. As an alternative to a high-volume sampler, the Permittee may use any other method that has been validated in accordance with the procedures specified in Method 301 in appendix A in 40 CFR part 63, subject to Administrator approval, as specified in 40 CFR 60.8(b).

[40 CFR 60.5386b(d)]

8. Reporting Requirements

a. The general information specified in Conditions III.B.8.a(1) through (4) below is required for all reports.

[40 CFR 60.5420b(b)(1) and 40 CFR 60.5385b(g)]

(1) The company name, facility site name associated with the affected facility and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.

[40 CFR 60.5420b(b)(1)(i)]

(2) An identification of each affected facility being included in the annual report.



[40 CFR 60.5420b(b)(1)(ii)]

- (3) Beginning and ending dates of the reporting period. [40 CFR 60.5420b(b)(1)(iii)]
- (4) A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. If the report is submitted via CEDRI, the certifier's electronic signature during the submission process replaces the requirement in this Condition.

[40 CFR 60.5420b(b)(1)(iv)]

b. For the reciprocating compressor, the information specified in Conditions III.B.8.b(1)and (7) below, as applicable.

[40 CFR 60.5420b(b)(6)]

(1) The cumulative number of hours of operation since initial startup or since the previous volumetric flow rate measurement, or since the previous reciprocating compressor rod packing replacement, as applicable, which have elapsed prior to conducting the volumetric flow rate measurement or emissions screening. Alternatively, a statement that emissions from the rod packing are being routed to a process or control device through a closed vent system.

[40 CFR 60.5420b(b)(6)(i)]

(2) If applicable, for each deviation that occurred during the reporting period and recorded as specified in Condition III.B.9.b(1) below, the date and time the deviation began, duration of the deviation in hours and a description of the deviation. If no deviations occurred during the reporting period, the Permittee shall include a statement that no deviations occurred during the reporting period.

[40 CFR 60.5420b(b)(6)(ii)]

- (3) A description of the method used and the results of the volumetric flow rate measurement or emissions screening, as applicable. [40 CFR 60.5420b(b)(6)(iii)]
- (4) If complying with Condition III.B.4 above, the information in Conditions III.E.6.a through d below .

[40 CFR 60.5420b(b)(6)(iv)]

(5) Number and type of rod packing replacements/repairs on delay of repair and explanation for each delay of repair.

[40 CFR 60.5420b(b)(6)(v)]

(6) Date of planned shutdown(s) that occurred during the reporting period if there are any rod packing replacements/repairs that have been placed on delay of repair.



[40 CFR 60.5420b(b)(6)(vi)]

(7) If the Permittee complies with an alternative GHG and VOC standard under 40 CFR 60.5398b, in lieu of the information specified in Conditions III.E.6.a and b below, the Permittee shall provide the information specified in 40 CFR 60.5424b.

[40 CFR 60.5420b(b)(6)(vii)]

- 9. Recordkeeping Requirements
 - a. The Permittee shall maintain the records identified as specified in 40 CFR 60.7(f) and Condition III.B.9.b below. All records required by this subpart must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by this subpart that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

[40 CFR 60.5420b(c) and 40 CFR 60.5385b(g)]

- b. For each reciprocating compressor affected facility, the Permittee shall maintain the records in Condition III.B.9.b(1) through (10) below. [40 CFR 60.5420b(c)(5)]
 - (1) For each reciprocating compressor affected facility, the Permittee shall maintain records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified Condition III.B.8 above, including a description of each deviation, the date and time each deviation began and the duration of each deviation in hours.

[40 CFR 60.5420b(c)(5)(i)]

(2) Records of the date of installation of a rod packing emissions collection system and closed vent system as specified in Condition III.B.4 above.

[40 CFR 60.5420b(c)(5)(ii)]

(3) Records of the cumulative number of hours of operation since initial startup or since the previous volumetric flow rate measurement, as applicable. Alternatively, a record that emissions from the rod packing are being routed to a process through a closed vent system.

[40 CFR 60.5420b(c)(5)(iii)]

(4) A description of the method used and the results of the volumetric flow rate measurement or emissions screening, as applicable. [40 CFR 60.5420b(c)(5)(iv)]



(5) Records for all flow meters, composition analyzers and pressure gauges used to measure volumetric flow rates as specified in Conditions III.B.9.b(5)(a) through below.

[40 CFR 60.5420b(c)(5)(v)]

(a) Description of standard method published by a consensus-based standards organization or industry standard practice.

[40 CFR 60.5420b(c)(5)(v)(A)]

- (b) Records of volumetric flow rate calculations conducted according to Conditions III.B.3.d or e, as applicable. [40 CFR 60.5420b(c)(5)(v)(B)]
- (c) Records of manufacturer operating procedures and measurement methods.

[40 CFR 60.5420b(c)(5)(v)(C)]

(d) Records of manufacturer's recommended procedures or an appropriate industry consensus standard method for calibration and results of calibration, recalibration, and accuracy checks.

[40 CFR 60.5420b(c)(5)(v)(D)]

(e) Records which demonstrate that measurements at the remote location(s) can, when appropriate correction factors are applied, reliably and accurately represent the actual temperature or total pressure at the flow meter under all expected ambient conditions. The Permittee shall include the date of the demonstration, the data from the demonstration, the mathematical correlation(s) between the remote readings and actual flow meter conditions derived from the data, and any supporting engineering calculations. If adjustments were made to the mathematical relationships, a record and description of such adjustments.

[40 CFR 60.5420b(c)(5)(v)(E)]

(f) Record of each initial calibration or a recalibration which failed to meet the required accuracy specification and the date of the successful recalibration.

[40 CFR 60.5420b(c)(5)(v)(F)]

- (6) Date when performance-based volumetric flow rate is exceeded. [40 CFR 60.5420b(c)(5)(vi)]
- (7) The date of successful replacement or repair of reciprocating compressor rod packing, including follow-up performance-based volumetric flow rate measurement to confirm successful repair. [40 CFR 60.5420b(c)(5)(vii)]



(8) Identification of each reciprocating compressor placed on delay of repair because of rod packing or part unavailability and explanation for each delay of repair.

[40 CFR 60.5420b(c)(5)(viii)]

(9) For each reciprocating compressor that is placed on delay of repair because of replacement rod packing or part unavailability, the Permittee shall document: the date the rod packing or part was added to the delay of repair list, the date the replacement rod packing or part was ordered, the anticipated rod packing or part delivery date (including any estimated shipment or delivery date provided by the vendor), and the actual arrival date of the rod packing or part.

[40 CFR 60.5420b(c)(5)(ix)]

(10) Date of planned shutdowns that occur while there are any reciprocating compressors that have been placed on delay of repair due to the unavailability of rod packing or parts to conduct repairs [40 CFR 60.5420b(c)(5)(x)]

10. Permit Shield

Compliance with the conditions of this subsection shall be deemed compliance with 40 CFR 60.5385b(a), 60.5385b(a)(1), 60.5385b(a)(2), 60.5385b(a)(3), 60.5385b(a)(3)(i), 60.5385b(a)(3)(ii)(A), 60.5385b(a)(3)(ii), 60.5385b(a)(3)(ii)(B), 60.5385b(b), 60.5385b(b)(1), 60.5385b(b)(1)(i), 60.5385b(b)(1)(ii). 60.5385b(b)(1)(iii), 60.5385b(b)(2). 60.5385b(b)(2)(i), 60.5385b(b)(2)(ii), 60.5385b(c), 60.5385b(c)(1), 60.5385b(c)(2), 60.5385b(c)(2)(i), 60.5385b(c)(2)(ii), 60.5385b(c)(2)(iii),60.5385b(c)(2)(iv), 60.5385b(d), 60.5385b(d)(1), 60.5385b(d)(3), 60.5410b(e), 60.5385b€, 60.5410b(e)(1), 60.5410b(e)(2), 60.5410b(e)(6), 60.5410b(e)(7), 60.5415b(g),60.5385b(f), 60.5415b(g)(1), 60.5415b(g)(2), 60.5415b(g)(3), 60.5415b(g)(4),60.5415b(g)(5), 60.5415b(g)(6), 60.5386b(a), 60.5386b(a)(1), 60.5386b(a)(2), 60.5386b(b), 60.5386b(c), 60.5386b(c)(1), 60.5386b(c)(2),60.5386b(c)(3), 60.5386b(c)(3)(i), 60.5386b(c)(3)(ii), 60.5386b(c)(3)(iii), 60.5386b(c)(4), 60.5386b(c)(4)(i), 60.5386b(c)(4)(ii), 60.5386b(c)(5), 60.5386b(c)(5)(i), 60.5386b(c)(5)(i)(A), 60.5386b(c)(5)(i)(B), 60.5386b(c)(5)(ii), 60.5386b(c)(6), 60.5386b(c)(6)(i), 60.5386b(c)(6)(ii), 60.5386b(c)(6)(iii), 60.5386b(c)(6)(iv), 60.5386b(c)(6)(v), 60.5386b(c)(7), 60.5386b(d), 60.5420b(b), 60.5385b(g), 60.5420b(b)(1), 60.5420b(b)(1)(i), 60.5420b(b)(1)(ii), 60.5420b(b)(1)(iii), 60.5420b(b)(1)(iv), 60.5420b(b)(6), 60.5420b(b)(6)(i), 60.5420b(b)(6)(ii), 60.5420b(b)(6)(iii), 60.5420b(b)(6)(iv), 60.5420b(b)(6)(v), 60.5420b(b)(6)(vi), 60.5420b(b)(6)(vii), 60.5420b(c), 60.5420b(c)(5), 60.5420b(c)(5)(i), 60.5420b(c)(5)(ii), 60.5420b(c)(5)(iii), 60.5420b(c)(5)(iv), 60.5420b(c)(5)(v), 60.5420b(c)(5)(v)(A),60.5420b(c)(5)(v)(B), 60.5420b(c)(5)(v)(C),60.5420b(c)(5)(v)(D), 60.5420b(c)(5)(v)(E), 60.5420b(c)(5)(v)(F), 60.5420b(c)(5)(vi), 60.5420b(c)(5)(vii), 60.5420b(c)(5)(viii), 60.5420b(c)(5)(ix), and 60.5420b(c)(5)(x).

C. Process Controller Requirements



1. Applicability

Subsection III.C applies the process controllers at the facility.

2. Emission Standards

The Permittee shall design and operate each process controller affected facility with zero methane and VOC emissions to the atmosphere.

[40 CFR 60.5390b(a)]

- a. If the Permittee complies by routing the emissions to a process, the Permittee shall route emissions to a process through a closed vent system.
- b. If the Permittee complies by using a self-contained natural gas-driven process controller, the Permittee shall design and operate each selfcontained natural gas-driven process controller with no identifiable emissions, as demonstrated by Condition III.E.2.b below.
- 3. Monitoring Requirements

If the Permittee routes process controller emissions to a process or a control device, the Permittee shall route the process controller affected facility emissions through a closed vent system that meets the requirements of Conditions III.E.2 and 4 below. [40 CFR 60.5390b(c)]

4. Initial Compliance Requirements

To demonstrate initial compliance with GHG and VOC emission standards for the process controller affected facility, the Permittee shall comply with Condition III.C.4.a through d below, as applicable. If the Permittee changes compliance methods, the Permittee shall perform the applicable compliance demonstrations of Condition III.C.4.a through b below again for the new compliance method, note the change in compliance method in the annual report required by Condition III.C.4.d below for the new compliance method.

[40 CFR 60.5390b(d) and 40 CFR 60.5410b(f)]

a. For process controller affected facilities complying with the requirements of Condition III.C.2 above, the Permittee shall demonstrate that the process controller affected facility does not emit any VOC or methane to the atmosphere by meeting the requirements of Condition III.C.4.a(1) or (2) below.

[40 CFR 60.5410b(f)(1)]

(1) If the Permittee complies by routing the emissions to a process, the Permittee shall meet the requirements for closed vent systems specified in Condition III.C.4.b below.

[40 CFR 60.5410b(f)(1)(i)]

(2) If the Permittee complies by using a self-contained natural gasdriven process controller, the Permittee shall conduct an initial no



identifiable emissions inspection as required by Condition III.E.2.b below.

[40 CFR 60.5410b(f)(1)(ii)]

b. For each closed vent system used to comply with Conditions III.C.2 and 3 above, the Permittee shall meet the requirements specified in Condition III.C.4.b(1) and (2) below.

[40 CFR 60.5410b(f)(3)]

(1) Install a closed vent system that meets the requirements of Conditions III.E.2 and 4 below.

[40 CFR 60.5410b(f)(3)(i)]

(2) Conduct the initial inspections of the closed vent system and bypasses, if applicable, as required in Conditions III.E.5.a and b below.

[40 CFR 60.5410b(f)(3)(ii)]

- c. The Permittee shall submit the initial annual report for the process controller affected facility as required in Condition III.C.6.a and b below. [40 CFR 60.5410b(f)(4)]
- d. The Permittee shall maintain the records as specified in Condition III.C.7.a below.

[40 CFR 60.5410b(f)(5)]

5. Continuous Compliance Requirements

To demonstrate continuous compliance with GHG and VOC emission standards for the process controller affected facility, the Permittee shall comply with Conditions III.C.5.a through c below, as applicable.

[40 CFR 60.5390b(e) and 40 CFR 60.5415b(h)]

a. The Permittee shall demonstrate that the process controller affected facility does not emit any VOC or methane to the atmosphere by meeting the requirements of Condition III.C.5.a(1) or (2) below.

[40 CFR 60.5415b(h)(1)]

- (1) If the Permittee complies by routing the emissions to a process, the Permittee shall comply with the closed vent system inspection and monitoring requirements of Condition III.E.5.a below. [40 CFR 60.5415b(h)(1)(i)]
- (2) If the Permittee complies by using a self-contained natural gasdriven process controller, the Permittee shall conduct the no identifiable emissions inspections required by Condition III.E.2.b below.

[40 CFR 60.5415b(h)(1)(ii)]



b. The Permittee shall submit the annual report for the process controller as required in Condition III.C.6.a and b below, and III.E.6 below, as applicable.

[40 CFR 60.5415b(h)(3)]

c. The Permittee shall maintain the records as specified in Conditions III.C.7.a below, and III.E.7.a and b below, for each process controller affected facility, as applicable.

[40 CFR 60.5415b(h)(4)]

6. Reporting Requirements

a. The general information specified in Conditions III.D.6.a(1) through (4) below is required for all reports.

[40 CFR 60.5420b(b)(1) and 40 CFR 60.5390b(f)])]

(1) The company name, facility site name associated with the affected facility and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.

[40 CFR 60.5420b(b)(1)(i)]

(2) An identification of each affected facility being included in the annual report.

[40 CFR 60.5420b(b)(1)(ii)]

(3) Beginning and ending dates of the reporting period.

[40 CFR 60.5420b(b)(1)(iii)]

(4) A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. If the report is submitted via CEDRI, the certifier's electronic signature during the submission process replaces the requirement in this Condition.

[40 CFR 60.5420b(b)(1)(iv)]

- b. For each process controller affected facility, the information specified in Conditions III.C.6.b(1) and (2) below in the initial annual report and in subsequent annual reports for each process controller affected facility that is constructed, modified, or reconstructed during the reporting period. Each annual report must contain the information specified in Conditions III.C.6.b(3) through (7) below each process controller affected facility. [40 CFR 60.5420b(b)(7)]
 - (1) An identification of each process controller that is driven by natural gas, as required Condition III.C.4 above, that allows



traceability to the records required in Condition III.C.7.a(1) below.

[40 CFR 60.5420b(b)(7)(i)]

(2) For each process controller in the affected facility complying with Condition III.C.2 above, the Permittee shall report the information specified in Conditions III.C.6.b(2)(a) and (b) below, as applicable.

[40 CFR 60.5420b(b)(7)(ii)]

(a) An identification of each process controller complying with Condition III.C.2 above by routing the emissions to a process.

[40 CFR 60.5420b(b)(7)(ii)(A)]

(b) An identification of each process controller complying with Condition III.C.2 above by using a self-contained natural gas-driven process controller.

[40 CFR 60.5420b(b)(7)(ii)(B)]

(3) Identification of each process controller which changes its method of compliance during the reporting period and the applicable information specified in Conditions III.C.6.b(4) through (6) below for the new method of compliance.

[40 CFR 60.5420b(b)(7)(iv)]

(4) For each process controller in the affected facility complying with the requirements of Condition III.C.2 above by routing the emissions to a process, the Permittee shall report the information specified in Conditions III.E.6.a through c below.

[40 CFR 60.5420b(b)(7)(v)]

(5) For each process controller in the affected facility complying with the requirements of Condition III.C.2 above by using a selfcontained natural gas-driven process controller, the Permittee shall t report the information specified in Condition III.C.6.b(5)(a) and (b) below.

[40 CFR 60.5420b(b)(7)(vi)]

(a) Dates of each inspection required under Condition III.E.5.b below and;

[40 CFR 60.5420b(b)(7)(vi)(A)]

(b) Each defect or leak identified during each natural gasdriven-self-contained process controller system inspection, and the date of repair or date of anticipated repair if repair is delayed.

[40 CFR 60.5420b(b)(7)(vi)(B)]

(6) For each deviation that occurred during the reporting period, the date and time the deviation began, the duration of the deviation in



hours, and a description of the deviation. If no deviations occurred during the reporting period, the Permittee shall include a statement that no deviations occurred during the reporting period.

[40 CFR 60.5420b(b)(7)(ix)]

(7) If the Permittee complies with an alternative GHG and VOC standard under 40 CFR 60.5398b, in lieu of the information specified in Condition (b)(7)(ii)(B) and Conditions III.E.6.a and b below, the Permittee shall provide the information specified in 40 CFR 60.5424b.

[40 CFR 60.5420b(b)(7)(x)]

7. Recordkeeping Requirements

The Permittee shall perform the recordkeeping as required by Condition III.C.7.a below and Condition III.E.7.a through c below.

[40 CFR 60.5390b(f)]

- a. For each process controller affected facility, the Permittee shall maintain the records specified in Conditions III.C.7.a(1) through (4) below. [40 CFR 60.5420b(c)(6)]
 - (1) Records identifying each process controller that is driven by natural gas and that does not function as an emergency shutdown device.

[40 CFR 60.5420b(c)(6)(i)]

(2) For each process controller affected facility complying with Condition III.C.2 above, the Permittee shall maintain records of the information specified in Conditions III.C.7.a(2)(a) and (b) below, as applicable.

[40 CFR 60.5420b(c)(6)(ii)]

(a) If the Permittee is complying with Condition III.C.2 above by routing process controller vapors to a process through a closed vent system, the Permittee shall report the information specified in Conditions III.C.7.a(2)(a)(i) and (ii) below.

[40 CFR 60.5420b(c)(6)(ii)(A)]

(i) An identification of all the natural gas-driven process controllers in the process controller affected facility for which the Permittee collects and route vapors to a process through a closed vent system.

[40 CFR 60.5420b(c)(6)(ii)(A)(1)]

 (ii) The records specified in Condition III.E.7.a and c below. If the Permittee complies with an alternative GHG and VOC standard under 40 CFR 60.5398b, in lieu of the information



specified in III.E.7.a below, the Permittee shall provide the information specified in 40 CFR 60.5424b.

[40 CFR 60.5420b(c)(6)(ii)(A)(2)]

(b) If the Permittee is complying with Condition III.C.2 above by using a self-contained natural gas-driven process controller, the Permittee shall report the information specified in Conditions III.C.7.a(2)(b)(i) through (iii) below.

[40 CFR 60.5420b(c)(6)(ii)(B)]

(i) An identification of each process controller complying with Condition III.C.2 above by using a self-contained natural gas-driven process controller;

[40 CFR 60.5420b(c)(6)(ii)(B)(1)]

- (ii) Dates of each inspection required under Condition III.E.5.b below; and [40 CFR 60.5420b(c)(6)(ii)(B)(2)]
- (iii) Each defect or leak identified during each natural gas-driven-self-contained process controller system inspection, and date of repair or date of anticipated repair if repair is delayed.

[40 CFR 60.5420b(c)(6)(ii)(B)(3)]

(3) Records of each change in compliance method, including identification of each natural gas-driven process controller which changes its method of compliance, the new method of compliance, and the date of the change in compliance method.

[40 CFR 60.5420b(c)(6)(vi)]

- (4) Records of each deviation, the date and time the deviation began, the duration of the deviation, and a description of the deviation. [40 CFR 60.5420b(c)(6)(vii)]
- 8. Permit Shield

Compliance with the conditions of this subsection shall be deemed compliance with 40 CFR 60.5390b(a), 60.5390b(c), 60.5410b(f), 60.5390b(d), 60.5410b(f)(1), 60.5410b(f)(1)(i). 60.5410b(f)(1)(ii), 60.5410b(f)(3), 60.5410b(f)(3)(i), 60.5410b(f)(4), 60.5410b(f)(5), 60.5415b(h), 60.5390b(e), 60.5410b(f)(3)(ii), 60.5415b(h)(1), 60.5415b(h)(1)(i), 60.5415b(h)(1)(ii), 60.5415b(h)(3), 60.5415b(h)(4), 60.5390b(f), 60.5420b(b)(1)),60.5420b(b)(1)(i), 60.5420b(b)(1)(ii), 60.5420b(b)(1)(iii), 60.5420b(b)(1)(iv), 60.5420b(b)(7), 60.5420b(b)(7)(i), 60.5420b(b)(7)(ii), 60.5420b(b)(7)(ii)(A), 60.5420b(b)(7)(ii)(B), 60.5420b(b)(7)(iv), 60.5420b(b)(7)(v), 60.5420b(b)(7)(vi), 60.5420b(b)(7)(vi)(A), 60.5420b(b)(7)(vi)(B), 60.5420b(b)(7)(ix), 60.5420b(b)(7)(x), 60.5420b(c)(6), 60.5420b(c)(6)(i), 60.5390b(f),



- **D.** Fugitive Emissions Requirements
 - 1. Applicability

Subsection III.D applies the fugitive emissions components at the facility.

- 2. Monitoring Requirements
 - a. The Permittee shall develop a fugitive emissions monitoring plan that covers all fugitive emissions components affected facilities within each company-defined area in accordance with Conditions III.D.2.b and III.D.2.c.

[40 CFR 60.5397b(b)]

- b. For the fugitive emissions monitoring plan, the Permittee shall include the elements specified in Conditions III.D.2.b(1) through (8) below. [40 CFR 60.5397b(c)]
 - (1) Surveys must be conducted at least as frequently as required by Conditions III.D.2.e and f below.

[40 CFR 60.5397b(c)(1)]

(2) Technique for determining fugitive emissions (*i.e.*, AVO or other detection methods, Method 21 of appendix A-7 to this part, and/or OGI and meeting the requirements of Conditions III.D.2.b(7)(a) through (g) below.

[40 CFR 60.5397b(c)(2)]

(3) Manufacturer and model number of fugitive emissions detection equipment to be used, if applicable.

[40 CFR 60.5397b(c)(3)]

(4) Procedures and timeframes for identifying and repairing fugitive emissions components from which fugitive emissions are detected, including timeframes for fugitive emission components that are unsafe to repair. The repair schedule must meet the requirements of Condition III.D.3.a below at a minimum.

[40 CFR 60.5397b(c)(4)]

(5) Procedures and timeframes for verifying fugitive emission component repairs.

[40 CFR 60.5397b(c)(5)]

(6) Records that will be kept and the length of time records will be kept.

[40 CFR 60.5397b(c)(6)]



(7)If the Permittee is using OGI, the plan must also include the elements specified in Conditions III.D.2.b(7)(a) through (g) below.

[40 CFR 60.5397b(c)(7)]

(a) Verification that the OGI equipment meets the specifications of Conditions III.D.2.b(7)(a)(i) and (ii) below. This verification is an initial verification, and may either be performed by the Permittee, by the manufacturer, or by a third party. For the purposes of complying with the fugitive emissions monitoring program with OGI, fugitive emissions are defined as any visible emissions observed using OGI.

[40 CFR 60.5397b(c)(7)(i)]

(i) The OGI equipment must be capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions.

[40 CFR 60.5397b(c)(7)(i)(A)

(ii) The OGI equipment must be capable of imaging a gas that is half methane, half propane at a concentration of 10,000 ppm at a flow rate of ≤ 60 g/hr from a quarter inch diameter orifice.

[40 CFR 60.5397b(c)(7)(i)(B)]

- (b) Procedure for a daily verification check. [40 CFR 60.5397b(c)(7)(ii)]
- Procedure for determining the operator's maximum (c) viewing distance from the equipment and how the operator will ensure that this distance is maintained. [40 CFR 60.5397b(c)(7)(iii)]
- (d) Procedure for determining maximum wind speed during which monitoring can be performed and how the operator will ensure monitoring occurs only at wind speeds below this threshold.

[40 CFR 60.5397b(c)(7)(iv)]

(e) Procedures for conducting surveys, including the items specified in Conditions III.D.2.b(7)(e)(i) through (iii) below.

[40 CFR 60.5397b(c)(7)(v)]

(i) How the operator will ensure an adequate thermal background is present in order to view potential fugitive emissions.

[40 CFR 60.5397b(c)(7)(v)(A)]



- (ii) How the operator will deal with adverse monitoring conditions, such as wind.
 [40 CFR 60.5397b(c)(7)(v)(B)]
- (iii) How the operator will deal with interferences (*e.g.*, steam).

[40 CFR 60.5397b(c)(7)(v)(C)]

(f) Training and experience needed prior to performing surveys.

[40 CFR 60.5397b(c)(7)(vi)]

(g) Procedures for calibration and maintenance. At a minimum, procedures must comply with those recommended by the manufacturer.

[40 CFR 60.5397b(c)(7)(vii)]

(8) If the Permittee is using Method 21 of appendix A-7 to 40 CFR 60, the plan must also include the elements specified in Conditions III.D.2.b(8)(a) through (d) below. For the purposes of complying with the fugitive emissions monitoring program using Method 21 of appendix A-7 to 40 CFR 60 a fugitive emission is defined as an instrument reading of 500 ppmv or greater.

[40 CFR 60.5397b(c)(8)]

(a) The Permittee shall ensure monitoring equipment meets the requirements specified in Section 6.0 of Method 21 of appendix A-7 of 40 CFR 60. For purposes of instrument capability, the fugitive emissions definition shall be 500 ppmv or greater methane using a FID-based instrument. If the Permittee uses an analyzer other than an FID-based instrument, the Permittee shall develop a site-specific fugitive emission definition that would be equivalent to 500 ppmv methane using a FID-based instrument (*e.g.*, 10.6 eV PID with a specified isobutylene concentration as the fugitive emission definition would provide equivalent response to the compound of interest).

[40 CFR 60.5397b(c)(8)(i)]

- (b) At a minimum, the procedures shall ensure that the surveys comply with the relevant sections of Method 21 of appendix A-7 to 40 CFR 60, including Section 8.3.1. [40 CFR 60.5397b(c)(8)(ii)]
- (c) The instrument must be calibrated before use each day of its use by the procedures specified in Method 21 of appendix A-7 of 40 CFR 60. At a minimum, the Permittee shall conduct precision tests at the interval specified in Method 21 of appendix A-7 of 40 CFR 60 Subpart OOOOb, Section 8.1.2, and a calibration drift assessment at the end of each monitoring day. The calibration drift



assessment must be conducted as specified in Condition III.D.2.b(8)(c)(i). Corrective action for drift assessments is specified in Conditions III.D.2.b(8)(c)(ii) and III.D.2.b(8)(c)(iii).

[40 CFR 60.5397b(c)(8)(iii)]

(i) Check the instrument using the same calibration gas that was used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A-7 of 40 CFR 60. Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. If multiple scales are used, record the instrument reading for each scale used. Divide the arithmetic difference of the initial and post-test calibration response by the corresponding calibration gas value for each scale and multiply by 100 to express the calibration drift as a percentage.

[40 CFR 60.5397b(c)(8)(iii)(A)]

(ii) If a calibration drift assessment shows a negative drift of more than 10 percent, then all equipment with instrument readings between the fugitive emission definition multiplied by (100 minus the percent of negative drift) divided by 100 and the fugitive emission definition that was monitored since the last calibration must be re-monitored. [40 CFR 60.5397b(c)(8)(iii)(B)]

(iii) If any calibration drift assessment shows a positive drift of more than 10 percent from the initial calibration value, then, at the Permittee's discretion, all equipment with instrument readings above the fugitive emission definition and below the fugitive emission definition multiplied by (100 plus the percent of positive drift) divided by 100 monitored since the last calibration may be re-monitored.

[40 CFR 60.5397b(c)(8)(iii)(C)]

At a minimum, place the probe inlet at the surface of the (d) vard piping and run the probe down the length of the piping. Connection points on the piping must be monitored following the procedures specified in Method 21 of appendix A-7 of 40 CFR 60.

[40 CFR 60.5397b(c)(8)(iv)]

Each fugitive emissions monitoring plan must include the elements c. specified in Conditions III.D.2.c(1) and (2) below, at a minimum, as applicable.



[40 CFR 60.5397b(d)]

- (1) If OGI is used, the plan must include procedures to ensure that all fugitive emissions components, except buried yard piping and associated components (*e.g.*, connectors), are monitored during each survey. Example procedures include, but are not limited to, a sitemap with an observation path, a written narrative of where the fugitive emissions components are located and how they will be monitored, or an inventory of fugitive emissions components. [40 CFR 60.5397b(d)(1)]
- (2) If Method 21 of appendix A-7 of 40 CFR 60 is used, the plan must include a list of fugitive emissions components to be monitored and method for determining the location of fugitive emissions components to be monitored in the field (*e.g.*, tagging, identification on a process and instrumentation diagram, etc.). The fugitive emissions monitoring plan must include the written plan developed for all of the fugitive emissions components designated as difficult-to-monitor in accordance with Condition III.D.2.f(2) below, and the written plan for fugitive emissions components designated as unsafe-to-monitor in accordance with III.D.2.f(3) below.

[40 CFR 60.5397b(d)(2)]

d. For each fugitive emissions component, except buried yard piping and associated components (*e.g.*, connectors), the Permittee shall observe or monitor fugitive emissions during each monitoring survey.

[40 CFR 60.5397b(e)]

e. The Permittee shall conduct initial monitoring surveys according to the requirements specified in Conditions Error! Reference source not found. through (2) below.

[40 CFR 60.5397b(f)]

(1) The Permittee shall conduct an initial monitoring survey using OGI or Method 21 of appendix A-7 to 40 CFR 60 within 90 days of the startup, for each fugitive emissions components affected facility.

[40 CFR 60.5397b(f)(ii)]

(2) For a modified or reconstructed fugitive emissions components affected facility, the initial monitoring survey must be conducted within 90 days of the startup for each fugitive emissions components affected facility after the modification or reconstruction.

[40 CFR 60.5397b(f)(iii)]

f. The Permittee shall conduct a monitoring survey of each fugitive emissions components affected facility as specified in Condition III.D.2.f(1) below, with the exceptions noted in Conditions III.D.2.f(2) through (4) below.



[40 CFR 60.5397b(g)]

(1) The Permittee shall conduct a monitoring survey of the fugitive emissions components affected facility located at a compressor station at the frequencies in Conditions III.D.2.f(1)(a) and (b) below.

[40 CFR 60.5397b(g)(1)(v)]

- (a) A monitoring survey must be conducted at least monthly using AVO, or any other detection method, after the initial survey. Any indications of fugitive emissions using these methods are considered fugitive emissions that must be repaired in accordance with Condition III.D.3.a below.
 [40 CFR 60.5397b(g)(1)(v)(A)]
- (b) A monitoring survey must be conducted at least quarterly using OGI or Method 21 of appendix A-7 to this part after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 calendar days apart. [40 CFR 60.5397b(g)(1)(v)(B)]
- (2) If the Permittee is using Method 21 of appendix A-7 to 40 CFR 60, fugitive emissions components that cannot be monitored without elevating the monitoring personnel more than 2 meters above the surface may be designated as difficult-to-monitor. Fugitive emissions components that are designated difficult-to-monitor must meet the specifications of Conditions III.D.2.f(2)(a) through (d) below.

[40 CFR 60.5397b(g)(2)]

(a) A written plan must be developed for all the fugitive emissions components designated difficult-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by Conditions III.D.2.a, III.D.2.b, and III.D.2.c.

[40 CFR 60.5397b(g)(2)(i)]

(b) The plan must include the identification and location of each fugitive emissions component designated as difficult-to-monitor.

[40 CFR 60.5397b(g)(2)(ii)]

(c) The plan must include an explanation of why each fugitive emissions component designated as difficult-to-monitor is difficult-to-monitor.

[40 CFR 60.5397b(g)(2)(iii)]

(d) The plan must include a schedule for monitoring the difficult-to-monitor fugitive emissions components at least once per calendar year.

[40 CFR 60.5397b(g)(2)(iv)]



(3) If the Permittee is using Method 21 of appendix A-7 to 40 CFR 60, fugitive emissions components that cannot be monitored because monitoring personnel would be exposed to immediate danger while conducting a monitoring survey may be designated as unsafe-to-monitor. Fugitive emissions components that are designated unsafe-to-monitor must meet the specifications of Conditions III.D.2.f(3)(a) through (d) below.

[40 CFR 60.5397b(g)(3)]

(a) A written plan must be developed for all the fugitive emissions components designated unsafe-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by Conditions III.D.2.a, III.D.2.b, and III.D.2.c.

[40 CFR 60.5397b(g)(3)(i)]

(b) The plan must include the identification and location of each fugitive emissions component designated as unsafe-to-monitor.

[40 CFR 60.5397b(g)(3)(ii)]

(c) The plan must include an explanation of why each fugitive emissions component designated as unsafe-to-monitor is unsafe-to-monitor.

[40 CFR 60.5397b(g)(3)(iii)]

(d) The plan must include a schedule for monitoring the fugitive emissions components designated as unsafe-to-monitor.

[40 CFR 60.5397b(g)(3)(iv)]

(4) The requirements of Condition III.D.2.f(1)(b) are waived during a quarterly monitoring period for any fugitive emissions components affected facility located within an area that has an average calendar month temperature below 0 degrees Fahrenheit for two of three consecutive calendar months of a quarterly monitoring period. The calendar month temperature average for each month within the quarterly monitoring period must be determined using historical monthly average temperatures over the previous three years as reported by a National Oceanic and Atmospheric Administration source or other source approved by the Administrator. The requirements of Condition III.D.2.f(1) shall not be waived for two consecutive quarterly monitoring periods.

[40 CFR 60.5397b(g)(4)]

- 3. Repair Requirements
 - a. The Permittee shall repair each identified source of fugitive emissions in accordance with Conditions III.D.3.a(1) and (2) below.

[40 CFR 60.5397b(h)]



(1) The Permittee shall attempt first repair in accordance with Conditions III.D.3.a(1)(a) and (b) below.

[40 CFR 60.5397b(h)(1)]

(a) A first attempt at repair shall be made no later than 15 calendar days after detection of fugitive emissions that were identified using AVO.

[40 CFR 60.5397b(h)(1)(i)]

(b) If the Permittee is complying with Condition III.D.2.f(1) above using OGI or Method 21 of appendix A-7 to 40 CFR 60, a first attempt at repair shall be made no later than 30 calendar days after detection of the fugitive emissions.

[40 CFR 60.5397b(h)(1)(ii)]

- (2) The Permittee shall complete repairs as soon as practicable, but no later than 15 calendar days after the first attempt at repair as required in Condition III.D.3.a(1)(a), and 30 calendar days after the first attempt at repair as required in Condition III.D.3.a(1)(b). [40 CFR 60.5397b(h)(2)]
- (3) Delay of repair will be allowed if Conditions III.D.3.a(3)(a) or (b) are met.

[40 CFR 60.5397b(h)(3)]

- (a) If the repair is technically infeasible, would require the compressor station shutdown, or would be unsafe to repair during operation of the unit, the Permittee shall complete the repair during the next scheduled compressor station shutdown for maintenance or within 2 years of detecting the fugitive emissions, whichever is earliest. [40 CFR 60.5397b(h)(3)(i)]
- (b) If the repair requires replacement of a fugitive emissions component or a part thereof, but the replacement cannot be acquired and installed within the repair timelines specified in Conditions III.D.3.a(1) and (2) due to either of the conditions specified in Conditions III.D.3.a(3)(a) or (b), the Permittee shall complete the repair in accordance with Condition III.D.3.a(3)(b)(iii) and documented in accordance with Condition III.D.7.b(3)(i) below:

[40 CFR 60.5397b(h)(3)(ii)]

(i) Valve assembly supplies had been sufficiently stocked but are depleted at the time of the required repair.

[40 CFR 60.5397b(h)(3)(ii)(A)]

(ii) A replacement fugitive emissions component or a part thereof requires custom fabrication.



[40 CFR 60.5397b(h)(3)(ii)(B)]

(iii) The required replacement must be ordered no later than 10 calendar days after the first attempt at repair. The repair must be completed as soon as practicable, but no later than 30 calendar days after receipt of the replacement component, unless the repair requires a compressor station shutdown. If the repair requires a compressor station shutdown, the repair must be completed in accordance with the timeframe specified in Condition III.D.3.a(3)(a).

[40 CFR 60.5397b(h)(3)(ii)(C)]

(4) Each identified source of fugitive emissions must be resurveyed to complete repair according to the requirements of Conditions III.D.3.a(4)(a) through (e), to ensure that there are no fugitive emissions.

[40 CFR 60.5397b(h)(4)]

(a) The Permittee may resurvey the fugitive emissions components to verify repair using either Method 21 of appendix A-7 to 40 CFR 60 or OGI, except as specified in Condition III.D.3.a(4)(e) below.

[40 CFR 60.5397b(h)(4)(i)]

(b) For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph must be taken of that component, or the component must be tagged during the monitoring survey when the fugitive emissions were initially found for identification purposes and subsequent repair. The digital photograph must include the date that the photograph was taken and must clearly identify the component by location within the site (*e.g.*, the latitude and longitude of the component or by other descriptive landmarks visible in the picture).

[40 CFR 60.5397b(h)(4)(ii)]

(c) Operators that use Method 21 of appendix A-7 of 40 CFR
 60 to resurvey the repaired fugitive emissions components are subject to the resurvey provisions specified in Conditions III.D.3.a(4)(c)(i) and (ii).

[40 CFR 60.5397b(h)(4)(iii)]

 A fugitive emissions component is repaired when the Method 21 instrument indicates a concentration of less than 500 ppmv above background or when no soap bubbles are observed when the alternative screening



procedures specified in section 8.3.3 of Method 21 of appendix A-7 of 40 CFR 60 are used. [40 CFR 60.5397b(h)(4)(iii)(A)]

(ii) Operators must use the Method 21 monitoring requirements specified in Condition III.D.2.b(8)(b) or the alternative screening procedures specified in section 8.3.3 of Method 21 of appendix A-7 of 40 CFR 60.

[40 CFR 60.5397b(h)(4)(iii)(B)]

(d) Operators that use OGI to resurvey the repaired fugitive emissions components are subject to the resurvey provisions specified in Conditions III.D.3.a(4)(d)(i) and (ii) below.

[40 CFR 60.5397b(h)(4)(iv)]

(i) A fugitive emissions component is repaired when the OGI instrument shows no indication of visible emissions.

[40 CFR 60.5397b(h)(4)(iv)(A)]

- (ii) Operators must use the OGI monitoring requirements specified in Condition III.D.2.b(7). [40 CFR 60.5397b(h)(4)(iv)(B)]
- (e) For fugitive emissions identified using AVO detection methods, the Permittee may resurvey using those same methods, Method 21 of appendix A-7 of 40 CFR 60, or OGI. For operators that use AVO detection methods, a fugitive emissions component is repaired when there are no indications of fugitive emissions using these methods. [40 CFR 60.5397b(h)(4)(v)]

4. Initial Compliance Requirements

The Permittee shall demonstrate initial compliance with the standards that apply to fugitive emissions components affected facilities as required by Conditions III.D.4.a through e below.

[40 CFR 60.5397b(i) and 40 CFR 60.5410b(k)]

a. The Permittee shall develop a fugitive emissions monitoring plan as required in Conditions III.D.2.a, b, and d above.

[40 CFR 60.5410b(k)(1)]

b. The Permittee shall conduct an initial monitoring survey as required in Conditions III.D.2.d and e above.

[40 CFR 60.5410b(k)(2)]

c. The Permittee shall repair each identified source of fugitive emissions for each affected facility as required in Condition III.D.3.a above.



[40 CFR 60.5410b(k)(3)]

d. The Permittee shall submit the initial annual report for each fugitive emissions components affected facility as required in Condition III.D.6.a and b below.

[40 CFR 60.5410b(k)(4)]

e. The Permittee shall maintain the records specified in Condition III.D.7.b below.

[40 CFR 60.5410b(k)(5)]

5. Continuous Compliance Requirements

The Permittee shall demonstrate continuous compliance with the standards that apply to fugitive emissions components affected facilities as required by Conditions III.D.5.a through d below.

[40 CFR 60.5397b(j) and 40 CFR 60.5415b(l)]

a. The Permittee shall conduct periodic monitoring surveys as required in Conditions III.D.2.d and f above.

[40 CFR 60.5415b(l)(1)]

b. The Permittee shall repair each identified source of fugitive emissions as required Condition III.D.3.a above.

[40 CFR 60.5415b(l)(2)]

c. The Permittee shall submit annual reports for fugitive emissions components affected facilities as required in in Condition III.D.6.a and b below.

[40 CFR 60.5415b(l)(3)]

d. The Permittee shall maintain records as specified in Condition III.D.7.b below.

[40 CFR 60.5415b(l)(4)]

- 6. Reporting Requirements
 - a. The general information specified in Conditions III.D.6.a(1) through (4) below is required for all reports.

[40 CFR 60.5420b(b)(1) and 40 CFR 60.5397b(k)]

(1) The company name, facility site name associated with the affected facility and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.

[40 CFR 60.5420b(b)(1)(i)]

(2) An identification of each affected facility being included in the annual report.

[40 CFR 60.5420b(b)(1)(ii)]



- (3)Beginning and ending dates of the reporting period. [40 CFR 60.5420b(b)(1)(iii)]
- (4) A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. If the report is submitted via CEDRI, the certifier's electronic signature during the submission process replaces the requirement in this Condition.

[40 CFR 60.5420b(b)(1)(iv)]

b. For the fugitive emissions components affected facility, report the information specified in Conditions III.D.6.b(1) through (3) below, as applicable.

[40 CFR 60.5420b(b)(9) and 40 CFR 60.5397b(k)]]

(1)Designation of the type of site (i.e., well site, centralized production facility, or compressor station) at which the fugitive emissions components affected facility is located.

[40 CFR 60.5420b(b)(9)(i)(A)]

For each fugitive emissions monitoring survey performed during (2)the annual reporting period, the information specified in Conditions III.D.6.b(2)(a) through (g) below.

[40 CFR 60.5420b(b)(9)(ii)]

Date of the survey. (a)

[40 CFR 60.5420b(b)(9)(ii)(A)]

- (b) Monitoring instrument or, if the survey was conducted by AVO methods, notation that AVO was used. [40 CFR 60.5420b(b)(9)(ii)(B)]
- (c) Any deviations from the monitoring plan elements under Conditions III.D.2.b(1), (2), and (7), III.D.2.b(8)(a) or (d) above or a statement that there were no deviations from these elements of the monitoring plan.

[40 CFR 60.5420b(b)(9)(ii)(C)]

(d) Number and type of components for which fugitive emissions were detected.

[40 CFR 60.5420b(b)(9)(ii)(D)]

(e) Number and type of fugitive emissions components that were not repaired as required in Condition III.D.3.a above.

[40 CFR 60.5420b(b)(9)(ii)(E)]

(f) Number and type of fugitive emission components (including designation as difficult-to-monitor or unsafe-



to-monitor, if applicable) on delay of repair and explanation for each delay of repair.

[40 CFR 60.5420b(b)(9)(ii)(F)]

(g) Date of planned shutdown(s) that occurred during the reporting period if there are any components that have been placed on delay of repair.

[40 CFR 60.5420b(b)(9)(ii)(G)]

(3) For the fugitive emissions components affected facility complying with an alternative fugitive emissions standard under 40 CFR 60.5399b, in lieu of the information specified in Conditions III.D.6.b(1) and III.D.6.b(2) above, the Permittee shall provide the information specified in Conditions III.D.6.b(3)(a) through (c) below.

[40 CFR 60.5420b(b)(9)(iii) and 40 CFR 60.5420b(a)(3)]

(a) The alternative standard with which the Permittee is complying.

[40 CFR 60.5420b(b)(9)(iii)(A)]

(b) The site-specific reports specified by the specific alternative fugitive emissions standard, submitted in the format in which they were submitted to the state, local, or Tribal authority. If the report is in hard copy, the Permittee shall scan the document and submit it as an electronic attachment to the annual report.

[40 CFR 60.5420b(b)(9)(iii)(B)]

(c) If the report specified by the specific alternative fugitive emissions standard is not site-specific, the Permittee shall submit the information specified in Conditions III.D.6.b(1) and III.D.6.b(2) above for each individual site complying with the alternative standard.

[40 CFR 60.5420b(b)(9)(iii)(C)]

- 7. Recordkeeping Requirements
 - a. The Permittee shall maintain the records identified as specified in 40 CFR 60.7(f) and Condition III.D.7.b below. All records required by this subpart must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by this subpart that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

[40 CFR 60.5420b(c) and 40 CFR 60.5397b(k)]

b. For the fugitive emissions components affected facility, maintain the records identified in Conditions III.D.7.b(1) through (5) below.



[40 CFR 60.5420b(c)(14)]

(1)	The date of modification for the fugitive emissions components affected facility at a compressor station		
	anceled facility at a compressor station.		[40 CFR 60.5420 b(c)(14)(i)]
(2)	The fugitive emissions monitoring plan as required in Condition III.D.2.a, b, and c above. [40 CFR 60.5420b(c)(14)(iv		
			[40 CFR 60.5420b(c)(14)(iv)]
(3)	The records of each monitoring survey as specified in Conditions		
	III.D. $7.6(3)(a)$ through (1) below.		[40 CFR 60.5420b(c)(14)(v)]
	(a)	Date of the survey.	40 CFR 60.5420b(c)(14)(v)(A)]
	(b)	Beginning and end time of the	survey. 40 CFR 60.5420b(c)(14)(v)(B)]
	(c)	Name of operator(s), training operator(s) performing the surv	g, and experience of the vey. 40 CFR 60.5420b(c)(14)(v)(C)]
	(d)	Monitoring instrument or meth	od used. 40 CFR 60.5420b(c)(14)(v)(D)]
	(e)	Fugitive emissions component identification whe Method 21 of appendix A-7 to this part is used to perform the monitoring survey.	
			[40 CFR 60.5420b(c)(14)(v)(E)]
	(f)	Ambient temperature, sky co wind speed at the time of the stations, operating mode of operating, standby pressuriz depressurized modes) at the s survey.	onditions, and maximum e survey. For compressor each compressor (<i>i.e.</i> , ed, and not operating- station at the time of the
		I	[40 CFR 60.5420b(c)(14)(v)(F)]
	(g)	Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan. $[40 \text{ CFR } 60.5420 \text{b}(\text{c})(14)(\text{v})(\text{G})]$	
	(h)	Records of calibrations for the monitoring survey.	instrument used during the 40 CFR 60 5420 $h(c)(14)(y)(H)$
	(i)	Decomposition of each function emission detects 1 having	
	(1)	bocumentation of each fugitive the monitoring survey, inc specified in Conditions III.D. below.	e emission detected during cluding the information (7.b(3)(i)(i) through (ix)



[40 CFR 60.5420b(c)(14)(v)(I)]

- (i) Location of each fugitive emission identified. [40 CFR 60.5420b(c)(14)(v)(I)(1)]
- (ii) Type of fugitive emissions component, including designation as difficult-to-monitor or unsafe-to-monitor, if applicable.

[40 CFR 60.5420b(c)(14)(v)(I)(2)]

(iii) If Method 21 of appendix A-7 to 40 CFR 60 is used for detection, record the component ID and instrument reading.

[40 CFR 60.5420b(c)(14)(v)(I)(3)]

(iv) For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph or video must be taken of that component or the component must be tagged for identification purposes. The digital photograph must include the date that the photograph was taken and must clearly identify the component by location within the site (*e.g.*, the latitude and longitude of the component or by other descriptive landmarks visible in the picture). The digital photograph or identification (*e.g.*, tag) may be removed after the repair is completed, including verification of repair with the resurvey.

[40 CFR 60.5420b(c)(14)(v)(I)(4)]

(v) The date of first attempt at repair of the fugitive emissions component(s).

[40 CFR 60.5420b(c)(14)(v)(I)(5)]

(vi) The date of successful repair of the fugitive emissions component, including the resurvey to verify repair and instrument used for the resurvey.

[40 CFR 60.5420b(c)(14)(v)(I)(6)]

- (vii) Identification of each fugitive emission component placed on delay of repair and explanation for each delay of repair.
 [40 CFR 60.5420b(c)(14)(v)(I)(7)]
- (viii) For each fugitive emission component placed on delay of repair for reason of replacement component unavailability, the operator must document: the date the component was added to the delay of repair list, the date the replacement



fugitive component or part thereof was ordered, the anticipated component delivery date (including any estimated shipment or delivery date provided by the vendor), and the actual arrival date of the component.

[40 CFR 60.5420b(c)(14)(v)(I)(8)]

(ix) Date of planned shutdowns that occur while there are any components that have been placed on delay of repair.

[40 CFR 60.5420b(c)(14)(v)(I)(9)]

(4) For the fugitive emissions components affected facility complying with an alternative means of emissions limitation under 40 CFR 60.5399b, the Permittee shall maintain the records specified by the specific alternative fugitive emissions standard for a period of at least 5 years.

[40 CFR 60.5420b(c)(14)(vii)]

(5) If the Permittee complies with an alternative GHG and VOC standard under 40 CFR 60.5398b, in lieu of the information specified in Conditions III.D.7.b(2) and (3) above, the Permittee shall maintain the records specified in 40 CFR 60.5424b.

[40 CFR 60.5420b(c)(14)(viii)]

8. Permit Shield

Compliance with the conditions of this subsection shall be deemed compliance with 40 CFR 60.5397b(b), 60.5397b(c), 60.5397b(c)(1), 60.5397b(c)(2), 60.5397b(c)(3), 60.5397b(c)(4), 60.5397b(c)(5), 60.5397b(c)(6), 60.5397b(c)(7),60.5397b(c)(7)(i), 60.5397b(c)(7)(i)(A, 60.5397b(c)(7)(i)(B), 60.5397b(c)(7)(ii), 60.5397b(c)(7)(iii), 60.5397b(c)(7)(iv), 60.5397b(c)(7)(v), 60.5397b(c)(7)(v)(A), 60.5397b(c)(7)(v)(B), 60.5397b(c)(7)(v)(C), 60.5397b(c)(7)(vi), 60.5397b(c)(8)(i), 60.5397b(c)(7)(vii), 60.5397b(c)(8), 60.5397b(c)(8)(ii), 60.5397b(c)(8)(iii), 60.5397b(c)(8)(iii)(A), 60.5397b(c)(8)(iii)(B), 60.5397b(c)(8)(iii)(C), 60.5397b(c)(8)(iv), 60.5397b(d), 60.5397b(d)(1), 60.5397b(d)(2), 60.5397b(e), 60.5397b(f), 60.5397b(f)(i), 60.5397b(f)(ii), 60.5397b(f)(iii), 60.5397b(g), 60.5397b(g)(1)(v), 60.5397b(g)(1)(v)(A), 60.5397b(g)(2)(ii), $60.5397b(g)(1)(v)(B), \quad 60.5397b(g)(2),$ 60.5397b(g)(2)(i), 60.5397b(g)(2)(iii), 60.5397b(g)(2)(iv), 60.5397b(g)(3), 60.5397b(g)(3)(i), 60.5397b(g)(3)(ii), 60.5397b(g)(3)(iii), 60.5397b(g)(3)(iv), 60.5397b(g)(4), 60.5397b(h), 60.5397b(h)(1), 60.5397b(h)(1)(i), 60.5397b(h)(1)(ii), 60.5397b(h)(2), 60.5397b(h)(3), 60.5397b(h)(3)(i), 60.5397b(h)(3)(ii), 60.5397b(h)(3)(ii)(A), 60.5397b(h)(3)(ii)(B), 60.5397b(h)(3)(ii)(C), 60.5397b(h)(4)(ii), 60.5397b(h)(4), 60.5397b(h)(4)(i), 60.5397b(h)(4)(iii), 60.5397b(h)(4)(iii)(A), 60.5397b(h)(4)(iii)(B), 60.5397b(h)(4)(iv), 60.5397b(h)(4)(iv)(A), 60.5397b(h)(4)(iv)(B), 60.5397b(h)(4)(v), 60.5410b(k), 60.5397b(i), 60.5410b(k)(1), 60.5410b(k)(2), 60.5410b(k)(3), 60.5410b(k)(4), 60.5410b(k)(5), 60.5415b(1), 60.5397b(j), 60.5415b(1)(1), 60.5415b(1)(2), 60.5415b(1)(3), 60.5415b(1)(4), 60.5420b(b), 60.5397b(k), 60.5420b(b)(1),

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60.5420b(b)(1)(i), 60.5420b(b)(1)(ii), 60.5420b(b)(1)(iii), 60.5420b(b)(1)(iv), 60.5397b(k)], 60.5420b(b)(9), 60.5420b(b)(9)(i)(A), 60.5420b(b)(9)(ii), 60.5420b(b)(9)(ii)(A), 60.5420b(b)(9)(ii)(B), 60.5420b(b)(9)(ii)(C), 60.5420b(b)(9)(ii)(E), 60.5420b(b)(9)(ii)(D), 60.5420b(b)(9)(ii)(F), 60.5420b(b)(9)(ii)(G), 60.5420b(a)(3), 60.5420b(b)(9)(iii, 60.5420b(b)(9)(iii)(A), 60.5420b(b)(9)(iii)(B), 60.5420b(b)(9)(iii)(C), 60.5420b(c), 60.5420b(c)(14), 60.5420b(c)(14)(iv), 60.5420b(c)(14)(i), 60.5420b(c)(14)(v), 60.5420b(c)(14)(v)(A), 60.5420b(c)(14)(v)(B), 60.5420b(c)(14)(v)(C),60.5420b(c)(14)(v)(D), 60.5420b(c)(14)(v)(E), 60.5420b(c)(14)(v)(F), 60.5420b(c)(14)(v)(G), 60.5420b(c)(14)(v)(H), 60.5420b(c)(14)(v)(I), 60.5420b(c)(14)(v)(I)(1), 60.5420b(c)(14)(v)(I)(2),60.5420b(c)(14)(v)(I)(3),60.5420b(c)(14)(v)(I)(4),60.5420b(c)(14)(v)(I)(5), 60.5420b(c)(14)(v)(I)(6),60.5420b(c)(14)(v)(I)(9),60.5420b(c)(14)(v)(I)(7),60.5420b(c)(14)(v)(I)(8),60.5420b(c)(14)(vii), and 60.5420b(c)(14)(viii).

- **E.** Cover and Closed Vent System Requirements
 - 1. Applicability

Subsection III.E applies to all cover and closed vent systems at the facility.

- 2. Closed Vent System Requirements
 - a. The Permittee shall design the closed vent system to capture and route all gases, vapors, and fumes to a process.

[40 CFR 60.5411b(a)(1)]

b. The Permittee shall design and operate the closed vent system with no identifiable emissions as demonstrated by Conditions III.E.5.a and b below.

[40 CFR 60.5411b(a)(3)]

c. The Permittee shall meet the requirements specified in Conditions III.E.2.c(1) and (2) below if the closed vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device or being routed to a process.

[40 CFR 60.5411b(a)(4)]

(1) Except as provided in Conditions III.E.2.c(2), the Permittee shall comply with either Condition III.E.2.c(1)(a) or (b) for each bypass device.

[40 CFR 60.5411b(a)(4)(i)]

(a) The Permittee shall properly install, calibrate, maintain, and operate a flow indicator at the inlet to the bypass device. The flow indicator must be capable of taking periodic readings as specified in Condition III.E.5.a(4)(a) below and sound an alarm, or initiate notification via remote alarm to the nearest field office, when the bypass



device is open such that the stream is being, or could be, diverted away from the control device or process, and sent to the atmosphere. The Permittee shall maintain records of each time the alarm is activated according to Condition III.E.7.c below.

[40 CFR 60.5411b(a)(4)(i)(A)]

(b) The Permittee shall secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.

[40 CFR 60.5411b(a)(4)(i)(B)]

(2) Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of Condition III.E.2.c(1) above.

[40 CFR 60.5411b(a)(4)(ii)]

3. Cover Requirements

a. The cover and all openings on the cover (*e.g.*, access hatches, sampling ports, pressure relief devices and gauge wells) shall form a continuous impermeable barrier of reciprocating compressor rod packing emissions collection system.

[40 CFR 60.5411b(b)(1)]

b. Each cover opening shall be secured in a closed, sealed position (*e.g.*, covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except during those times when it is necessary to use an opening as follows:

[40 CFR 60.5411b(b)(2)]

- (1) To add material to, or remove material from the unit (this includes openings necessary to equalize or balance the internal pressure of the unit following changes in the level of the material in the unit); [40 CFR 60.5411b(b)(2)(i)]
- (2) To inspect or sample the material in the unit;

[40 CFR 60.5411b(b)(2)(ii)]

(3) To inspect, maintain, repair, or replace equipment located inside the unit; or

[40 CFR 60.5411b(b)(2)(iii)]

(4) To vent liquids, gases, or fumes from the unit through a closed vent system designed and operated in accordance with the requirements of Condition III.E.2 above to a control device or to a process.

[40 CFR 60.5411b(b)(2)(iv)]



c. The Permittee shall design and operate the cover with no identifiable emissions as demonstrated by Conditions III.E.5.a and b below, except when operated as provided in Conditions III.E.3.b(1) through (3) above. [40 CFR 60.5411b(b)(4)]

4. Design Requirements

a. The Permittee shall conduct an assessment that the closed vent system is of sufficient design and capacity to ensure that all gases, vapors, and fumes from the affected facility are routed to the control device or process and that the control device or process is of sufficient design and capacity to accommodate all emissions from the affected facility. The assessment must be certified by a qualified professional engineer or an in-house engineer with expertise on the design and operation of the closed vent system in accordance with Conditions III.E.4.a(1) and (2) below.

[40 CFR 60.5411b(c)(1)]

(1) The Permittee shall provide the following certification, signed and dated by a qualified professional engineer or an in-house engineer: "I certify that the closed vent system design and capacity assessment was prepared under my direction or supervision. I further certify that the closed vent system design and capacity assessment was conducted, and this report was prepared pursuant to the requirements of subpart OOOOb of 40 CFR 60. Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete."

[40 CFR 60.5411b(c)(1)(i)]

(2) The assessment shall be prepared under the direction or supervision of a qualified professional engineer or an in-house engineer who signs the certification in Condition III.E.4.a(1) above.

[40 CFR 60.5411b(c)(1)(ii)]

5. Initial and continuous cover and closed vent system inspection and monitoring requirements

For each closed vent system and cover, the Permittee shall comply with the applicable requirements of Conditions III.E.5.a and b below. Each self-contained natural gas process controller must comply with Condition III.E.5.b below. [40 CFR 60.5416b]

a. If the Permittee installs a control device or route emissions to a process, the Permittee shall must inspect each closed vent system according to the procedures and schedule specified in Conditions III.E.5.a(1) and (2) below, inspect each cover according to the procedures and schedule specified in Condition III.E.5.a(3) below, and inspect each bypass device according to the procedures of Condition III.E.5.a(4) below, except as provided in Conditions III.E.5.b(6) and (7) below.



[40 CFR 60.5416b(a)]

(1)For each closed vent system joint, seam, or other connection that is permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange), the Permittee shall meet the requirements specified in Conditions III.E.5.a(1)(a) through (c) below.

[40 CFR 60.5416b(a)(1)]

(a) Conduct an initial inspection according to the test methods and procedures specified in Condition III.E.5.b below to demonstrate that the closed vent system operates with no identifiable emissions within the first 30 calendar days after startup of the affected facility routing emissions through the closed vent system.

[40 CFR 60.5416b(a)(1)(i)]

(b) Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices. The Permittee shall monitor a component or connection using the test methods and procedures in Condition III.E.5.b below to demonstrate that it operates with no identifiable emissions following any time the component is repaired or replaced or the connection is unsealed.

[40 CFR 60.5416b(a)(1)(ii)]

Conduct AVO inspections in accordance with and at the (c) same frequency as specified for fugitive emissions components affected facilities located at the same type of site as specified in Condition III.D.2.f above.

[40 CFR 60.5416b(a)(1)(iii)]

(2)For closed vent system components other than those specified in Condition III.E.5.a(1) above, the Permittee shall meet the requirements of Conditions III.E.5.a(2)(i) through (iv) below.

[40 CFR 60.5416b(a)(2)]

(i) Conduct an initial inspection according to the test methods and procedures specified in Condition III.E.5.b below within the first 30 calendars days after startup of the affected facility routing emissions through the closed vent system to demonstrate that the closed vent system operates with no identifiable emissions.

[40 CFR 60.5416b(a)(2)(i)]

Conduct inspections according to the test (ii) methods, procedures, and frequencies specified



in Condition III.E.5.b to demonstrate that the components or connections operate with no identifiable emissions.

[40 CFR 60.5416b(a)(2)(ii)]

(iii) Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; liquid leaks; or broken or missing caps or other closure devices. The Permittee shall monitor a component or connection using the test methods and procedures in Condition III.E.5.b below to demonstrate that it operates with no identifiable emissions following any time the component is repaired or replaced or the connection is unsealed.

[40 CFR 60.5416b(a)(2)(iii)]

(iv) Conduct AVO inspections in accordance with and at the same frequency as specified for fugitive emissions components affected facilities located at the same type of site, as specified in Condition III.D.2.f above.

[40 CFR 60.5416b(a)(2)(iv)]

(3) For each cover, the Permittee shall meet the requirements of Conditions III.E.5.a(3)(i) through (iv) below.

[40 CFR 60.5416b(a)(3)]

Conduct inspections specified (i) the in ConditionsIII.E.5.a(3)(ii) through (iv) below to identify defects that could result in air emissions and to ensure the cover operates with no identifiable emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover, or between the cover and the separator wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the case where the storage vessel is buried partially or entirely underground, the Permittee shall inspect only those portions of the cover that extend to or above the ground surface, and those connections that are on such portions of the cover (e.g., fill ports, access hatches, gauge wells, etc.) and can be opened to the atmosphere.

[40 CFR 60.5416b(a)(3)(i)]



 (ii) An initial inspection according to the test methods and procedures specified in Condition III.E.5.b below, following installation of the cover to demonstrate that each cover operates with no identifiable emissions.

[40 CFR 60.5416b(a)(3)(ii)]

- (iii) Conduct AVO inspections in accordance with and at the same frequency as specified for fugitive emissions components affected facilities located at the same type of site as specified in Condition III.D.2.f above. Process unit equipment affected facilities must conduct annual AVO inspections concurrent with the inspections required by Condition III.E.5.a(1)(b) above. [40 CFR 60.5416b(a)(3)(iii)]
- (iv) Inspections according to the test methods, procedures, and schedules specified in Condition III.E.5.b below to demonstrate that each cover operates with no identifiable emissions.

[40 CFR 60.5416b(a)(3)(iv)]

(4) For each bypass device, except as provided for in Condition III.E.2.c(2) above, the Permittee shall meet the requirements of Condition III.E.5.a(4)(a) or (b) below.

[40 CFR 60.5416b(a)(4)]

(a) Set the flow indicator to take a reading at least once every 15 minutes at the inlet to the bypass device that could divert the stream away from the control device and to the atmosphere.

[40 CFR 60.5416b(a)(4)(i)]

(b) If the bypass device valve installed at the inlet to the bypass device is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device.

[40 CFR 60.5416b(a)(4)(ii)]

b. If the Permittee is required to conduct an inspection of a closed vent system and cover as specified in Conditions III.E.5.a(1), (2), or (3) above or 40 CFR 60.5398b(b), the Permittee shall meet the requirements of Conditions III.E.5.b(1) through (8) below. The Permittee shall meet the requirements of Conditions III.E.5.b(1), (2), and (4) below, for each self-contained process controller at the process controller affected facility as specified in Condition III.C.2.b above.

[40 CFR 60.5416b(b)]



(1) The Permittee shall conduct initial and periodic no identifiable emissions inspections as specified in Conditions III.E.5.b(1) through (3) below, as applicable.

[40 CFR 60.5416b(b)(1)]

(a) The Permittee shall conduct inspections for no identifiable emissions from the covers and closed vent systems at the reciprocating compressor or process controller, using the procedures for conducting OGI inspections in Condition III.D.2.b(7) above. As an alternative the Permittee may conduct inspections in accordance with Method 21 of appendix A-7 to this part. Monitoring must be conducted at the same frequency as specified for fugitive emissions components affected facilities located at the same type of site, as specified in Condition III.D.2.f above.

[40 CFR 60.5416b(b)(1)(i)]

(b) For covers and closed vent systems located at onshore natural gas processing plants, OGI inspections for no identifiable emissions must be conducted initially and bimonthly in accordance with appendix K to this part. As an alternative the Permittee shall conduct quarterly inspections for no identifiable emissions in accordance with Method 21 of appendix A-7 to 40 CFR 60.

[40 CFR 60.5416b(b)(1)(ii)]

(c) For the self-contained process controller, the Permittee shall conduct initial and quarterly inspections for no identifiable emissions using the procedures for conducting OGI inspections in Condition III.D.2.b(7) above. As an alternative the Permittee may conduct quarterly inspections in accordance with Method 21 of appendix A-7 to 40 CFR 60.

[40 CFR 60.5416b(b)(1)(iii)]

(2) Where OGI is used, the closed vent system, cover, or selfcontained process controller is determined to operate with no identifiable emissions if no emissions are imaged during the inspection. Emissions imaged by OGI constitute a deviation of the no identifiable emissions standard until an OGI inspection conducted determines that the closed vent system, cover, or selfcontained process controller, as applicable, operates with no identifiable emissions.

[40 CFR 60.5416b(b)(2)]

(3) Where AVO inspections are required, the closed vent system or cover is determined to operate with no identifiable emissions if no emissions are detected by AVO. Emissions detected by AVO constitute a deviation of the no identifiable emissions standard


(ii)

until an AVO inspection determines that the closed vent system or cover operates with no identifiable emissions.

[40 CFR 60.5416b(b)(3)]

(4) Where Method 21 of appendix A-7 to 40 CFR 60 is used for the inspection, the requirements of Conditions III.E.5.b(4)(a) through (g) below apply.

[40 CFR 60.5416b(b)(4)]

(a) The detection instrument must meet the performance criteria of Method 21 of appendix A-7 to 40 CFR 60, except that the instrument response factor criteria in section 8.1.1 of Method 21 must be for the average composition of the fluid and not for each individual organic compound in the stream.

[40 CFR 60.5416b(b)(4)(i)]

- (b) The Permittee shall calibrate the detection instrument before use on each day of its use by the procedures specified in Method 21 of appendix A-7 to 40 CFR 60. [40 CFR 60.5416b(b)(4)(ii)]
- (c) Calibration gases must be as specified in Conditions III.E.5.b(4)(c)(i) and (ii) below.

[40 CFR 60.5416b(b)(4)(iii)]

- (i) Zero air (less than 10 parts per million by volume hydrocarbon in air).
 [40 CFR 60.5416b(b)(4)(iii)(A)]
 - A mixture of methane in air at a concentration less than 500 ppmv.

[40 CFR 60.5416b(b)(4)(iii)(B)]

(d) The Permittee may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If the Permittee chooses to adjust the instrument readings for the background level, the Permittee shall determine the background level value according to the procedures in Method 21 of appendix A-7 to 40 CFR 60.

[40 CFR 60.5416b(b)(4)(iv)]

(e) the Permittee's detection instrument must meet the performance criteria specified in Conditions III.E.5.b(4)(e)(i) and (ii) below.

[40 CFR 60.5416b(b)(4)(v)]

(i) Except as provided in Condition III.E.5.b(4)(e)(ii) below, the detection instrument must meet the performance criteria of Method 21



of appendix A-7 to 40 CFR 60, except the instrument response factor criteria in section 8.1.1 of Method 21 must be for the average composition of the process fluid, not each individual volatile organic compound in the stream. For process streams that contain nitrogen, air, or other inerts that are not organic hazardous air pollutants or volatile organic compounds, the Permittee shall calculate the average stream response factor on an inert-free basis.

[40 CFR 60.5416b(b)(4)(v)(A)]

(ii) If no instrument is available that will meet the performance criteria specified in Condition III.E.5.b(4)(e)(i) above, the Permittee may adjust the instrument readings by multiplying by the average response factor of the process fluid, calculated on an inert-free basis, as described in Condition III.E.5.b(4)(e)(i) above.

[40 CFR 60.5416b(b)(4)(v)(B)]

(f) The Permittee shall determine if a potential leak interface operates with no identifiable emissions using the applicable procedure specified in Condition III.E.5.b(4)(f)(i) or (ii) below.

[40 CFR 60.5416b(b)(4)(vi)]

(i) If the Permittee chooses not to adjust the detection instrument readings for the background organic concentration level, then the Permittee shall directly compare the maximum organic concentration value measured by the detection instrument to the applicable value for the potential leak interface as specified in Condition III.E.5.b(4)(g) below.

[40 CFR 60.5416b(b)(4)(vi)(A)]

(ii) If the Permittee chooses to adjust the detection instrument readings for the background organic concentration level, the Permittee shall compare the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in Condition III.E.5.b(4)(d) above with the applicable value for the potential leak interface as specified in Condition III.E.5.b(4)(g) below.

[40 CFR 60.5416b(b)(4)(vi)(B)]



A closed vent system, cover, or self-contained process (g) controller is determined to operate with no identifiable emissions if the organic concentration value determined in Condition III.E.5.b(4)(f) above is less than 500 ppmv. An organic concentration value determined in Condition III.E.5.b(4)(f) above of greater than or equal to 500 ppmv constitutes a deviation of the no identifiable emissions standard until an inspection conducted in accordance with Condition III.E.5.b(4) above determines that the closed vent system, cover, or self-contained process controller, as applicable, operates with no identifiable emissions.

[40 CFR 60.5416b(b)(4)(vii)]

Whenever emissions or a defect is detected, the Permittee shall (5)repair the emissions or defect as soon as practicable according to the requirements of Conditions III.E.5.b(5)(a) through (c) below, except as provided in Condition III.E.5.b(6) below. [40 CFR 60.5416b(b)(5)]

- (a) A first attempt at repair must be made no later than 5 calendar days after the emissions or defect is detected. [40 CFR 60.5416b(b)(5)(i)]
- (b) Repair must be completed no later than 30 calendar days after the emissions or defect is detected. [40 CFR 60.5416b(b)(5)(ii)]
- (c) For covers, grease or another substance compatible with the gasket material must be applied to deteriorating or cracked gaskets to improve the seal while awaiting repair. [40 CFR 60.5416b(b)(5)(iii)]
- (6) Delay of repair of a closed vent system or cover for which emissions or defects have been detected is allowed if the repair is technically infeasible without a shutdown, or if the Permittee determines that emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. The Permittee shall complete repair of such equipment by the end of the next shutdown.

[40 CFR 60.5416b(b)(6)]

The Permittee may designate any parts of the closed vent system (7)or cover as unsafe to inspect if the requirements of Conditions III.E.5.b(7)(a) and (b) below are met. Unsafe to inspect parts are exempt from the inspection requirements of Conditions III.E.5.b(1) through (3) above.

[40 CFR 60.5416b(b)(7)]

(a) the Permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to



an imminent or potential danger as a consequence of complying with Condition III.E.5.b(1), (2), or (3) above. [40 CFR 60.5416b(b)(7)(i)]

(b) the Permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-toinspect times.

[40 CFR 60.5416b(b)(7)(ii)]

(8) The Permittee may designate any parts of the closed vent system or cover as difficult to inspect if the requirements of Conditions III.E.5.b(8)(a) and (b) below are met. Difficult to inspect parts are exempt from the inspection requirements of Condition III.E.5.b(1) through (3) above.

[40 CFR 60.5416b(b)(8)]

(a) The Permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface.

[40 CFR 60.5416b(b)(8)(i)]

- (b) The Permittee shall have a written plan that requires inspection of the equipment at least once every 5 years. [40 CFR 60.5416b(b)(8)(ii)]
- 6. Reporting Requirements

For the reciprocating compressor or process controller which uses a closed vent system to route to a process, the Permittee shall submit the information in Conditions III.E.6.a through d below. For the reciprocating compressor, the permittee shall submit the information in Conditions III.E.6.a and b below.

[40 CFR 60.5416b(b)(9) and 40 CFR 60.5420b(b)(11)]

- a. Dates of each inspection required under Conditions III.E.5.a and b above. [40 CFR 60.5420b(b)(11)(i)]
- b. Each defect or emissions identified during each inspection and the date of repair or the date of anticipated repair if the repair is delayed. [40 CFR 60.5420b(b)(11)(ii)]
- c. Date and time of each bypass alarm or each instance the key is checked out if the Permittee is subject to the bypass requirements of Condition III.E.5.a(4) above.

[40 CFR 60.5420b(b)(11)(iii)]

d. The Permittee shall submit the certification signed by the qualified professional engineer or in-house engineer according to Condition III.E.4 above for each closed vent system routing to a control device or process in the reporting year in which the certification is signed.

[40 CFR 60.5420b(b)(11)(iv)]



7. Recordkeeping Requirements

The Permittee shall maintain records of all inspection results as specified in Conditions III.E.7.a through c below.

[40 CFR 60.5416b(b)(9)]

a. Records of each closed vent system inspection required under Conditions III.E.5.a(1) and (2) above, and Condition III.E.5.b above for the reciprocating compressor and each process controller as required in Conditions III.E.7.a(1) through (4) below.

[40 CFR 60.5420b(c)(8)]

- (1) A record of each closed vent system inspection or no identifiable emissions monitoring survey. The Permittee shall include an identification number for each closed vent system (or other unique identification description selected by the Permittee), the date of the inspection, and the method used to conduct the inspection (*i.e.*, visual, AVO, OGI, Method 21 of appendix A-7 to 40 CFR 60). [40 CFR 60.5420b(c)(8)(i)]
- (2) For each defect or emissions detected during inspections required by Conditions III.E.5.a(1) and (2) above, or Condition III.E.5.b above the Permittee shall record the location of the defect or emissions; a description of the defect; the maximum concentration reading obtained if using Method 21 of appendix A-7 to 40 CFR 60; the indication of emissions detected by AVO if using AVO; the date of detection; the date of each attempt to repair the emissions or defect; the corrective action taken during each attempt to repair the defect; and the date the repair to correct the defect or emissions is completed.

[40 CFR 60.5420b(c)(8)(ii)]

(3) If repair of the defect is delayed as described in Condition III.E.5.b(6) above, the Permittee shall record the reason for the delay and the date the Permittee expects to complete the repair. [40 CFR 60.5420b(c)(8)(iii)]

(4) Parts of the closed vent system designated as unsafe to inspect as described in Condition III.E.5.b(7) above, or difficult to inspect as described in Condition III.E.5.b(8) above, the reason for the designation, and written plan for inspection of that part of the closed vent system.

[40 CFR 60.5420b(c)(8)(iv)]

b. A record of each cover inspection required under Condition III.E.5.b(3) above for the reciprocating compressor as required in Conditions III.E.7.b(1) through (4) below.

[40 CFR 60.5420b(c)(9)]

(1) The Permittee shall must include an identification number for each cover (or other unique identification description selected by the



Permittee), the date of the inspection, and the method used to conduct the inspection (*i.e.*, AVO, OGI, Method 21 of appendix A-7 to 40 CFR 60).

[40 CFR 60.5420b(c)(9)(i)]

(2) For each defect detected during the inspection the Permittee shall record the location of the defect; a description of the defect, the date of detection, the maximum concentration reading obtained if using Method 21 of appendix A-7 to 40 CFR 60; the indication of emissions detected by AVO if using AVO; the date of each attempt to repair the defect; the corrective action taken during each attempt to repair the defect; and the date the repair to correct the defect is completed.

[40 CFR 60.5420b(c)(9)(ii)]

(3) If repair of the defect is delayed as described Condition III.E.5.b(6) above, the Permittee shall record the reason for the delay and the date the Permittee expects to complete the repair.

[40 CFR 60.5420b(c)(9)(iii)]

(4) Parts of the cover designated as unsafe to inspect as described in Condition III.E.5.b(7) above or difficult to inspect as described in Condition III.E.5.b(8) above, the reason for the designation, and written plan for inspection of that part of the cover.

[40 CFR 60.5420b(c)(9)(iv)]

c. For each bypass subject to the bypass requirements of Condition III.E.5.b(4) above, the Permittee shall maintain a record of the following, as applicable: readings from the flow indicator; each inspection of the seal or closure mechanism; the date and time of each instance the key is checked out; date and time of each instance the alarm is sounded.

[40 CFR 60.5420b(c)(10)]

8. Permit Shield

Compliance with the conditions of this subsection shall be deemed compliance with 40 CFR 60.5411b(a)(1), 60.5411b(a)(3), 60.5411b(a)(4), 60.5411b(a)(4)(i), 60.5411b(a)(4)(i)(A), 60.5411b(a)(4)(i)(B), 60.5411b(a)(4)(ii), 60.5411b(b)(1), 60.5411b(b)(2)(ii), 60.5411b(b)(2), 60.5411b(b)(2)(i), 60.5411b(b)(2)(iii), 60.5411b(b)(2)(iv), 60.5411b(b)(4), 60.5411b(c)(1), 60.5411b(c)(1)(i), 60.5411b(c)(1)(ii), 60.5416b, 60.5416b(a), 60.5416b(a)(1), 60.5416b(a)(1)(i),60.5416b(a)(1)(ii), 60.5416b(a)(1)(iii), 60.5416b(a)(2), 60.5416b(a)(2)(i), 60.5416b(a)(2)(ii), 60.5416b(a)(2)(iii), 60.5416b(a)(2)(iv), 60.5416b(a)(3), 60.5416b(a)(3)(i), 60.5416b(a)(3)(ii), 60.5416b(a)(3)(iii), 60.5416b(a)(3)(iv), 60.5416b(a)(4), 60.5416b(a)(4)(i), 60.5416b(a)(4)(ii), 60.5416b(b), 60.5416b(b)(1), 60.5416b(b)(1)(i), 60.5416b(b)(1)(ii), 60.5416b(b)(1)(iii), 60.5416b(b)(2), 60.5416b(b)(3), 60.5416b(b)(4), 60.5416b(b)(4)(i), 60.5416b(b)(4)(ii), 60.5416b(b)(4)(iii), 60.5416b(b)(4)(iii)(A), 60.5416b(b)(4)(iii)(B), 60.5416b(b)(4)(iv), 60.5416b(b)(4)(v), 60.5416b(b)(4)(v)(A), 60.5416b(b)(4)(v)(B), 60.5416b(b)(4)(vi),



IV. EMERGENCY ENGINE REQUIREMENTS

60.5416b(b)(4)(vi)(A), 60.5416b(b)(4)(vi)(B), 60.5416b(b)(4)(vii), 60.5416b(b)(5), 60.5416b(b)(5)(i), 60.5416b(b)(5)(ii), 60.5416b(b)(5)(iii), 60.5416b(b)(6), 60.5416b(b)(7), 60.5416b(b)(7)(i), 60.5416b(b)(7)(ii), 60.5416b(b)(8), 60.5416b(b)(8)(i), 60.5416b(b)(8)(ii), 60.5416b(b)(9), 60.5420b(b)(11), 60.5420b(b)(11)(i), 60.5420b(b)(11)(ii), 60.5420b(b)(11)(iii), 60.5420b(b)(11)(iv), 60.5416b(b)(9), 60.5420b(c)(8), 60.5420b(c)(8)(i), 60.5420b(c)(8)(ii), 60.5420b(c)(8)(iii), 60.5420b(c)(8)(iv), 60.5420b(c)(9), 60.5420b(c)(9)(i), 60.5420b(c)(9)(ii), 60.5420b(c)(9)(iii), 60.5420b(c)(9)(iv), and 60.5420b(c)(10).

IV. EMERGENCY ENGINE REQUIREMENTS

A. Applicability

This Section applies to the emergency generator listed in Attachment "C."

B. Operating Requirements

The Permittee shall install a non-resettable hour meter prior to start-up of the engine.

[A.A.C. R18-2-306.A.3, A.A.C. R18-2-331.A.3.c, 40 CFR 60.4243(d)] [Material Permit Conditions are indicated by underline and italics]

- **C.** Emission Standards
 - 1. The Permittee shall operate and maintain emergency generator that achieves the emission standards as required by 40 CFR 60 Subpart JJJJ over the entire life of the engine.

[40 CFR 60.4234]

2. The Permittee shall comply with the emission standards listed in Table 1 of 40 CFR 60 Subpart JJJJ for the emergency generator.

[40 CFR 60.4233(e)]

- **D.** Compliance Requirements
 - 1. The Permittee shall keep records of conducted maintenance to demonstrate compliance and also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply. If the Permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the emergency generator will not be considered out of compliance.

[40 CFR 60.4243(a)(1)]

2. The Permittee shall demonstrate compliance with IV.C.2 by purchasing an engine certified according to procedures specified in Condition IV.D.1.

[40 CFR 60.4243(b)]

3. The Permittee shall operate the emergency generator according to the requirements in Conditions IV.D.3.a through c below. In order for the engine to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-



emergency situations for 50 hours per year, as described in Conditions IV.D.3.a through c below, is prohibited. If the Permittee does not operate the engine according to the requirements in Conditions IV.D.3.a through c below, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

[40 CFR 60.4243(d)]

- a. There is no time limit on the use of emergency generator in emergency situations.
- b. The Permittee shall operate emergency generator for any combination of the purposes specified in Conditions IV.D.3.a through c for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition IV.D.3.c counts as part of the 100 hours per calendar year allowed by Condition IV.D.3.b.
 - (1) The emergency generator may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- c. The emergency generator may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Condition IV.D.3.b. Except as provided in Condition IV.D.3.a, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - (1) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.



- (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (d) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (e) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the Permittee.
- E. Notification, Reporting, and Recordkeeping Requirements
 - 1. The Permittee operating an applicable stationary SI ICE shall meet the following recordkeeping requirements:

[40 CFR 60.4245(a)]

- a. Records of all notifications submitted to comply with this Section and all documentation supporting any notification.
- b. Maintenance conducted on the engine.
- c. 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.
- 2. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

[40 CFR 60.4245(b)]

F. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4234 60.4233(e), 60.4243(a)(1), 60.4243(b), 60.4243(d), 60.4245(a), and 60.4245(b). [A.A.C. R18-2-325]

V. FUGITIVE DUST REQUIREMENTS

A. Applicability

Section V applies to any non-point source of fugitive dust in the facility.

B. Particulate Matter and Opacity



- 1. Emission Limitations/Standards
 - a. Opacity of emissions from any fugitive dust non-point source shall not be greater than 40%.

[A.A.C. R18-2-614]

- b. The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:
 - (1) Keep dust and other types of air contaminants to a minimum in an open area where construction operations, repair operations, demolition activities, clearing operations, leveling operations, or any earth moving or excavating activities are taking place, by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means;

[A.A.C. R18-2-604.A]

(2) Keep dust to a minimum from driveways, parking areas, and vacant lots where motor vehicular activity occurs by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means;

[A.A.C. R18-2-604.B]

(3) Keep dust and other particulates to a minimum by employing dust suppressants, temporary paving, detouring, wetting down or by other reasonable means when a roadway or alley is used, repaired, constructed, or reconstructed;

[A.A.C. R18-2-605.A]

(4) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits;

[A.A.C. R18-2-605.B]

(5) Any other method as proposed by the Permittee and approved by the Director.

[A.A.C. R18-2-306.A.3.c]

2. Monitoring and Recordkeeping Requirements

The Permittee shall maintain records of the dates on which any of the activities listed in Condition V.B.1.b above were performed and the control measures that were adopted.

[A.A.C. R18-2-306.A.3.c]



C. Permit Shield

Compliance with Section V shall be deemed compliance with A.A.C. R18-2-604. -605, and -614.

[A.A.C. R18-2-325]

VI. OTHER PERIODIC ACTIVITIES

- **A.** Abrasive Blasting
 - 1. Particulate Matter and Opacity
 - a. Emission Limitations and Standards

The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

[A.A.C. R18-2-726]

- (1) Wet blasting;
- (2) Effective enclosures with necessary dust collecting equipment; or
- (3) Any other method approved by the Director.
- b. Opacity

The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 20% opacity.

[A.A.C. R18-2-702.B.3]

- 2. Monitoring and Recordkeeping Requirements
 - a. Each time an abrasive blasting project is conducted, the Permittee shall make a record of the following:

[A.A.C. R18-2-306.A.3.c]

- (1) The date the project was conducted;
- (2) The duration of the project; and
- (3) Type of control measures employed.
- b. Each time an abrasive blasting project is conducted, the Permittee shall monitor visible emissions from the project in accordance with Condition I.A of Attachment "B".

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield



Compliance with Condition VI.A.1.a shall be deemed compliance with A.A.C. R18-2-702.B.3 and -726.

[A.A.C. R18-2-325]

- **B.** Use of Paints
 - 1. Volatile Organic Compounds
 - a. Emission Limitations and Standards

While performing spray painting operations, the Permittee shall comply with the following requirements:

- (1) The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray. [A.A.C. R18-2-727.A]
- (2) The Permittee or their designated contractor shall not either:
 - (a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
 - (b) Thin or dilute any architectural coating with a photochemically reactive solvent.

[A.A.C. R18-2-727.B]

(3) For the purposes of Condition VI.B.1.a(1), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Condition VI.B.1.a(2), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

[A.A.C. R18-2-727.C]

(a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturationhydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.

[[A.A.C. R18-2-727.C.1]

(b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.

[A.A.C. R18-2-727.C.2]



(c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

[A.A.C. R18-2-727.C.3]

(4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Condition VI.B.1.a(3), it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

[A.A.C. R18-2-727.D]

b. Monitoring and Recordkeeping Requirements

(1) Each time a spray painting project is conducted, the Permittee shall make a record of the following:

[A.A.C. R18-2-306.A.3.c]

- (a) The date the project was conducted;
- (b) The duration of the project;
- (c) Type of control measures employed;
- (d) Safety Data Sheets (SDS) for all paints and solvents used in the project; and
- (e) The amount of paint consumed during the project.
- (2) Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition VI.B.1.b(1).

c. Permit Shield

Compliance with Condition VI.B.1.a shall be deemed compliance with A.A.C. R18-2-727.

[A.A.C. R18-2-325]

2. Opacity

a. Emission Limitation and Standard

The Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 20% opacity.

[A.A.C. R18-2-702.B.3]

b. Monitoring, Recordkeeping and Reporting Requirements



Each time a spray painting project is conducted, the Permittee shall monitor visible emissions in accordance with Condition I.A of Attachment "B".

c. Permit Shield

Compliance with Condition VI.B.2.a shall be deemed compliance with A.A.C. R18-2-702.B.3.

[A.A.C. R18-2-325]

C. Demolition and Renovation - Hazardous Air Pollutants

1. Emission Limitation/Standard

The Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M for National Emissions Standards for Hazardous Air Pollutants - Asbestos. [A.A.C. R18-2-1101.A.12]

2. Monitoring and Recordkeeping Requirement

The Permittee shall keep all required records in a file. The required records shall include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with the Condition VI.C.1 shall be deemed compliance with A.A.C. R18-2-1101.A.12.

[A.A.C. R18-2-325]



EQUIPMENT LIST

ATTACHMENT "C": EQUIPMENT LIST

EQUIPMENT TYPE	MAX. CAPACITY	MAKE	MODEL	SERIAL NUMBER	INSTALLATION/ MFG. DATE	EQUIPMENT ID NUMBER	A.A.C. / NSPS / NESHAP
Compressor Engine	5,000 bhp	Caterpillar	G3616	TBD	2024+	TBD	NSPS Subpart JJJJ NESHAP Subpart ZZZZ
Single Stage Reciprocating Natural Gas Compressor	TBD	Ariel KBC	6- Throws	TBD	2024+	TBD	NSPS Subpart OOOOb
Emergency Generator	1,006 hp	TBD	TBD	TBD	2024+	TBD	NSPS Subpart JJJJ NESHAP Subpart ZZZZ