



Tuesday, May 12, 2015

William F. Durham
Director
WVDEP, Division of Air Quality
601 – 57th Street
Charleston, West Virginia 25304

Re: Class 1 Administrative Permit Modification
Facility ID 103-00065, R13-3060
Winters Compressor Station, New Martinsville, West Virginia

Dear Mr. Durham:

SLR International Corporation (SLR) has prepared the attached Class 1 Administrative Update to the source's Rule 13 Permit Application on behalf of Stone Energy Corporation (Stone) for the Winters Compressor Station located near New Martinsville, West Virginia.

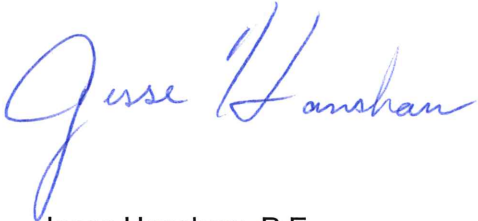
Stone would like to reflect the installation of an electric VRU compressor instead of the originally permitted natural gas engine. Additionally, while reviewing the closed vent system (CVS) leak detection and monitoring requirements associated with this equipment it was found to be outdated and based on sections of NSPS, Subpart OOOO that have been amended by US EPA. Although the tanks are not subject to OOOO control their venting system is subject to the closed vent and cover requirement of the Regulation. Therefore, it is proposed that this permit be updated to reflect the current CVS requirements to assure the emission reduction device is practically enforceable.

Furthermore, to enhance compliance clarity we are providing a proposed markup of the draft permit that reflects the change listed above as well as the removal of all non-applicable requirements and possibly unnecessary VE and fuel usage monitoring that pertains to small natural gas burners associated with Rule 2 exempt fuel burning units, less than 10 MMBtu/hr.

Tuesday, May 12, 2015
Page 2

If any additional information is needed, please don't hesitate contacting me by telephone at (304) 545-8563 or by e-mail at jhanshaw@slrconsulting.com.

Sincerely,
SLR International Corporation



Jesse Hanshaw, P.E.
Principal Engineer
JH:lev

Attachment: Rule 13 Administrative Permit Modification Application
cc Brian Burns, Stone Energy Corporation



global environmental solutions

Stone Energy Corporation

Winters Compressor Station

103-00065

New Martinsville, West Virginia

Rule 13 Administrative Permit Application

SLR Ref: 116.01038.00018

May 2015



Winters Compressor Station Rule 13 Administrative Permit Application

Prepared for:

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia 26508

This document has been prepared by SLR International Corporation. The material and data in this permit application were prepared under the supervision and direction of the undersigned.

A handwritten signature in blue ink that reads "Chris Boggess". The signature is fluid and cursive, written over a horizontal line.

Chris Boggess
Associate Engineer

A handwritten signature in blue ink that reads "Jesse Hanshaw". The signature is fluid and cursive, written over a horizontal line.

Jesse Hanshaw, P.E.
Principal Engineer

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APPENDICES

APPENDIX A	SUGGESTED DRAFT PERMIT LANGUAGE
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Notes:

- ATTACHMENT M – Proposed permit modifications have no effect on air pollution control devices
- ATTACHMENT P – Public Notice not required for Class I Administrative Updates
- ATTACHMENT Q – No information contained within this application is claimed confidential
- ATTACHMENT R – No delegation of authority
- ATTACHMENT S – Not a Title V Permit Revision

APPLICATION FOR PERMIT

Rule 13 Administrative Permit Application

**Winters Compressor Station, 103-00065
New Martinsville, West Virginia**

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015



WEST VIRGINIA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY

601 57th Street, SE
Charleston, WV 25304
(304) 926-0475
www.dep.wv.gov/daq

**APPLICATION FOR NSR PERMIT
AND
TITLE V PERMIT REVISION
(OPTIONAL)**

PLEASE CHECK ALL THAT APPLY TO **NSR (45CSR13)** (IF KNOWN):

- ☐ CONSTRUCTION ☐ MODIFICATION ☐ RELOCATION
☒ CLASS I ADMINISTRATIVE UPDATE ☐ TEMPORARY
☐ CLASS II ADMINISTRATIVE UPDATE ☐ AFTER-THE-FACT

PLEASE CHECK TYPE OF **45CSR30 (TITLE V)** REVISION (IF ANY):

- ☐ ADMINISTRATIVE AMENDMENT ☐ MINOR MODIFICATION
☐ SIGNIFICANT MODIFICATION

IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS **ATTACHMENT S** TO THIS APPLICATION

FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.

Section I. General

1. Name of applicant (as registered with the WV Secretary of State's Office):

Stone Energy Corporation

2. Federal Employer ID No. (**FEIN**):

721235413

3. Name of facility (if different from above):

Winters Compressor Station

4. The applicant is the:

☐ OWNER ☐ OPERATOR ☒ BOTH

5A. Applicant's mailing address:

1300 Fort Pierpont, Suite 201
Morgantown WV, 26508

5B. Facility's present physical address:

Approx. 3.5 miles from New Martinsville, WV along County Route 22

6. **West Virginia Business Registration.** Is the applicant a resident of the State of West Virginia? ☒ YES ☐ NO

- If **YES**, provide a copy of the **Certificate of Incorporation/Organization/Limited Partnership** (one page) including any name change amendments or other Business Registration Certificate as **Attachment A**.
- If **NO**, provide a copy of the **Certificate of Authority/Authority of L.L.C./Registration** (one page) including any name change amendments or other Business Certificate as **Attachment A**.

7. If applicant is a subsidiary corporation, please provide the name of parent corporation:

8. Does the applicant own, lease, have an option to buy or otherwise have control of the *proposed site*? ☒ YES ☐ NO

- If **YES**, please explain: **The applicant owns the site.**
- If **NO**, you are not eligible for a permit for this source.

9. Type of plant or facility (stationary source) to be **constructed, modified, relocated, administratively updated or temporarily permitted** (e.g., coal preparation plant, primary crusher, etc.): **Natural Gas Compressor Station**

10. North American Industry Classification System (**NAICS**) code for the facility:

211111

11A. DAQ Plant ID No. (for existing facilities only):

103-00065

11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only):

R13-3060

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

12A. – For Modifications, Administrative Updates or Temporary permits at an existing facility, please provide directions to the <i>present location</i> of the facility from the nearest state road; – For Construction or Relocation permits , please provide directions to the <i>proposed new site location</i> from the nearest state road. Include a MAP as Attachment B . From the intersection of State Route 2 and North Street/Doolin Run Rd head east for 1.1 miles. Turn left onto County Route 22 and travel approx 2.4 miles. The station is located on the left		
12.B. New site address (if applicable): N/A	12C. Nearest city or town: New Martinsville	12D. County: Wetzel
12.E. UTM Northing (KM): 4,389.060	12F. UTM Easting (KM): 516.139	12G. UTM Zone: 17
13. Briefly describe the proposed change(s) at the facility: Removal of permitted engine that was never installed, plus removal of outdated closed vent system LDAR requirements, fuel monitoring requirements on small line heaters, and visual emission requirements also on the small line heaters		
14A. Provide the date of anticipated installation or change: After the Fact – If this is an After-The-Fact permit application, provide the date upon which the proposed change did happen: NA		14B. Date of anticipated Start-Up if a permit is granted: NA
14C. Provide a Schedule of the planned Installation of/Change to and Start-Up of each of the units proposed in this permit application as Attachment C (if more than one unit is involved).		
15. Provide maximum projected Operating Schedule of activity/activities outlined in this application: <div style="display: flex; justify-content: space-around;"> Hours Per Day 24 Days Per Week 7 Weeks Per Year 52 </div>		
16. Is demolition or physical renovation at an existing facility involved? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
17. Risk Management Plans. If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see www.epa.gov/ceppo), submit your Risk Management Plan (RMP) to U. S. EPA Region III.		
18. Regulatory Discussion. List all Federal and State air pollution control regulations that you believe are applicable to the proposed process (<i>if known</i>). A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance (<i>if known</i>). Provide this information as Attachment D .		
Section II. Additional attachments and supporting documents.		
19. Include a check payable to WVDEP – Division of Air Quality with the appropriate application fee (per 45CSR22 and 45CSR13).		
20. Include a Table of Contents as the first page of your application package.		
21. Provide a Plot Plan , e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as Attachment E (Refer to Plot Plan Guidance) . – Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).		
22. Provide a Detailed Process Flow Diagram(s) showing each proposed or modified emissions unit, emission point and control device as Attachment F .		
23. Provide a Process Description as Attachment G . – Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).		
All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.		

24. Provide **Material Safety Data Sheets (MSDS)** for all materials processed, used or produced as **Attachment H**.
 – For chemical processes, provide a MSDS for each compound emitted to the air.

25. Fill out the **Emission Units Table** and provide it as **Attachment I**.

26. Fill out the **Emission Points Data Summary Sheet (Table 1 and Table 2)** and provide it as **Attachment J**.

27. Fill out the **Fugitive Emissions Data Summary Sheet** and provide it as **Attachment K**.

28. Check all applicable **Emissions Unit Data Sheets** listed below:

<input type="checkbox"/> Bulk Liquid Transfer Operations	<input type="checkbox"/> Haul Road Emissions	<input type="checkbox"/> Quarry
<input type="checkbox"/> Chemical Processes	<input type="checkbox"/> Hot Mix Asphalt Plant	<input type="checkbox"/> Solid Materials Sizing, Handling and Storage Facilities
<input type="checkbox"/> Concrete Batch Plant	<input type="checkbox"/> Incinerator	<input type="checkbox"/> Storage Tanks
<input type="checkbox"/> Grey Iron and Steel Foundry	<input type="checkbox"/> Indirect Heat Exchanger	

☒ General Emission Unit, specify: **Compressor Engine**

Fill out and provide the **Emissions Unit Data Sheet(s)** as **Attachment L**.

29. Check all applicable **Air Pollution Control Device Sheets** listed below:

<input type="checkbox"/> Absorption Systems	<input type="checkbox"/> Baghouse	<input type="checkbox"/> Flare
<input type="checkbox"/> Adsorption Systems	<input type="checkbox"/> Condenser	<input type="checkbox"/> Mechanical Collector
<input type="checkbox"/> Afterburner	<input type="checkbox"/> Electrostatic Precipitator	<input type="checkbox"/> Wet Collecting System

☐ Other Collectors, specify

Fill out and provide the **Air Pollution Control Device Sheet(s)** as **Attachment M**.

30. Provide all **Supporting Emissions Calculations** as **Attachment N**, or attach the calculations directly to the forms listed in Items 28 through 31.

31. **Monitoring, Recordkeeping, Reporting and Testing Plans.** Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as **Attachment O**.
 ➤ Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.

32. **Public Notice.** At the time that the application is submitted, place a **Class I Legal Advertisement** in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and **Example Legal Advertisement** for details). Please submit the **Affidavit of Publication** as **Attachment P** immediately upon receipt.

33. **Business Confidentiality Claims.** Does this application include confidential information (per 45CSR31)?
☐ YES ☒ NO
 ➤ If **YES**, identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's **"Precautionary Notice – Claims of Confidentiality"** guidance found in the **General Instructions** as **Attachment Q**.

Section III. Certification of Information

34. **Authority/Delegation of Authority.** Only required when someone other than the responsible official signs the application. Check applicable **Authority Form** below:

<input type="checkbox"/> Authority of Corporation or Other Business Entity	<input type="checkbox"/> Authority of Partnership
<input type="checkbox"/> Authority of Governmental Agency	<input type="checkbox"/> Authority of Limited Partnership

Submit completed and signed **Authority Form** as **Attachment R**.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

35A. Certification of Information. To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

Certification of Truth, Accuracy, and Completeness

I, the undersigned ☒ **Responsible Official** / ☐ **Authorized Representative**, hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

SIGNATURE _____

(Please use blue ink)

DATE: _____

(Please use blue ink)

35B. Printed name of signee: Mr. Richard L. Toothman

35C. Title:

Sr. Vice President Appalachia

35D. E-mail:

ToothmanRL@StoneEnergy.com

36E. Phone: 304-225-1600

36F. FAX

36A. Printed name of contact person (if different from above): Nate Lanham

36B. Title: Consultant

36C. E-mail: nlanham@slrconsulting.com

36D. Phone: 681-205-8949

36E. FAX: 681-205-8969

PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Attachment A: Business Certificate | <input checked="" type="checkbox"/> Attachment K: Fugitive Emissions Data Summary Sheet |
| <input checked="" type="checkbox"/> Attachment B: Map(s) | <input checked="" type="checkbox"/> Attachment L: Emissions Unit Data Sheet(s) |
| <input checked="" type="checkbox"/> Attachment C: Installation and Start Up Schedule | <input type="checkbox"/> Attachment M: Air Pollution Control Device Sheet(s) |
| <input checked="" type="checkbox"/> Attachment D: Regulatory Discussion | <input checked="" type="checkbox"/> Attachment N: Supporting Emissions Calculations |
| <input checked="" type="checkbox"/> Attachment E: Plot Plan | <input checked="" type="checkbox"/> Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans |
| <input checked="" type="checkbox"/> Attachment F: Detailed Process Flow Diagram(s) | <input type="checkbox"/> Attachment P: Public Notice |
| <input checked="" type="checkbox"/> Attachment G: Process Description | <input type="checkbox"/> Attachment Q: Business Confidential Claims |
| <input type="checkbox"/> Attachment H: Material Safety Data Sheets (MSDS) | <input type="checkbox"/> Attachment R: Authority Forms |
| <input checked="" type="checkbox"/> Attachment I: Emission Units Table | <input type="checkbox"/> Attachment S: Title V Permit Revision Information |
| <input checked="" type="checkbox"/> Attachment J: Emission Points Data Summary Sheet | <input checked="" type="checkbox"/> Application Fee |

Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.

FOR AGENCY USE ONLY – IF THIS IS A TITLE V SOURCE:

- ☐ Forward 1 copy of the application to the Title V Permitting Group and:
- ☐ For Title V Administrative Amendments:
- ☐ NSR permit writer should notify Title V permit writer of draft permit,
- ☐ For Title V Minor Modifications:
- ☐ Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,
- ☐ NSR permit writer should notify Title V permit writer of draft permit.
- ☐ For Title V Significant Modifications processed in parallel with NSR Permit revision:
- ☐ NSR permit writer should notify a Title V permit writer of draft permit,
- ☐ Public notice should reference both 45CSR13 and Title V permits,
- ☐ EPA has 45 day review period of a draft permit.

ATTACHMENT A

BUSINESS CERTIFICATE

Rule 13 Administrative Permit Application

Winters Compressor Station, 103-00065
New Martinsville, West Virginia

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

20

State of West Virginia



Certificate

*I, Betty Ireland, Secretary of State of the
State of West Virginia, hereby certify that*

STONE ENERGY CORPORATION

Control Number: 97941

a corporation formed under the laws of Delaware

has filed its "Application for Certificate of Authority" to transact business in West Virginia as required by the provisions of the West Virginia Code. I hereby declare the organization to be registered as a foreign corporation from its effective date of November 2, 2007

Therefore, I issue this

CERTIFICATE OF AUTHORITY

to the corporation authorizing it to transact business in West Virginia



*Given under my hand and the
Great Seal of the State of
West Virginia on this day of
November 2, 2007*

Betty Ireland

Secretary of State

ATTACHMENT B

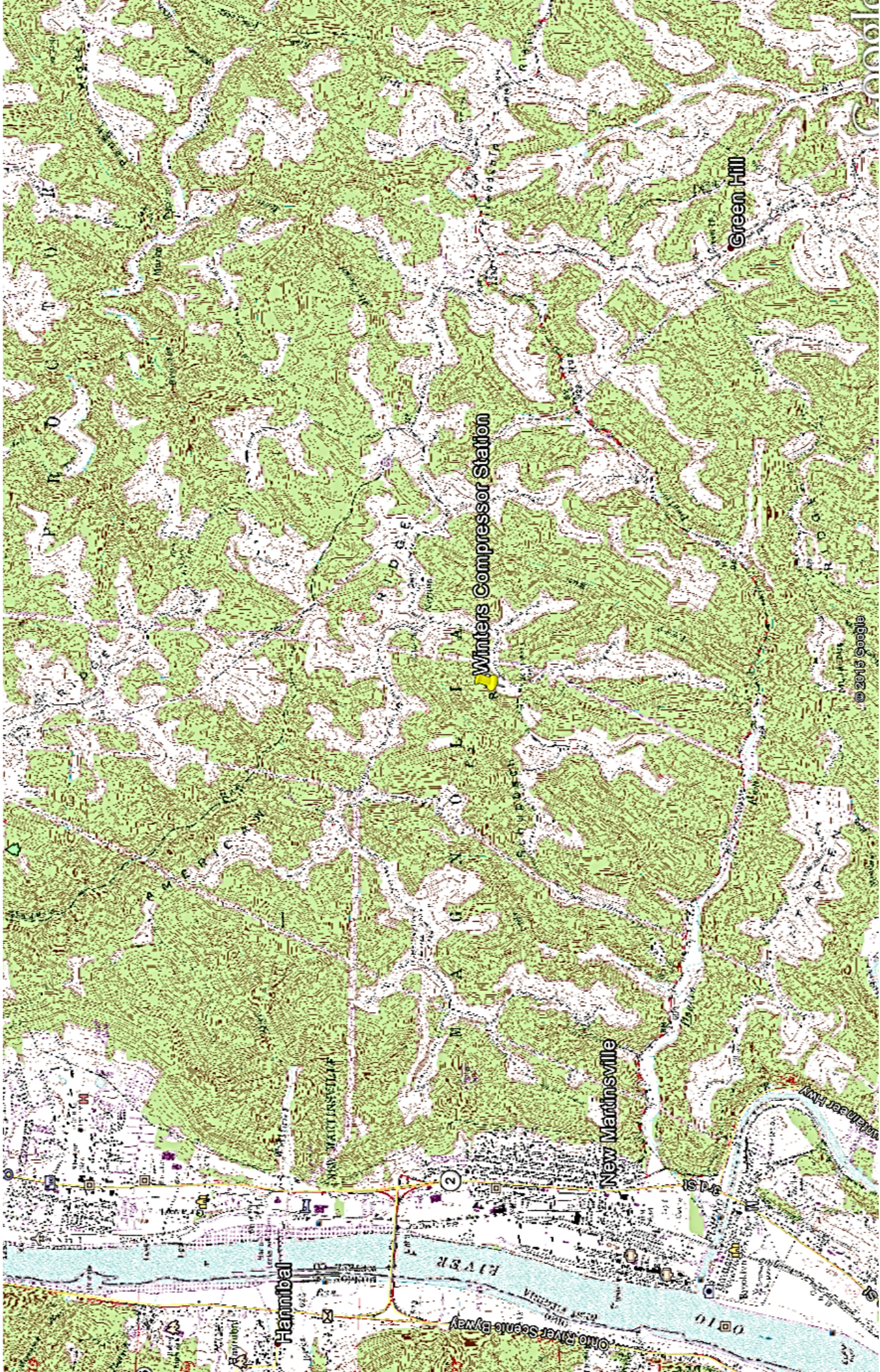
MAP

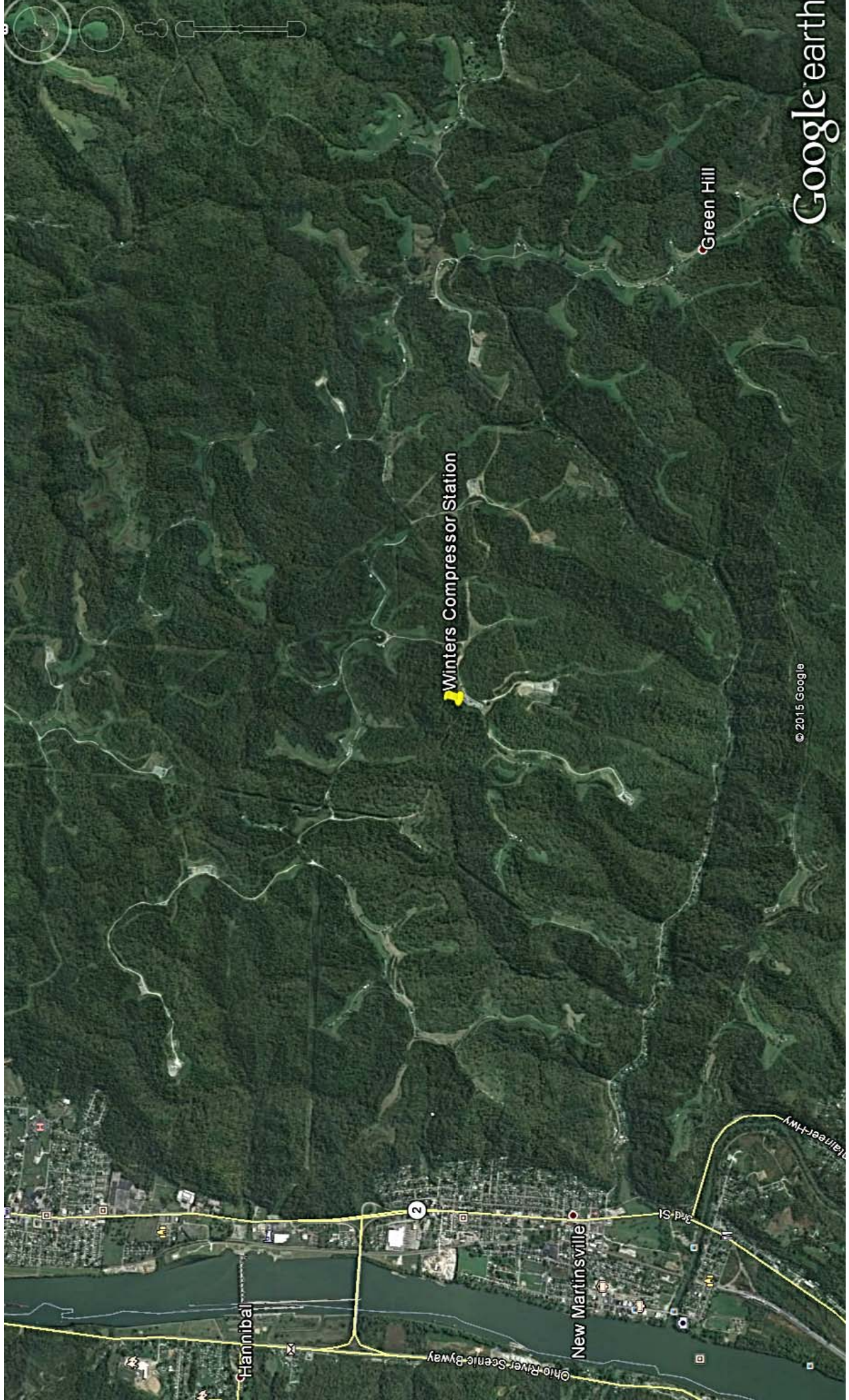
Rule 13 Administrative Permit Application

**Winters Compressor Station, 103-00065
New Martinsville, West Virginia**

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015





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ATTACHMENT C

INSTALLATION AND START-UP

Rule 13 Administrative Permit Application

Winters Compressor Station, 103-00065
New Martinsville, West Virginia

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

INSTALLATION AND STARTUP SCHEDULE

Stone Energy Corporation is modifying its operating permit for Winters Compressor Station (Facility ID: 103-00065), by removing a permitted emission source CE-5 from the permit R13-3060. The reason for this modification is due in part to this source having never been installed. The site was able to utilize an electric motor instead of the originally anticipated internal combustion engine to run the VRU compressor.

Therefore the requested equipment change has already been implemented and due to its reduction in emissions did not require prior approval.

ATTACHMENT D

REGULATORY DISCUSSION

Rule 13 Administrative Permit Application

Winters Compressor Station, 103-00065
New Martinsville, West Virginia

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

REGULATORY DISCUSSION

APPLICABLE REGULATIONS

This facility is subject to the following applicable rules and regulations:

Federal and State:

45 CSR 2 – Particulate Matter Standards from Combustion of Fuel in Indirect Heat Exchangers

The indirect heat exchangers consisting of the line heaters and GPU heaters are subject to the visible emission standard of §45-2-3 as follows:

3.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

However, in accordance with the exemptions defined with §45-2-11 these sources have limited requirements as follows:

11.1. Any fuel burning unit(s) having a heat input under ten (10) million B.T.U.'s per hour will be exempt from sections 4, 5, 6, 8 and 9. However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

Therefore, the heat exchangers at this site are exempt from the weight emission standards of section 4 and the control of fugitive particulate matter standards of section 5. The additionally exempt sections of this rule, section 6, 8, and 9 pertain to registration, testing, monitoring, recordkeeping and reporting as well as startup, shutdown and malfunctions.

As a result each combustion source will use method 9 to determine compliance with the 10% opacity limitation, but this monitoring should only be implemented upon a request by the Director or his duly authorized representative.

45 CSR 6 - Open Burning Prohibited

This state rule is geared towards reducing particulate matter emissions from the combustion of refuse and is specific to burning solid waste such as trash, but also includes combustion of waste gas in flares. The rule sets PM limits and establishes a 20% visible emission limit, both of which shouldn't be any problem for the gas fired flare to meet.

45 CSR 10 - Emission of Sulfur Oxides

The facility evaluated within this application utilizes fuel burning units, but they are all below the exemption threshold of 10 MMBtu/hr as stated in 45CSR§10-10.1:

10.1 Any fuel burning units having a design heat input under ten (10) million BTU's per hour will be exempt from section 3 and sections 6 through 8. However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

The 440 hp diesel fired generator (7E) is a USEPA certified stationary compression ignition engine according to 40CFR60 Subpart IIII. Stone provided the USEPA Certificate of Conformity for this engine with the initial permit application. Therefore this engine will not be required to conduct performance testing to demonstrate compliance with the rule. The unit will however, be required to operate the engine in accordance with the manufacturer's emission related operating instructions and keep records of maintenance.

40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

The two natural gas sales gas compressors (CE-1 & CE-2) are 1,380 hp 4SLB Caterpillar 3516B units and are considered subject to this rule as a result of being manufactured after 7/1/2011. Also the 637 hp natural gas primary generator unit, a Caterpillar 3412 (GE-1) will also be subject to these same SI > 500hp Table 1 requirements for engines manufactured after 7-1-10.

CE-1 was manufactured on 12-5-2011,
CE-2 was manufactured on 10-24-2013
GE-1 was manufactured on 8-12-2013

The 630 hp natural gas fired flash gas compressor, Caterpillar 3508LE unit was manufactured after the existing source date of 40CFR63, subpart ZZZZ (6-12-2006) so it is considered a new unit subject to the JJJJ standards. However, it was relocated from another site and its manufacturing date of 9-21-2006 predates the Table 1 standards applicable manufacturing date category of 1-1-2008.

CE-4 was manufactured on 9-21-2006

40 CFR 60 Subpart OOOO – Reciprocating Compressor Engines

The two sales gas compressors CE-1 and 2 constructed after 8/23/2011 and therefore are subject to the rod packing requirements of this regulation.

40 CFR 63 Subpart HH - National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities

The rule applies to dehydration units located at major and area sources of HAPs located at natural gas production facilities. This area source complies by meeting the 1 tpy of benzene exemption by using a BTEX elimination recycle system to reduce emissions.

40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants from Stationary Reciprocating Internal Combustion Engines

This facility would be considered an area source of HAPs and therefore certain engines located at this facility would be considered subject to the rule, but they are all considered new sources so they are directed to comply with NSPS JJJJ.

40 CFR 61 - This facility is subject to the asbestos inspection and notification requirements related to construction activities containing asbestos.

45 CSR 4 - No Objectionable Odors

45 CSR 11 - Standby Plans for Emergency Episodes.

45 CSR 13 - Permits for Construction, Modification, Relocation, and Operation of Stationary Source of Air Pollutants

The company has applied for a Rule 13 permit modification to remove emission limitations and federally enforceable requirements associated with RICE units.

WV Code § 22-5-4 (a) (14)

The Secretary can request any pertinent information such as annual emission inventory reporting. This station is required to submit an annual air emission inventory.

45 CSR 17 - Fugitive Particulate Emissions

NON-APPLICABILITY DETERMINATIONS

The following requirements have been determined “not applicable” due to the following:

45 CSR 27 - To Prevent and Control the Emissions of Toxic Air Pollutants

This rule is not applicable because natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR § 27-2.4 exempts equipment “used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.”

45 CSR 30 – Requirements for Operating Permits – Title V of the Clean Air Act

This facility does not meet the emission threshold to trigger a 45 CSR 30 Title V Operating Permit nor is it subject to any Federal Standards that trigger the need for a Title V Permit.

40 CFR 60 Subpart OOOO - Storage Vessel NSPS

The storage vessels have been demonstrated to have PTEs < 6tpy with the use of permitted VRU recycle system. Therefore, the storage vessels at this site are not considered affected sources under this regulation.

40 CFR 60 Subpart OOOO – Pneumatic Control Valve NSPS

The site was evaluated and found to contain only intermittent venting pneumatic control valves rated at less than 6 scf/hr. Therefore the site is not proposing to install or operate any affected continuous bleed pneumatic devices defined by this NSPS for control valves.

40 CFR 63 HHH - National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities

This subpart is related to Natural Gas Transmission Facilities which are major sources of HAPs. This federal regulation is not applicable since this facility is neither a transmission facility nor is it a major source of HAPs.

40 CFR 60 Subpart KKK - Natural Gas Processing Plant NSPS

This subpart is not applicable because this station is not a processing site engaged in extracting natural gas liquids by fractionation from natural gas.

Natural gas processing plant (gas plant) means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both.

40 CFR 60 Subpart K, Ka, Kb - Storage Vessel NSPS

The produced water and condensate storage tanks are exempt under 60.110b(d) (4) in accordance with the following: Vessels with a design capacity less than or equal to 1,589.874 m³ (approx 420,000 gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer.

40 CFR 63 Subpart DDDDD - Boilers & Process Heaters Located at Major Sources of HAPs

This subpart is not applicable because this facility is not a major source of HAPs.

40 CFR 63 Subpart JJJJJ - Boilers & Process Heaters Located at Area Sources of HAPs

This subpart is not applicable because the process heaters at this facility use natural gas fuel, which is exempt from regulation under this area source GACT standard.

40 CFR 82 Subpart F - Ozone Depleting Substances

The purpose of this subpart is to reduce emissions of class I and class II refrigerants and their substitutes. The facility does not utilize class I and class II refrigerants and their substitutes.

ATTACHMENT E

PLOT PLAN

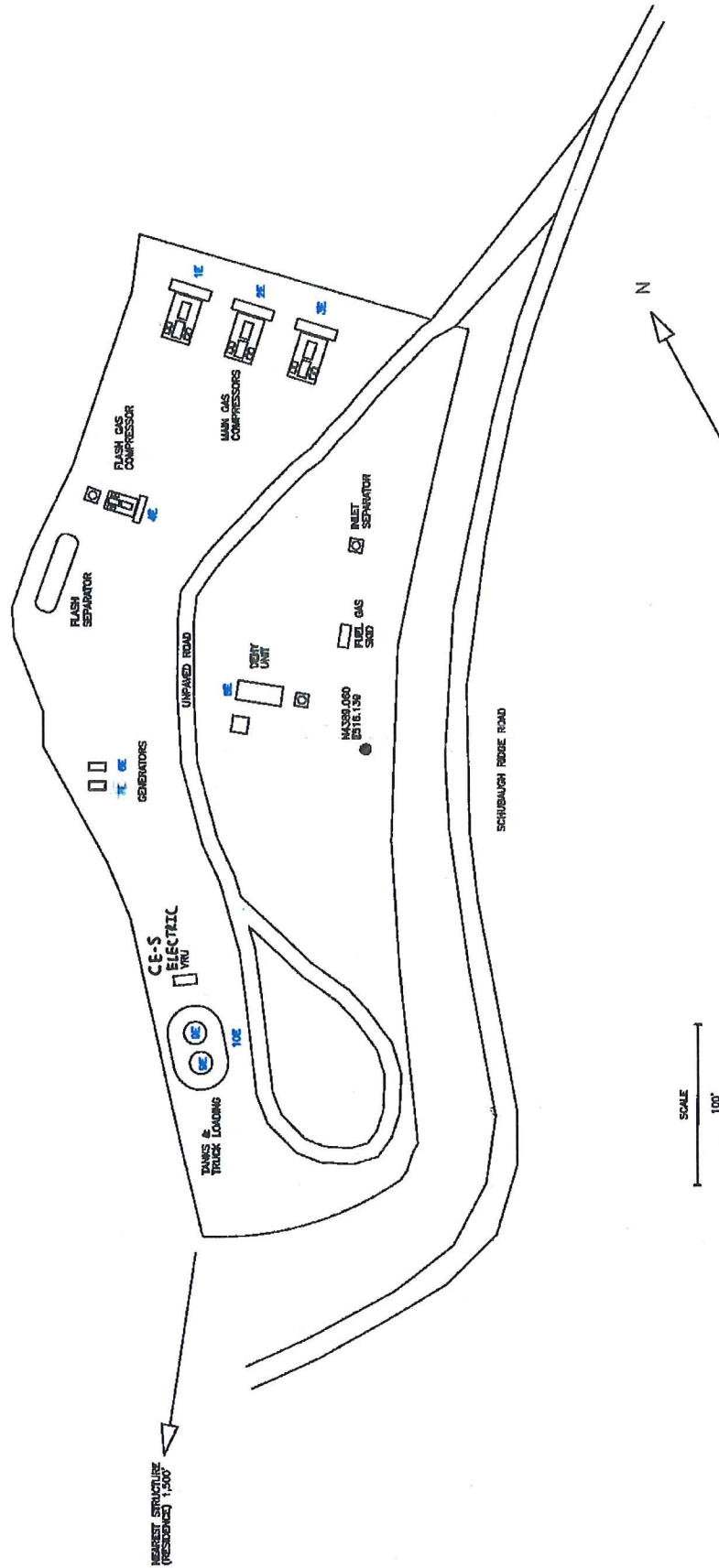
Rule 13 Administrative Permit Application

**Winters Compressor Station, 103-00065
New Martinsville, West Virginia**

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

WINTERS COMPRESSOR STATION SITE LAYOUT



ATTACHMENT F

PROCESS FLOW DIAGRAM

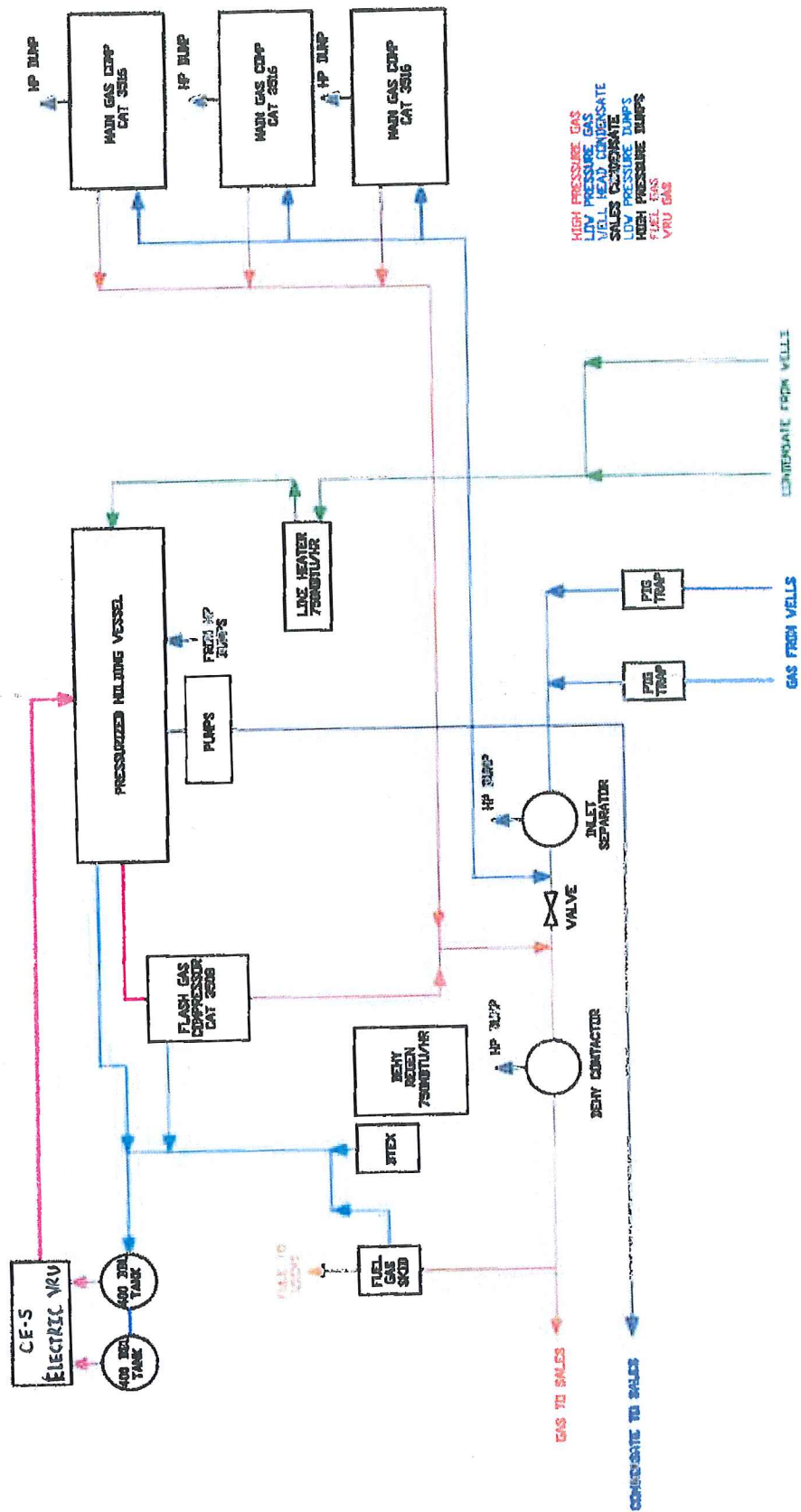
Rule 13 Administrative Permit Application

Winters Compressor Station, 103-00065
New Martinsville, West Virginia

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

WINTERS COMPRESSOR STATION PROCESS FLOW



ATTACHMENT G

PROCESS DESCRIPTION

Rule 13 Administrative Permit Application

Winters Compressor Station, 103-00065
New Martinsville, West Virginia

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

PROCESS DESCRIPTION

Description of Process

Natural gas is delivered to the Winters Compressor Station from two (2) gas pipelines. The pipelines, normally operating at 650 psig, merge with pig traps inside the facility. Natural gas and pigged liquids are sent to the inlet separator where natural gas continues from the inlet separator to main gas compression (CE-1 and CE-2) and dehydration. Natural gas is then sent onto a sales pipeline operated by others. The station may also be operated at high pressure (1,000 psig) by bypassing the main gas compression.

Natural gas dehydration will take place through a sixty (60) million standard cubic feet per day (mmscfd) TEG dehydration unit. Emissions from the still vent are controlled through a condenser (BTEX elimination system). Gases from the flash tank along with non condensable gases from the BTEX unit are recycled as fuel to the reboiler burner.

Natural gas condensate is delivered to the Winters Compressor Station from two (2) condensate pipelines. These pipelines have an operating pressure of 200-300 psig. Once in the facility, condensate passes through a heater (HTR-1) to prevent freezing, then it is sent to a pressurized holding vessel, which acts as a three phase separator (gas, condensate, and water) operating near 100 psig. Flashing vapors from the vessel are recovered by a flash gas compressor (CE-4) and injected back into the sales gas pipeline. Condensate in the pressurized holding vessel is pumped to a liquid pipeline owned by others. The pressurized holding vessel also receives residual and pigged liquids from the high pressure gas stream.

Fuel gas is provided to the facility through a small fuel gas skid, which is comprised of low pressure regulation and separation.

Low pressure fluids from the fuel gas skid, BTEX elimination system, and water are dumped from the pressurized holding vessel and flash gas compressor inlet scrubber to two (2) 400 bbl storage vessels (T01 and T02). The liquids dumped to the tanks are estimated to be less than 2 barrels (bbl)/day condensate and less than 6 bbl/day of water. Emissions from these tanks are controlled by a vapor recovery unit (VRU), which will discharge vapors back into the pressurized condensate holding vessel. The VRU is estimated to provide 95% control of these vapors.

Liquids in the tanks are loaded onto trucks for further processing offsite. Truck loading vapors are controlled using carbon filtration canisters. As well as using two (2) carbon canisters in series, the canisters capacity will be verified prior to each truck loading session.

Description of Modification

Stone Energy plans to modify the current permit for Winters Compressor Station (R13-3060) by doing the following;

- Removal of CE-5, a 215 hp Caterpillar 3406 RICE with NSCR, from the permit that was never installed at the facility.
- Remove dated closed vent system requirements pertaining to the VRU and replace with amended NSPS OOOO language
- Remove VE requirements for exempt fuel burning units less than 10 MMBtu/hr
- Remove fuel usage requirements and associated monitoring for exempt small units.

- General cleanup of permit to propose the removal of non applicable requirements.

These requested changes to the permit are in an effort to streamline the monitoring and recordkeeping requirements for Stone Energy as well as to enhance compliance clarity for DAQ inspectors.

ATTACHMENT I

EMISSION UNITS TABLE

Rule 13 Administrative Permit Application

**Winters Compressor Station, 103-00065
New Martinsville, West Virginia**

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

Attachment I

Emission Units Table

(includes all emission units and air pollution control devices
that will be part of this permit application review, regardless of permitting status)

Emission Unit ID ¹	Emission Point ID ²	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type ³ and Date of Change	Control Device ⁴
CE-1	1E	Caterpillar 3516B	2013	1380 hp	EXIST	1C
CE-2	2E	Caterpillar 2516B	2013	1380 hp	EXIST	2C
CE-3	3E	Caterpillar 3516B	2013	1380 hp	EXIST	3C
CE-4	4E	Caterpillar 3508LE	2013	630 hp	EXIST	4C
CE-5	5E	Caterpillar 3406	2013	215 hp	REMOVAL	5C
GE-1	6E	Caterpillar 3412	2013	637 hp	EXIST	6C
GE-2	7E	Caterpillar C15	2013	440 hp	EXIST	None
RSV-1	8E	Dehydration Still Vent	2013	60 mmscfd	EXIST	8C
RBV-1	8E	Dehy Reboiler Vent	2013	0.75 MMBTU/hr	EXIST	None
T01 & T02	9E	Condensate & Water Tanks	2013	2 @ 400 bbl each	EXIST	CE-5 Electric VRU
S2	10E	Condensate Loading	2013	122,600 ga/yr	EXIST	10C
HTR-1	11E	Line Heater	2013	0.75 MMBTU/hr	EXIST	None

¹ For Emission Units (or Sources) use the following numbering system: 1S, 2S, 3S,... or other appropriate designation.

² For Emission Points use the following numbering system: 1E, 2E, 3E, ... or other appropriate designation.

³ New, modification, removal

⁴ For Control Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.

ATTACHMENT J

EMISSION POINTS DATA SUMMARY SHEET

Rule 13 Administrative Permit Application

**Winters Compressor Station, 103-00065
New Martinsville, West Virginia**

Stone Energy Corporation
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Morgantown, West Virginia

May 2015

Attachment J
EMISSION POINTS DATA SUMMARY SHEET

Table 1: Emissions Data															
Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Emission Point Type ¹	Emission Unit Vented Through This Point (Must match Emission Units Table & Plot Plan)		Air Pollution Control Device (Must match Emission Units Table & Plot Plan)		Vent Time for Emission Unit (chemical processes only)		All Regulated Pollutants - Chemical Name/CAS ³ (Speciate VOCs & HAPS)	Maximum Potential Uncontrolled Emissions ⁴		Maximum Potential Controlled Emissions ⁵		Emission Form or Phase (At exit conditions, Solid, Liquid or Gas/Vapor)	Est. Method Used ⁶	Emission Concentration ⁷ (ppmv or mg/m ⁴)
		ID No.	Source	ID No.	Device Type	Short Term ²	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr			
1E	Upward Vertical Stack	CE-1	Comp. Engine	1C	Oxidation Catalyst	C	8760	NO _x CO VOC Formaldehyde PM/PM10 CO ₂ e	1.52 9.34 2.71 1.13 0.11 1592	6.66 40.91 11.86 4.93 0.49 6974	1.52 0.93 0.54 0.23 0.11 1592	6.66 4.09 2.37 0.99 0.49 6974	Gas Gas Gas Gas Solid Gas	EE	Can Supply Upon Request
2E	Upward Vertical Stack	CE-2	Comp. Engine	2C	Oxidation Catalyst	C	8760	NO _x CO VOC Formaldehyde PM/PM10 CO ₂ e	1.52 9.34 2.71 1.13 0.11 1592	6.66 40.91 11.86 4.93 0.49 6974	1.52 0.93 0.54 0.23 0.11 1592	6.66 4.09 2.37 0.99 0.49 6974	Gas Gas Gas Gas Solid Gas	EE	Can Supply Upon Request
3E	Upward Vertical Stack	CE-3	Comp. Engine	3C	Oxidation Catalyst	C	8760	NO _x CO VOC Formaldehyde PM/PM10 CO ₂ e	1.52 9.34 2.71 1.13 0.11 1592	6.66 40.91 11.86 4.93 0.49 6974	1.52 0.93 0.54 0.23 0.11 1592	6.66 4.09 2.37 0.99 0.49 6974	Gas Gas Gas Gas Solid Gas	EE	Can Supply Upon Request
4E	Upward Vertical Stack	CE-4	Comp. Engine	4C	Oxidation Catalyst	C	8760	NO _x CO VOC SO ₂ PM/PM10 CO ₂ e Formaldehyde	2.78 3.36 0.61 0.00 0.55 809 0.43	12.17 14.72 2.68 0.01 0.24 3542 1.89	2.78 0.34 0.12 0.00 0.55 809 0.09	12.17 1.47 0.54 0.01 0.24 3542 0.38	Gas Gas Gas Gas Solid Gas Gas	EE	Can Supply Upon Request
6E	Upward Vertical Stack	GE-1	Gen. Engine	6C	Oxidation Catalyst	C	8760	NO _x CO VOC SO ₂ PM/PM10 CO ₂ e	1.40 3.45 0.62 0.00 0.05 768	6.15 15.13 2.71 0.01 0.23 33.66	1.40 2.77 0.31 0.00 0.05 768	6.15 12.12 1.35 0.01 0.23 33.66	Gas Gas Gas Gas Solid Gas	EE	Can Supply Upon Request
7E	Upward Vertical Stack	GE-2	Gen. Engine	NA	None	C	500	NO _x CO VOC SO ₂ PM/PM10 CO ₂ e	3.59 0.25 0.03 1.32 1.40 1088	0.90 0.06 0.01 0.33 0.35 272	3.59 0.25 0.03 1.32 1.40 1088	0.90 0.06 0.01 0.33 0.35 272	Gas Gas Gas Gas Solid Gas	EE	Can Supply Upon Request

8E	Upward Vertical Stack	RBV-1	Dehy Reboiler Exhaust	8C	Condenser + Combustion	C	8760	NO _x CO VOC SO ₂ PM/PM10 CO ₂ e Benzene	0.13 0.11 13.00 0.00 0.01 161.3 0.24	0.59 0.49 56.94 0.00 0.45 706.6 0.36	0.13 0.11 0.60 0.00 0.01 161.3 0.00	0.59 0.49 2.63 0.00 0.45 706.6 0.01	Gas Gas Gas Gas Solid Gas Gas	EE	Can Supply Upon Request
9E	Upward Vertical Stack	T01,T02	Tank Vents	CE-5	VRU Compressor	C	8760	VOC n-hexane	6.83 0.27	29.90 1.17	0.34 0.01	1.50 0.06	Gas Gas	EE	Can Supply Upon Request
10E	Upward Vertical Stack	S2	Truck Loading Vent	10C	Carbon Filters	4hr/ day 1day /week	8760	VOC	79.6	2.08	23.9	0.62	Gas	EE	Can Supply Upon Request
11E	Upward Vertical Stack	HTR-1	Line Heater	NA	None	C	8760	NO _x CO VOC SO ₂ PM/PM10 CO ₂ e	0.07 0.06 0.00 0.00 0.01 85.0	0.31 0.26 0.02 0.00 0.02 371.0	0.07 0.06 0.00 0.00 0.01 85.0	0.31 0.26 0.02 0.00 0.02 371.0	Gas Gas Gas Gas Solid Gas	EE	Can Supply Upon Request

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

- 1 Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.
- 2 Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (ie., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/wk).
- 3 List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. **LIST** Acids, CO, CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, all applicable Greenhouse Gases (including CO₂ and methane), etc. **DO NOT LIST** H₂, H₂O, N₂, O₂, and Noble Gases.
- 4 Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- 5 Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- 6 Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).
- 7 Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m³) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO₂, use units of ppmv (See 45CSR10).

Attachment J
EMISSION POINTS DATA SUMMARY SHEET

Table 2: Release Parameter Data								
Emission Point ID No. <i>(Must match Emission Units Table)</i>	Inner Diameter (ft.)	Exit Gas		Emission Point Elevation (ft)			UTM Coordinates (km)	
		Temp. (°F)	Volumetric Flow ¹ (acfm) <i>at operating conditions</i>	Velocity (fps)	Ground Level <i>(Height above mean sea level)</i>	Stack Height ² <i>(Release height of emissions above ground level)</i>	Northing	Easting
1E	1.333	1008	9293	-	1330	25.5	4389.060	516.139
2E	1.333	1008	9293	-	1330	25.5	4389.060	516.139
3E	1.333	1008	9293	-	1330	25.5	4389.060	516.139
4E	0.833	891	3574	-	1330	18.5	4389.060	516.139
5E	0.667	978	1040	-	1330	8.67	4389.060	516.139
6E	0.833	855	3694	-	1330	-	4389.060	516.139
7E	0.5	-	-	-	1330	-	4389.060	516.139
8E	0.833	-	-	-	1330	-	4389.060	516.139
9E	-	Ambient	Variable	-	1330	-	4389.060	516.139
10E	-	Ambient	Variable	-	1330	-	4389.060	516.139
11E	0.25	800	250	-	1330	4.0	4389.060	516.139

¹ Give at operating conditions. Include inserts.

² Release height of emissions above ground level.

ATTACHMENT K

FUGITIVE EMISSIONS DATA SHEET

Rule 13 Administrative Permit Application

Winters Compressor Station, 103-00065
New Martinsville, West Virginia

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

Attachment K

FUGITIVE EMISSIONS DATA SUMMARY SHEET

The FUGITIVE EMISSIONS SUMMARY SHEET provides a summation of fugitive emissions. Fugitive emissions are those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Note that uncaptured process emissions are not typically considered to be fugitive, and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET.

Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions).

APPLICATION FORMS CHECKLIST - FUGITIVE EMISSIONS
1.) Will there be haul road activities? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If YES, then complete the HAUL ROAD EMISSIONS UNIT DATA SHEET.
2.) Will there be Storage Piles? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete Table 1 of the NONMETALLIC MINERALS PROCESSING EMISSIONS UNIT DATA SHEET.
3.) Will there be Liquid Loading/Unloading Operations? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If YES, complete the BULK LIQUID TRANSFER OPERATIONS EMISSIONS UNIT DATA SHEET.
4.) Will there be emissions of air pollutants from Wastewater Treatment Evaporation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.
5.) Will there be Equipment Leaks (e.g. leaks from pumps, compressors, in-line process valves, pressure relief devices, open-ended valves, sampling connections, flanges, agitators, cooling towers, etc.)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If YES, complete the LEAK SOURCE DATA SHEET section of the CHEMICAL PROCESSES EMISSIONS UNIT DATA SHEET.
6.) Will there be General Clean-up VOC Operations? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.
7.) Will there be any other activities that generate fugitive emissions? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET or the most appropriate form.
If you answered "NO" to all of the items above, it is not necessary to complete the following table, "Fugitive Emissions Summary."

FUGITIVE EMISSIONS SUMMARY		All Regulated Pollutants - Chemical Name/CAS ¹	Maximum Potential Uncontrolled Emissions ²		Maximum Potential Controlled Emissions ³		Est. Method Used ⁴
			lb/hr	ton/yr	lb/hr	ton/yr	
Haul Road/Road Dust Emissions Paved Haul Roads			-	-	-	-	EE
Unpaved Haul Roads		PM	2.59	0.07	2.59	0.07	EE
Storage Pile Emissions			-	-	-	-	EE
Loading/Unloading Operations		VOC	79.6	2.08	23.9	0.62	EE
Wastewater Treatment Evaporation & Operations			-	-	-	-	EE
Equipment Leaks		VOC	0.62	2.70	0.62	2.70	EE
General Clean-up VOC Emissions			-	-	-	-	EE
Other – Pigging and Blowdown		VOC	-	0.56	-	0.56	EE

¹ List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO, CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, all applicable Greenhouse Gases (including CO₂ and methane), etc. DO NOT LIST H₂, H₂O, N₂, O₂, and Noble Gases.

² Give rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

³ Give rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

⁴ Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).

ATTACHMENT L

EMISSION UNIT DATA SHEET

Rule 13 Administrative Permit Application

Winters Compressor Station, 103-00065
New Martinsville, West Virginia

Stone Energy Corporation
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Morgantown, West Virginia

May 2015

NATURAL GAS-FIRED COMPRESSOR ENGINE (RICE)

EMISSION UNIT DATA SHEET

Complete this section for any natural gas-fired reciprocating internal combustion engine.

Emission Unit (Source) ID No. ¹		CE-5					
Emission Point ID No. ²		5E					
Engine Manufacturer and Model		Caterpillar 3406					
Manufacturer's Rated bhp/rpm		215 / 1,800					
Source Status ³		RS					
Date Installed/Modified/Removed ⁴		Never Installed					
Engine Manufactured/Reconstruction Date ⁵		NA					
Is this engine subject to 40CFR60, Subpart JJJJ?		No					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60, Subpart JJJJ? (Yes or No) ⁶		No					
Is this engine subject to 40CFR63, Subpart ZZZZ? (yes or no)		No					
Engine, Fuel and Combustion Data	Engine Type ⁷	4SRB					
	APCD Type ⁸	NSCR					
	Fuel Type ⁹	RG					
	H ₂ S (gr/100 scf)	0.25					
	Operating bhp/rpm	215 / 1,800					
	BSFC (Btu/bhp-hr)	7,950					
	Fuel throughput (ft ³ /hr)	1,501					
	Fuel throughput (MMft ³ /yr)	13.15					
	Operation (hrs/yr)	8760					
Reference ¹⁰	Potential Emissions ¹¹	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
	NO _x	0.38	1.65				
	CO	0.38	1.65				
	VOC	0.03	0.15				
	SO ₂	0.00	0.00				
	PM ₁₀	0.03	0.15				
	Formaldehyde	0.03	0.11				
MRR ¹²	Proposed Monitoring:	See Attachment O					
	Proposed Recordkeeping:	See Attachment O					
	Proposed Reporting:	See Attachment O					

Instructions for completing the Engine Emission Unit Data Sheet:

- ¹ Enter the appropriate Emission Unit (Source) identification number for each natural gas-fueled reciprocating internal combustion compressor/generator engine located at the production pad. Multiple compressor engines should be designated CE-1S, CE-2S, etc. or other appropriate designation. Generator engines should be designated GE-1S, GE-2S, etc. or other appropriate designation. If more than three (3) engines exist, please use additional sheets.
- ² For Emission Points, use the following numbering system: 1E, 2E, etc. or other appropriate designation.
- ³ Enter the Source Status using the following codes: NS = Construction of New Source (installation); ES = Existing Source; MS = Modification of Existing Source; and RS = Removal of Source
- ⁴ Enter the date (or anticipated date) of the engine's installation (construction of source), modification or removal.
- ⁵ Enter the date that the engine was manufactured, modified or reconstructed.
- ⁶ Is the engine a certified stationary spark ignition internal combustion engine according to 40CFR60 Subpart JJJJ. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4243a(2)(i) through (iii), as appropriate. ***Provide a manufacturer's data sheet for all engines being registered and a manufacturer's EPA certification of conformity sheet.***
- ⁷ Enter the Engine Type designation(s) using the following codes: LB2S = Lean Burn Two Stroke, RB4S = Rich Burn Four Stroke, and LB4S = Lean Burn Four Stroke.
- ⁸ Enter the Air Pollution Control Device (APCD) type designation(s) using the following codes: NSCR = Rich Burn & Non-Selective Catalytic Reduction, PSC = Rich Burn & Prestratified Charge, SCR = Lean Burn & Selective Catalytic Reduction, or CAT = Lean Burn & Catalytic Oxidation
- ⁹ Enter the Fuel Type using the following codes: PQ = Pipeline Quality Natural Gas, or RG = Raw Natural Gas
- ¹⁰ Enter the Potential Emissions Data Reference designation using the following codes. Attach all referenced data to this *Compressor/Generator Data Sheet(s)*. Codes: MD = Manufacturer's Data, AP = AP-42 Factors, GR = GRI-HAPCalc™, or OT = Other _____ (please list)
- ¹¹ Enter each engine's Potential to Emit (PTE) for the listed regulated pollutants in pounds per hour and tons per year. PTE shall be calculated at manufacturer's rated brake horsepower and may reflect reduction efficiencies of listed Air Pollution Control Devices. Emergency generator engines may use 500 hours of operation when calculating PTE. PTE data from this data sheet shall be incorporated in the *Emissions Summary Sheet as Attachment O*.
- ¹² Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the operation of this engine operation and associated air pollution control device. Include operating ranges and maintenance procedures required by the manufacturer to maintain the warranty.

Please attach the following required dehydration unit information:

1. System map indicating the chain of custody information. See Page 43 of this document for an example of a gas flow schematic. It is not intended that the applicant provide this level of detail for all sources. The level of detail that is necessary is to establish where the custody transfer points are located. This can be accomplished by submitting a process flow diagram indicating custody transfer points and the natural gas flow. However, the DAQ reserves the right to request more detailed information in order to make the necessary decisions.
2. Extended gas analysis from the Wet Gas Stream including mole percents of C₁-C₈, benzene, ethylbenzene, toluene, xylene and n-Hexane, using Gas Processors Association (GPA) 2286 (or similar). A sample should be taken from the inlet gas line, downstream from any inlet separator, and using a manifold to remove entrained liquids from the sample and a probe to collect the sample from the center of the gas line. GPA standard 2166 reference method or a modified version of EPA Method TO-14, (or similar) should be used.
3. GRI-GLYCalc Ver. 3.0 aggregate report based on maximum Lean Glycol circulation rate and maximum throughput.
4. Detailed calculations of gas or hydrocarbon flow rate.

Section C: Facility NESHAPS Subpart HH/HHH status

Affected facility status: (choose only one)	<input checked="" type="checkbox"/>	Subject to Subpart HH	
	<input type="checkbox"/>	Subject to Subpart HHH	
	<input type="checkbox"/>	Not Subject	<input type="checkbox"/> < 10/25 TPY
	because:	<input type="checkbox"/> Affected facility exclusively handles black oil	
		<input type="checkbox"/> The facility wide actual annual average NG throughput is < 650 thousand scf/day and facility wide actual annual average hydrocarbon liquid is < 250 bpd	
		<input type="checkbox"/> No affected source is present	

ATTACHMENT M

NOT APPLICABLE (SEE NOTE)

Note: Proposed permit modifications have no effect on air pollution control devices

Rule 13 Administrative Permit Application

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ATTACHMENT N

SUPPORTING EMISSIONS CALCULATIONS

Rule 13 Administrative Permit Application

Winters Compressor Station, 103-00065
New Martinsville, West Virginia

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

R13-3060 - Winters Compressor Station Annual Emissions										
Emission Point ID	Source	Description	NO _x ton/yr	CO ton/yr	VOC ton/yr	PM ton/yr	SO ₂ ton/yr	CH ₂ O ton/yr	HAPs ton/yr	CO ₂ e ton/yr
1E	CE-1	CAT 3516B	6.66	4.09	2.37	0.49	0.03	0.99	1.34	6974
2E	CE-2	CAT 3516B	6.66	4.09	2.37	0.49	0.03	0.99	1.34	6974
3E	CE-3	CAT 3516B	6.66	4.09	2.37	0.49	0.03	0.99	1.34	6974
4E	CE-4	CAT 3508B	12.17	1.47	0.54	0.24	0.01	0.38	0.55	3542
5E	CE-5	CAT 3406	1.65	1.65	0.15	0.15	0.01	0.11	0.19	1237
6E	GE-1	CAT 3412	6.15	12.12	1.35	0.23	0.01	0.86	1.18	3366
7E	GE-2	CAT C15	0.9	0.06	0.01	0.35	0.35	0.01	0.01	272
8E	RBV-1	Dehy Reboiler	0.3	0.25	0.02	0.03	0.01	0.01	0.01	353
8E	RSV-1	Dehy Still Vent	-	-	9.43	-	-	-	0.28	-
9E	S1	Condensate/Water Tanks	-	-	1.52	-	-	-	-	-
10E	S2	Condensate Loadout	-	-	0.62	-	-	-	-	-
11E	HTR-1	Line Heater	0.31	0.26	0.02	0.02	0.01	0.01	0.01	371
Fugitive	-	Equipment Leaks	-	-	2.7	-	-	-	-	156
Fugitive	-	Pigging & Blowdowns	-	-	0.56	-	-	-	-	28
Totals			41.46	28.08	24.03	2.49	0.49	4.35	6.25	30247

Proposed R13-3060A - Winters Compressor Station Annual Emissions										
Emission Point ID	Source	Description	NO _x ton/yr	CO ton/yr	VOC ton/yr	PM ton/yr	SO ₂ ton/yr	CH ₂ O ton/yr	HAPs ton/yr	CO ₂ e ton/yr
1E	CE-1	CAT 3516B	6.66	4.09	2.37	0.49	0.03	0.99	1.34	6974
2E	CE-2	CAT 3516B	6.66	4.09	2.37	0.49	0.03	0.99	1.34	6974
3E	CE-3	CAT 3516B	6.66	4.09	2.37	0.49	0.03	0.99	1.34	6974
4E	CE-4	CAT 3508B	12.17	1.47	0.54	0.24	0.01	0.38	0.55	3542
6E	GE-1	CAT 3412	6.15	12.12	1.35	0.23	0.01	0.86	1.18	3366
7E	GE-2	CAT C15	0.9	0.06	0.01	0.35	0.35	0.01	0.01	272
8E	RBV-1	Dehy Reboiler	0.3	0.25	0.02	0.03	0.01	0.01	0.01	353
8E	RSV-1	Dehy Still Vent	-	-	9.43	-	-	-	0.28	-
9E	S1	Condensate/Water Tanks	-	-	1.52	-	-	-	-	-
10E	S2	Condensate Loadout	-	-	0.62	-	-	-	-	-
11E	HTR-1	Line Heater	0.31	0.26	0.02	0.02	0.01	0.01	0.01	371
Fugitive	-	Equipment Leaks	-	-	2.7	-	-	-	-	156
Fugitive	-	Pigging & Blowdowns	-	-	0.56	-	-	-	-	28
Totals			39.81	26.43	23.88	2.34	0.48	4.24	6.06	29010
Emission Reduction (tons/yr)			1.65	1.65	0.15	0.15	0.01	0.11	0.19	1237

ATTACHMENT O

**MONITORING/RECORDKEEPING/REPORTING/
TESTING PLANS**

Rule 13 Administrative Permit Application

**Winters Compressor Station, 103-00065
New Martinsville, West Virginia**

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

MONITORING, RECORD KEEPING, REPORTING, TESTING PLANS

Monitoring

See APPENDIX A – SUGGESTED DRAFT PERMIT LANGUAGE

Recordkeeping

See APPENDIX A – SUGGESTED DRAFT PERMIT LANGUAGE

Reporting

See APPENDIX A – SUGGESTED DRAFT PERMIT LANGUAGE

Testing

See APPENDIX A – SUGGESTED DRAFT PERMIT LANGUAGE

ATTACHMENT P

NOT APPLICABLE (SEE NOTE)

Note: Public Notice not required for Class I Administrative Updates

Rule 13 Administrative Permit Application

**Winters Compressor Station, 103-00065
New Martinsville, West Virginia**

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

ATTACHMENT Q

NOT APPLICABLE (SEE NOTE)

Note: No information contained within this application is claimed confidential.

Rule 13 Administrative Permit Application

Winters Compressor Station, 103-00065
New Martinsville, West Virginia

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

ATTACHMENT R

NOT APPLICABLE (SEE NOTE)

Note: No delegation of authority.

Rule 13 Administrative Permit Application

Winters Compressor Station, 103-00065
New Martinsville, West Virginia

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

ATTACHMENT S

NOT APPLICABLE (SEE NOTE)

Note: Not a Title V Permit Revision.

Rule 13 Administrative Permit Application

Winters Compressor Station, 103-00065
New Martinsville, West Virginia

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

ATTACHMENT T

PERMIT APPLICATION FEE

Rule 13 Administrative Permit Application

Winters Compressor Station, 103-00065
New Martinsville, West Virginia

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

FINAL PERMITS

Rule 13 Administrative Permit Application

**Winters Compressor Station, 103-00065
New Martinsville, West Virginia**

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

APPENDIX A

SUGGESTED DRAFT PERMIT LANGUAGE

Rule 13 Administrative Permit Application

**Winters Compressor Station, 103-00065
New Martinsville, West Virginia**

Stone Energy Corporation
1300 Fort Pierpont, Suite 201
Morgantown, West Virginia

May 2015

West Virginia Department of Environmental Protection
Earl Ray Tomblin
Governor

Division of Air Quality

Randy C. Huffman
Cabinet Secretary

Permit to Construct



R13- 3060

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Stone Energy Corporation
Winters Compressor Station
103-00065

John A. Benedict
Director

Issued: June 17, 2013 • Effective: June 17, 2013

Facility Location: New Martinsville, Wetzel County, West Virginia
Mailing Address: 625 East Kaliste Saloom Road, Lafayette, LA 70508
Facility Description: Natural gas compressor station
NAICS Codes: 486210
UTM Coordinates: 516.139 km Easting • 4,389.060 km Northing • Zone 17
Permit Type: Construction
Description of Change: Construction and operation of a natural gas compressor facility with three (3) natural gas fired reciprocating internal combustion engines, one (1) flash gas compressor, one (1) natural gas fired generator, one (1) diesel fired generator, one (1) tri-ethylene glycol (TEG) dehydration unit with associated reboiler, one (1) line heater, two (2) storage tanks with a vapor recovery unit (VRU), product loadout rack, and related fugitive emissions.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

The source is not subject to 45CSR30.

Unless otherwise stated WVDEP DAQ did not determine whether the permittee is subject to an area source air toxics standard requiring Generally Achievable Control Technology (GACT) promulgated after January 1, 2007 pursuant to 40 CFR 63, including the area source air toxics provisions of 40 CFR 63, Subparts HH and ZZZZ.

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1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
CE-1	1E	Caterpillar 3516B Reciprocating Internal Combustion Engine (RICE)	2013	1,380 HP	1C - Selective Catalytic Reduction (SCR) Oxidation Catalyst (OC)
CE-2	2E	Caterpillar 3516B RICE	2014	1,380 HP	2C - SCR OC
CE-3	3E	Caterpillar 3516B RICE Not Yet Installed	20XX	1,380 HP	3C - SCR OC
CE-4	4E	Caterpillar 3508LE RICE Flash Gas Compressor	2013	630 HP	4C - SCR OC
CE-5	5E	Caterpillar 3406 RICE	2013	215 HP	5C - Non Selective Catalytic Reduction (NSCR)
GE-1	6E	Caterpillar 3412 NG Primary Generator	2014	637 HP	6C- OC
GE-2	7E	Caterpillar C15 Diesel Backup Generator	2013	440 HP	None
RSV-1	8E	Tri-ethylene Glycol (TEG) Glycol Dehydration Still Vent	2013	60 mmscfd	8C - Condenser
RBV-1	8E	TEG Glycol Dehydration Reboiler	2013	0.75 MMBTU/hr	None
T01 & T02	9E	Condensate and Water Storage Tanks	2013	2 @ 400 bbl each	CE-5 Electric VRU
S2	10E	Condensate Loading	2013	122,600 gal/yr	10C - Carbon Canisters
HTR-1	11E	Line Heater	2013	0.75 MMBTU/hr	None
T03	T03	Ethylene Glycol Storage Tank	2013	55 gal	None
T04	T04	Lube Oil Storage Tank	2013	1,500 gal	None
T05	T05	Lube Oil Storage Tank	2013	1,500 gal	None

1.1. Control Devices

Emission Unit	Pollutant	Control Device	Control Efficiency
1,380 HP Caterpillar 3516B RICE (1E-3E)	Carbon Monoxide	1C-3C – SCR OC	90 %
	Volatile Organic Compounds		80 %
	Formaldehyde		80 %
630 HP Caterpillar 3508LE RICE (4E)	Carbon Monoxide	4C - SCR OC	90 %
	Volatile Organic Compounds		80 %
	Formaldehyde		80 %
215 HP Caterpillar 3406 RICE (5E)	Nitrogen Oxides	5C – NSCR	95 %
	Carbon Monoxide		95 %
	Volatile Organic Compounds		80 %
	Formaldehyde		80 %
637 HP Caterpillar 3412 RICE (6E)	Carbon Monoxide	6C - SCR OC	20 %
	Volatile Organic Compounds		50 %
	Formaldehyde		50 %
60 mmscfd TEG Dehydrator Still Vent (8E)	Volatile Organic Compounds	8C – Condenser/Combustion	95 %
	Hazardous Air Pollutants		95 %
Condensate & Water Storage Tanks (9E)	Volatile Organic Compounds	5E-CE-5- Electric Vapor Recovery Unit (VRU)	95 %
	Hazardous Air Pollutants		95 %
Condensate Loading (10E)	Volatile Organic Compounds	10C – Carbon Canisters	70 %
	Hazardous Air Pollutants		70 %

5.0. Source-Specific Requirements (Engines, 1E – 7E)

5.1. Limitations and Standards

~~5.1.1. The quantity of natural gas that shall be consumed in each of the 1,380 hp Caterpillar 3516B natural gas fired reciprocating engines equipped with SCR (1E-3E) shall not exceed 9,896 cubic feet per hour or 86.69×10^6 cubic feet per year.~~

5.1.2. Maximum emissions from each of the 1,380 hp Caterpillar 3516B natural gas fired reciprocating engines equipped with SCR **Oxidation Catalyst (OC)** (1E-3E) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	1.52	6.66
Carbon Monoxide	0.93	4.09
Volatile Organic Compounds	0.54	2.37
Formaldehyde	0.23	0.99

~~5.1.3. The quantity of natural gas that shall be consumed in the 630 hp Caterpillar 3508LE natural gas fired reciprocating engines equipped with SCR (4E) shall not exceed 4,834 cubic feet per hour or 42.34×10^6 cubic feet per year.~~

5.1.4. Maximum emissions from the 630 hp Caterpillar 3508LE natural gas fired reciprocating engines equipped with SCR **Oxidation Catalyst (OC)** (4E) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	2.78	12.17
Carbon Monoxide	0.34	1.47
Volatile Organic Compounds	0.12	0.54
Formaldehyde	0.09	0.38

~~5.1.5. The quantity of natural gas that shall be consumed in the 215 hp Caterpillar 3406 natural gas fired reciprocating engines equipped with NSCR (5E) shall not exceed 1,501 cubic feet per hour or 13.15×10^6 cubic feet per year.~~

~~5.1.6. Maximum emissions from the 215 hp Caterpillar 3406 natural gas fired reciprocating engines equipped with NSCR (5E) shall not exceed the following limits:~~

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.38	1.65
Carbon Monoxide	0.38	1.65
Volatile Organic Compounds	0.03	0.15

Formaldehyde	0.03	0.11
--------------	------	------

~~5.1.7. The quantity of natural gas that shall be consumed in the 637 hp Caterpillar 3412 natural gas fired primary generator equipped with SCR (6E) shall not exceed 4,588 cubic feet per hour or 40.19 x 10⁶ cubic feet per year.~~

5.1.8. Maximum emissions from the 637 hp Caterpillar 3412 natural gas fired primary generator equipped with SCR **Oxidation Catalyst (OC)** (6E) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	1.40	6.15
Carbon Monoxide	2.77	12.12
Volatile Organic Compounds	0.31	1.35
Formaldehyde	0.20	0.86

~~5.1.9. The quantity of diesel fuel that shall be consumed in the 440 hp Caterpillar C15 diesel fired backup generator (7E) shall not exceed 17,450 gallons per year.~~

5.1.10. Maximum emissions from the 440 hp Caterpillar C15 diesel fired backup generator (7E) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	3.59	0.90
Carbon Monoxide	0.25	0.06
Volatile Organic Compounds	0.03	0.01
Particulate Matter	1.40	0.35

5.1.11. **Maximum Yearly Operation Limitation.** The maximum yearly hours of operation for the 440 hp Caterpillar C15 diesel fired backup generator (7E) shall not exceed 500 hours per year. Compliance with the Maximum Yearly Operation Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the hours of operation at any given time during the previous twelve consecutive calendar months.

5.1.12. Requirements for Use of Catalytic Reduction Devices

- a. Rich-burn natural gas compressor engines equipped with non-selective catalytic reduction (NSCR) air pollution control devices shall be fitted with a closed-loop, automatic air/fuel ratio controller to ensure emissions of regulated pollutants do not exceed the potential to emit for any engine/NSCR combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering valve to deliver additional fuel when required to ensure a fuel-rich mixture and a resultant exhaust oxygen content of less than or equal to 0.5%. The automatic air/fuel ratio controller shall also incorporate dual-point exhaust gas temperature and oxygen sensors which provide temperature and exhaust oxygen content differential feedback. Such controls shall ensure proper and efficient operation of the engine and NSCR air pollution control device;

- b. Lean-burn natural gas compressor engines equipped with selective catalytic reduction (SCR) air pollution control devices shall be fitted with a closed-loop automatic feedback controller to ensure emissions of regulated pollutants do not exceed the potential to emit for any engine/SCR combination under varying load. The closed-loop automatic feedback controller shall provide proper and efficient operation of the engine, ammonia injection and SCR device, monitor emission levels downstream of the catalyst element and limit ammonia slip to less than 10 ppm_v;
- c. The automatic air/fuel ratio controller or closed-loop automatic feedback controller shall provide a warning or indication to the operator and/or be interlocked with the engine ignition system to cease engine operation in case of a masking, poisoning or overrich air/fuel ratio situation which results in performance degradation or failure of the catalyst element; and
- d. No person shall knowingly:
 - 1. Remove or render inoperative any air pollution or auxiliary air pollution control device installed subject to the requirements of this permit;
 - 2. Install any part or component when the principal effect of the part or component is to bypass, defeat or render inoperative any air pollution control device or auxiliary air pollution control device installed subject to the requirements of this permit; or
 - 3. Cause or allow engine exhaust gases to bypass any catalytic reduction device.

5.2. Monitoring Requirements

5.2.1. Catalytic Oxidizer Control Devices

- a. The permittee shall regularly inspect, properly maintain and/or replace catalytic reduction devices and auxiliary air pollution control devices to ensure functional and effective operation of the engine's physical and operational design. The permittee shall ensure proper operation, maintenance and performance of catalytic reduction devices and auxiliary air pollution control devices by:
 - 1. Maintaining proper operation of the automatic air/fuel ratio controller or automatic feedback controller.
 - 2. Following operating and maintenance recommendations of the catalyst element manufacturer.

5.3. Testing Requirements

- 5.3.1. See Facility-Wide Testing Requirements Section 3.3 and Testing Requirements of Sections 6, 7, 8.

5.4. Recordkeeping Requirements

- 5.4.1. To demonstrate compliance with sections 5.1.1 – 5.1.11, the permittee shall maintain records of the amount and type of fuel consumed in each engine and the hours of operation of each engine. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
- 5.4.2. To demonstrate compliance with section 5.1.12 the permittee shall maintain records of all catalytic reduction device maintenance. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency

pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

5.5. Reporting Requirements

- 5.5.1. See Facility-Wide Reporting Requirements Section 3.5 and Reporting Requirements of Sections 6, 7, 8.

6.0. Source-Specific Requirements (40CFR60 Subpart IIII Requirements, Engine 7E)

6.1. Limitations and Standards

6.1.1. Emission Standards

Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. [40CFR§60.4205b]

- 6.1.2. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §60.4204 and §60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. [40CFR§60.4206]

6.1.3. Fuel Requirements

Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a). [40CFR§60.4207a]

6.1.4. Fuel Requirements

Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [40CFR§60.4207b]

6.1.5. Fuel Requirements

Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator. [40CFR§60.4207c]

6.1.6. Fuel Requirements

Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section. [40CFR§60.4207e]

- 6.1.7. After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines. [40CFR§60.4208a]

- 6.1.8. In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that

do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section. [40CFR§60.4208g]

- 6.1.9. The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location. [40CFR§60.4208h]
- 6.1.10. If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211. [40CFR§60.4209]
- 6.1.11. If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine. [40CFR§60.4209a]
- 6.1.12. If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40CFR§60.4209b]
- 6.1.13. If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you. [40CFR§60.4211a]
- 6.1.14. If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications. [40CFR§60.4211c]

~~6.1.15. If you are an owner or operator and must comply with the emission standards specified in §60.4204(e) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section. [40CFR§60.4211d]~~

~~(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213. [40CFR§60.4211d1]~~

~~(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(I) through (v) of this section. [40CFR§60.4211d2]~~

~~(i) Identification of the specific parameters you propose to monitor continuously; [40CFR§60.4211d2(i)]~~

~~(ii) A discussion of the relationship between these parameters and NOX and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOX and PM emissions; [40CFR§60.4211d2(ii)]~~

~~(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations; [40CFR§60.4211d2(iii)]~~

~~(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and [40CFR§60.4211d2(iv)]~~

~~(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters. [40CFR§60.4211d2(v)]~~

- 6.1.16. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under §60.4205 but not §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited. [40CFR§60.4211e]

6.2. Testing Requirements

6.2.1. Stack Testing

At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or other tests the Secretary may specify shall be conducted to determine compliance. For cause, the Secretary may request the permittee to install such stack gas monitoring devices as the Secretary deems necessary to determine continuing compliance. The data from such devices shall be readily available for review on-site or such other reasonable location that the Secretary may specify. At the request of the Secretary, such data shall be made available for inspection or copying and the Secretary may require periodic submission of excess emission reports (45CSR13).

6.2.1.a. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary. [WV Code § 22-5-4(a)(15)]

6.2.2. Notification of Compliance Testing

For any compliance test to be conducted by the permittee as set forth in this section, a test protocol shall be submitted to the Secretary at least thirty (30) calendar days prior to the scheduled date of the test. Such compliance test protocol shall be subject to approval by the Secretary. The permittee shall notify the Secretary at least fifteen (15) calendar days in

advance of actual compliance test dates and times during which the test (or tests) will be conducted.

6.2.3. Alternative Test Methods

The Secretary may require a different test method or approve an alternative method in light of any technology advancements that may occur and may conduct such other tests as may be deemed necessary to evaluate air pollution emissions.

~~6.2.4. Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (d) of this section. [40CFR§60.4212]~~

~~6.2.5. The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F. [40CFR§60.4212a]~~

~~6.2.6. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not to exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039. [40CFR§60.4212b]~~

~~6.2.7. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:~~

~~NTE Requirement for each pollutant = (1.25) x (STD)~~

~~Where:~~

~~STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.~~

~~Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate. [40CFR§60.4212c]~~

~~6.2.8. Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load. [40CFR§60.4213a]~~

~~6.2.9. You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(e). [40CFR§60.4213b]~~

~~6.2.10. You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour. [40CFR§60.4213c]~~

~~6.2.11. To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section. [40CFR§60.4213d]~~

~~(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:~~

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 2})$$

Where:

C_i = concentration of NO_x or PM at the control device inlet;
 C_o = concentration of NO_x or PM at the control device outlet, and
 R = percent reduction of NO_x or PM emissions.

(2) You must normalize the NO_x or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

Where:

$$C_{\text{adj}} = C_d \frac{5.9}{20.9 - \% \text{O}_2} \quad (\text{Eq. 3})$$

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O_2 ;
 C_d = Measured concentration of NO_x or PM, uncorrected;
 5.9 = 20.9 percent O_2 - 15 percent O_2 , the defined O_2 correction value, percent;
 $\% \text{O}_2$ = Measured O_2 concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(I) through (iii) of this section.

(i) Calculate the fuel specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_e} \quad (\text{Eq. 4})$$

Where:

F_o = Fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air;
 0.209 = Fraction of air that is O_2 , percent/100;
 F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($\text{dscf}/10^6 \text{ Btu}$);
 F_e = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($\text{dscf}/10^6 \text{ Btu}$).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2 , as follows:

$$X_{\text{CO}_2} = \frac{5.9}{F_o} \quad (\text{Eq. 5})$$

Where:

X_{CO_2} = CO_2 correction factor, percent.

$$5.9 = 20.9 \text{ percent } O_2 - 15 \text{ percent } O_2, \text{ the defined } O_2 \text{ correction value, percent.}$$

(iii) Calculate the NO_x and PM gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 6})$$

Where:

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O_2 .

C_d = Measured concentration of NO_x or PM, uncorrected.

$\%CO_2$ = Measured CO_2 concentration, dry basis, percent.

6.2.12. To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 7 of this section: [40CFR§60.4213e]

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{KW\text{-hour}} \quad (\text{Eq. 7})$$

Where:

ER = Emission rate in grams per KW hour.

C_d = Measured NO_x concentration in ppm.

1.912×10^{-3} = Conversion constant for ppm NO_x to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW hour = Brake work of the engine, in KW hour.

6.2.13. To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{KW\text{-hour}} \quad (\text{Eq. 8})$$

Where:

ER = Emission rate in grams per KW hour.

C_{adj} = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW hour = Energy output of the engine, in KW.

6.3. Recordkeeping and Reporting Requirements

6.3.1. Monitoring Information

The permittee shall keep the following records of monitoring information:

- a. The date, place and time of sampling measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

6.3.2. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [40CFR§60.4214b]

6.3.3. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [40CFR§60.4214c]

7.0. Source-Specific Requirements (40CFR60 Subpart JJJJ Requirements, 1E-6E)

7.1. Limitations and Standards

- 7.1.1. The provisions of this subpart are applicable to owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified below. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
- a. Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:
1. On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
 2. *Reserved*;
 3. on or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or
 4. *Reserved*.
- b. Owners and operators of stationary SI ICE that commence modification or reconstruction after June 12, 2006.
[40CFR§60.4230(a)]

~~7.1.2. The provisions of this subpart are not applicable to stationary SI ICE being tested at an engine test cell/stand. [40CFR§60.4230(b)]~~

~~7.1.3. If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable. [40CFR§60.4230(e)]~~

~~7.1.4. Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security. [40CFR§60.4230(e)]~~

~~7.1.5. Owners and operators of facilities with internal combustion engines that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines. [40CFR§60.4230(f)]~~

7.2. Emission Standards for Owners and Operators

~~7.2.1. Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified. [40CFR§60.4233(e)]~~

~~7.2.2. Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of this section. [40CFR§60.4233(h)]~~

7.2.3. Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine. [40CFR§60.4234]

7.3. Other Requirements for Owners and Operators

~~7.3.1. After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in §60.4233. [40CFR§60.4236(a)]~~

~~7.3.2. After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 1, 2010. [40CFR§60.4236(b)]~~

~~7.3.3. For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in §60.4233 after January 1, 2011. [40CFR§60.4236(c)]~~

~~7.3.4. In addition to the requirements specified in §§60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in paragraphs (a), (b), and (c) of this section, after the date specified in paragraph (a), (b), and (c) of this section. [40CFR§60.4236(d)]~~

7.3.5. The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location. [40CFR§60.4236(e)]

~~7.3.6. Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter. [40CFR§60.4237(b)]~~

7.4. Compliance Requirements for Owners and Operators

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

- a. Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.
- b. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

1. If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.
2. If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

[40CFR§60.4243(b)]

- 7.4.2. If you are an owner or operator of a stationary SI internal combustion engine that must comply with the emission standards specified in §60.4233(f), you must demonstrate compliance according paragraph (b)(2)(i) or (ii) of this section, except that if you comply according to paragraph (b)(2)(i) of this section, you demonstrate that your non-certified engine complies with the emission standards specified in §60.4233(f). [40CFR§60.4243(c)]

~~7.4.3. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. [40CFR§60.4243(d)]~~

- 7.4.4. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233. [40CFR§60.4243(e)]

- 7.4.5. If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). [40CFR§60.4243(f)]

~~(e) You must demonstrate continuous compliance with standards that apply to pneumatic controller affected facilities as required by § 60.5415.~~

~~(f) You must perform the required notification, recordkeeping, and reporting as required by § 60.5420, except that you are not required to submit the notifications specified in § 60.5420(a).~~

[40CFR§60.5390, Pneumatic Controllers]

8.2. Initial Compliance Demonstration

8.2.1. You must determine initial compliance with the standards for each affected facility using the requirements in paragraph (c) of this section. The initial compliance period begins on October 15, 2012 or upon initial startup, whichever is later, and ends no later than one year after the initial startup date for your affected facility or no later than one year after October 15, 2012. The initial compliance period may be less than one full year.

c. To achieve initial compliance with the standards for each reciprocating compressor affected facility you must comply with paragraphs (c)(1) through (4) of this section.

1. During the initial compliance period, you must continuously monitor the number of hours of operation or track the number of months since the last rod packing replacement.
2. You must submit the notifications required in 60.7(a)(1), (3), and (4).
3. You must submit the initial annual report for your reciprocating compressor as required in § 60.5420(b).
4. You must maintain the records as specified in § 60.5420(c)(3) for each reciprocating compressor affected facility.

[40CFR§60.5410, Reciprocating Compressor Engines]

8.2.2. To achieve initial compliance with emission standards for your pneumatic controller affected facility you comply with the requirements specified below.

~~1. If applicable, you have demonstrated by maintaining records as specified in § 60.5420(c)(4)(ii) of your determination that the use of a pneumatic controller affected facility with a bleed rate greater than 6 standard cubic feet of gas per hour is required as specified in § 60.5390(a).~~

~~2. You own or operate a pneumatic controller affected facility located between the wellhead and a natural gas processing plant and the manufacturer's design specifications indicate that the controller emits less than or equal to 6 standard cubic feet of gas per hour.~~

~~3. You must tag each new pneumatic controller affected facility according to the requirements of § 60.5390(b)(2).~~

~~4. You must include the information in paragraph (d)(1) of this section and a listing of the pneumatic controller affected facilities specified in paragraphs (d)(2) and (3) of this section in the initial annual report submitted for your pneumatic controller affected facilities constructed, modified or reconstructed during the period covered by the annual report according to the requirements of § 60.5420(b).~~

5. You must maintain the records as specified in § 60.5420(c)(4) for each pneumatic controller affected facility.

[40CFR§60.5410, Pneumatic Controllers]

8.3. Continuous Compliance Demonstration

8.3.1. For each reciprocating compressor affected facility, you must demonstrate continuous compliance according to paragraphs (1) through (3) of this section.

1. You must continuously monitor the number of hours of operation for each reciprocating compressor affected facility or track the number of months since initial startup, or October 15, 2012, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.
2. You must submit the annual report as required in § 60.5420(b) and maintain records as required in § 60.5420(c)(3).
3. You must replace the reciprocating compressor rod packing before the total number of hours of operation reaches 26,000 hours or the number of months since the most recent rod packing replacement reaches 36 months.

8.3.2. ~~Affirmative defense for violations of emission standards during malfunction. In response to an action to enforce the standards set forth in §§ 60.5375, you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at § 60.2. Appropriate penalties may be assessed, however, if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.~~

~~(1) To establish the affirmative defense in any action to enforce such a standard, you must timely meet the reporting requirements in § 60.5420(a), and must prove by a preponderance of evidence that:~~

~~(i) The violation:~~

~~(A) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and~~

~~(B) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and~~

~~(C) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and~~

~~(D) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and~~

~~(ii) Repairs were made as expeditiously as possible when a violation occurred. Off shift and overtime labor were used, to the extent practicable to make these repairs; and~~

~~(iii) The frequency, amount and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and~~

~~(iv) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and~~

~~(v) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment and human health; and~~

~~(vi) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and~~

~~(vii) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and~~

~~(viii) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and~~

~~(ix) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.~~

~~(2) Report. The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in paragraph (h)(1) of this section. This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.~~

~~[40CFR§60.5415, Reciprocating Compressor Engines]~~

~~8.3.3. For each pneumatic controller affected facility, you must demonstrate continuous compliance according to paragraphs (1) through (3) of this section.~~

~~1. You must continuously operate the pneumatic controllers as required in § 60.5390(a), (b), or (c).~~

~~2. You must submit the annual report as required in § 60.5420(b).~~

~~3. You must maintain records as required in § 60.5420(c)(4).~~

~~[40CFR§60.5415(d) Pneumatic Controller]~~

8.4. Notification, Recordkeeping and Reporting Requirements

8.4.1. You must submit the notifications required in § 60.7(a)(1) and (4), and according to paragraphs (a)(1) and (2) of this section, if you own or operate one or more of the affected facilities specified in § 60.5365 that was constructed, modified, or reconstructed during the reporting period.

8.4.2. Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (6) of this section to the Administrator and performance test reports as specified in paragraph (b)(7) of this section. The initial annual report is due ~~30~~ 90 days after the end of the initial compliance period as determined according to § 60.5410. Subsequent annual reports are due on the same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs (b)(1) through (6) of this section. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting period.

1. The general information specified in paragraphs (b)(1)(i) through (iv) of this section.

authority, you must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority.

- ii. All reports required by this subpart not subject to the requirements in paragraph (a)(2)(i) of this section must be sent to the Administrator at the appropriate address listed in § 63.13 of this part. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraph (a)(2)(i) and (ii) of this section in paper format.

[40CFR§60.5420(b)]

8.4.3. Recordkeeping requirements. You must maintain the records identified as specified in § 60.7(f) and as specified below. All records must be maintained for at least 5 years.

1. For each reciprocating compressors affected facility, you must maintain the records in paragraphs (c)(3)(i) through (iii) of this section.

- (i) Records of the cumulative number of hours of operation or number of months since initial startup or October 15, 2012, or the previous replacement of the reciprocating compressor rod packing, whichever is later.

- (ii) Records of the date and time of each reciprocating compressor rod packing replacement.

- (iii) Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in § 60.5385.

- ~~2. For each pneumatic controller affected facility, you must maintain the records identified in paragraphs (c)(4)(i) through (v) of this section.~~

- ~~i. Records of the date, location and manufacturer specifications for each pneumatic controller constructed, modified or reconstructed.~~

- ~~ii. Records of the demonstration that the use of pneumatic controller affected facilities with a natural gas bleed rate greater than 6 standard cubic feet per hour are required and the reasons why.~~

- ~~iii. If the pneumatic controller is not located at a natural gas processing plant, records of the manufacturer's specifications indicating that the controller is designed such that natural gas bleed rate is less than or equal to 6 standard cubic feet per hour.~~

- ~~iv. If the pneumatic controller is located at a natural gas processing plant, records of the documentation that the natural gas bleed rate is zero.~~

- ~~v. Records of deviations in cases where the pneumatic controller was not operated in compliance with the requirements specified in § 60.5390.~~

[40CFR§60.5420]

9.0. Source-Specific Requirements (Reboiler 8E, Line Heater 11E)

9.1. Limitations and Standards

- 9.1.1. Maximum Design Heat Input. The maximum design heat input for the Reboiler (8E) shall not exceed 0.75 MMBTU/hr.
- 9.1.2. Maximum emissions from the 0.75 MMBTU/hr Reboiler (8E) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.07	0.30
Carbon Monoxide	0.06	0.25

- ~~9.1.3. To demonstrate compliance with Section 9.1.2, the quantity of natural gas that shall be consumed in the 0.75 MMBTU/hr Reboiler (8E) shall not exceed 745 cubic feet per hour and 6.5×10^6 cubic feet per year.~~

- 9.1.4. Maximum Design Heat Input. The maximum design heat input for the Line Heater (11E) shall not exceed 0.75 MMBTU/hr.
- 9.1.5. Maximum emissions from the 0.75 MMBTU/hr Line Heater (11E) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.07	0.30
Carbon Monoxide	0.06	0.25

- ~~9.1.6. To demonstrate compliance with Section 9.1.2, the quantity of natural gas that shall be consumed in the 0.75 MMBTU/hr Line Heater (11E) shall not exceed 745 cubic feet per hour and 6.5×10^6 cubic feet per year.~~

- 9.1.7. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

9.2. Monitoring Requirements

- ~~9.2.1. For the purpose of determining compliance with the opacity limits of 45CSR2, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for each of the Reboiler (8E) and the Line Heater (11E).~~

~~The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix~~

~~A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.~~

~~Visible emission checks shall be conducted at least once per calendar month with a maximum of forty five (45) days between consecutive readings. These checks shall be performed at each source for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of facility operation and appropriate weather conditions.~~

~~If visible emissions are present at a source(s) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of Method 9 as soon as practicable, but within seventy two (72) hours of the final visual emission check. A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.~~

9.3. Testing Requirements

- 9.3.1. Compliance with the visible emission requirements of section 9.1.7 shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9, Method 22, or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of section 9.1.7. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.

9.4. Recordkeeping Requirements

~~9.4.1. To demonstrate compliance with sections 9.1.1 9.1.6, the permittee shall maintain records of the amount of natural gas consumed in the Reboiler (8E) and the Line Heater (11E). Said records shall be maintained on site or in a readily accessible off site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.~~

~~9.4.2. The permittee shall maintain records of all monitoring data required by Section 9.2.1 documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80EF, 6 – 10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.~~

9.5. Reporting Requirements

- 9.5.1. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

10.0. Source-Specific Hazardous Air Pollutant Requirements (Natural Gas Dehydration Units Not Subject to MACT Standards and being controlled by Condenser/Combustion)

10.1. Limitations and Standards

- 10.1.1. Maximum Throughput Limitation. The maximum wet natural gas throughput to the glycol dehydration unit/still column shall not exceed 60 mmscf/day.
- 10.1.2. The glycol dehydration unit/still column (8E) shall be equipped with a fully functional BTEX Elimination System (8C) at all times. The BTEX Elimination System (8C) shall be operated according to manufacturer's specifications.
- 10.1.3. Recycled reboilers subject to this section shall be designed and operated in accordance with the following:
 - a. The vapors/overheads from the still column shall be routed through a closed vent system to the reboiler at all times when there is a potential that vapors (emissions) can be generated from the still column.
 - b. The reboiler shall only be fired with vapors from the still column, and natural gas may be used as supplemental fuel.
 - c. The vapors/overheads from the still column shall be introduced ~~into the flame zone~~ with the primary fuel for the reboiler.

10.2. Monitoring Requirements

- 10.2.1. The permittee shall monitor the throughput of wet natural gas fed to the dehydration system on a monthly basis for the glycol dehydration unit (8E).

10.3. Recordkeeping Requirements

- 10.3.1. The permittee shall maintain a record of the wet natural gas throughput through the glycol dehydration unit/still column (8E) to demonstrate compliance with section 10.1.1 of this permit. Said records shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

~~10.3.2. The permittee shall maintain a record of the condensate gathered from the condenser. Said records shall be maintained for a period of five (5) years on site or in a readily accessible off site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.~~

11.0. Source-Specific Requirements (Storage Tanks, 9E)

11.1. Limitations and Standards

- 11.1.1. Emissions from the storage tanks (9E) shall be controlled by an **electrically driven** vapor recovery unit **(CE-5)** ~~(5E), prior to release to the atmosphere.~~ This vapor recovery unit ~~(5E)~~ shall be designed to achieve a minimum guaranteed control efficiency of 95% for volatile organic compound (VOC) emissions and hazardous air pollutant (HAP) emissions.
- 11.1.2. The vapor recovery unit ~~(5E)~~ must be installed and operating prior to start-up of the storage tanks (9E).

11.2. Testing Requirements

11.2.1. For the purposes of determining compliance with Section 11.1.1, the permittee shall conduct monitoring to show compliance with the capture efficiency requirement of the storage tanks (9E) **in accordance with 40CFR§60.5416(c).** ~~The monitoring shall be conducted initially within 60 days after achieving the maximum production rate at which the facility will be operated or within 180 days of start up, whichever is earlier. Monitoring will be conducted once every calendar year thereafter per the requirements of §60.482-10.~~

- ~~a. The vapor recovery unit (5E) will be operated and monitored in compliance with §60.482-10(b), (f) through (m), and §60.485.~~
- ~~b. Records of the vapor recovery unit (5E) will be maintained according to the requirements of §60.486 and §60.635(b).~~

(c) Cover and closed vent system inspections for storage vessel affected facilities. If you install a control device or route emissions to a process, you must inspect each closed vent system according to the procedures and schedule specified in paragraphs (c)(1) of this section, inspect each cover according to the procedures and schedule specified in paragraph (c)(2) of this section, and inspect each bypass device according to the procedures of paragraph (c)(3) of this section. You must also comply with the requirements of (c)(4) through (7) of this section.

(1) For each closed vent system, you must conduct an inspection at least once every calendar month as specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) You must maintain records of the inspection results as specified in §60.5420(c)(6).

(ii) Conduct olfactory, visual and auditory 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.

(iii) Monthly inspections must be separated by at least 14 calendar days.

(2) For each cover, you must conduct inspections at least once every calendar month as specified in paragraphs (c)(2)(i) through (iii) of this section.

(i) You must maintain records of the inspection results as specified in §60.5420(c)(7).

(ii) Conduct olfactory, visual and auditory inspections for defects that could result in air 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, you must 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.

(iii) Monthly inspections must be separated by at least 14 calendar days.

(3) For each bypass device, except as provided for in §60.5411(c)(3)(ii), you must meet the requirements of paragraphs (c)(3)(i) or (ii) of this section.

(i) Set the flow indicator to sound an alarm at the inlet to the bypass device when the stream is being diverted away from the control device or process to the atmosphere. You must maintain records of each time the alarm is sounded according to §60.5420(c)(8).

(ii) 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. You must maintain records of the inspections and records of each time the key is checked out, if applicable, according to §60.5420(c)(8).

11.2.2. The Director may approve or specify additional testing for demonstrating compliance with Section 11.1.1.

11.3. Recordkeeping Requirements

~~11.3.1. The vapor recovery unit (5E) will comply with the recordkeeping requirements of §60.486 and §60.635(b).~~

11.4. Reporting Requirements

~~11.4.1. The permittee shall submit a written report of the results of testing required in 11.2.1 of this permit before the close of business on the 60th day following the completion of such testing to the Director. Such report(s) shall include all records of the control device performance parameters taken during such testing, whichever is appropriate for the required report.~~

2.0. Source-Specific Requirements (Product Loadout, 10E)

12.1. Limitations and Standards

12.1.1. Maximum Throughput Limitation. The maximum condensate throughput to the Condensate Product Loadout (10E) shall not exceed 122,600 gallons per year. Compliance with the Maximum Throughput Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the monthly throughput at any given time during the previous twelve consecutive calendar months.

12.1.2. The Condensate Product Loadout (10E) shall be operated in accordance with the plans and specifications filed in Permit Application R13-3060. All emissions from the Condensate Product Loadout (10E) will be controlled by a carbon canister (10C) that shall be designed to achieve a minimum guaranteed control efficiency of 95% for volatile organic compound (VOC) and Hazardous Air Pollutant (HAP) emissions.

12.1.3. The carbon canister (APC-CARBON) must be operated at all times when gases, vapors, and fumes are vented from the Condensate Product Loadout (10E). In addition, the carbon canister must be operated in series, as dual carbon canisters, in case of emission breakthrough in one carbon canister.