MAJOR SOURCE OPERATING PERMIT
2ND RENEWAL TITLE V
MAY 10, 2018
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Table of Contents

PROCESS DESCRIPTION............................................................................................................. 1

EQUIPMENT LIST ...................................................................................................................... 2

NOTABLE CHANGES .................................................................................................................... 4

FACILITY-WIDE EMISSION REQUIREMENTS ............................................................................ 5

STATE REGULATIONS .................................................................................................................. 5

ADEM Admin. Code R. 335-3-16-.03, “Major Source Operating Permits” (MSOP) .................... 5

ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting” 5

FEDERAL REGULATIONS ............................................................................................................. 6


40 CFR Part 64, “Compliance Assurance Monitoring (CAM)” .................................................... 6

FACILITY-WIDE EMISSIONS ..................................................................................................... 7

VARIOUS HEATING UNITS .......................................................................................................... 8

STATE REGULATIONS .................................................................................................................. 9

ADEM Admin. Code R. 335-3-4-.03(4), “Fuel Burning Equipment” for Control of Particulate Emissions .................................................................................................................. 9

ADEM Admin. Code R. 335-3-5-.01(1)(b), “Fuel Combustion” for Control of Sulfur Compound Emissions .................................................................................................................. 9

ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting” 10

ADEM Admin. Code R. 335-3-16 “TITLE V” ............................................................................ 10

FEDERAL REGULATIONS ............................................................................................................. 10

40 CFR 60 Subpart Dc [NSPS Dc] “Standards of Performance for Small Industrial-Commercial- Institutional Steam Generating Units” ....................................................................................... 10


ENGINE REQUIREMENTS ......................................................................................................... 13

STATE REGULATIONS .................................................................................................................. 14

ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting” 14

ADEM ADMIN. CODE 335-3-5-.03(1-2), “PETROLEUM PRODUCTION” ................................. 15

FEDERAL REGULATIONS ............................................................................................................. 15


40 CFR 60 Subpart OOOO, “Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution” ....................................................................................... 16

40 CFR 64, “Compliance Assurance Monitoring (CAM)” ................................................................................................. 17

ENGINE ACTUAL EMISSIONS ................................................................................................................................. 18

TABLE 5: ENGINE EMISSIONS ............................................................................................................................... 18

EMERGENCY ENGINE ............................................................................................................................................... 19

STATE REGULATIONS ............................................................................................................................................... 19

ADEM Admin. Code R. 335-3-16 “TITLE V” ........................................................................................................... 19

40 CFR 60 Subpart IIII (NSPS IIII) “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines” ................................................................................................. 19


40 CFR 64, “Compliance Assurance Monitoring (CAM)” ................................................................................................. 20

HYdraulically Fractured Sites & Gas Production Sites .................................................................................................. 21

STATE REGULATIONS ............................................................................................................................................... 21

ADEM Admin. Code R. 335-3-16 “TITLE V” ........................................................................................................... 21

ADEM Admin. Code R. 335-3-14-04, “Prevention of Significant Deterioration (PSD) Permitting” ................................................................. 21

40 CFR 60 Subpart OOOO (NSPS OOOO), “Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015” ................................................................................................................................. 21

40 CFR 64, “Compliance Assurance Monitoring (CAM)” ................................................................................................. 23

Equipment in VOC/HAPs Service .................................................................................................................................. 24

STATE REGULATIONS ............................................................................................................................................... 24

ADEM Admin. Code R. 335-3-16 “TITLE V” ........................................................................................................... 24

ADEM Admin. Code R. 335-3-14-04, “Prevention of Significant Deterioration (PSD) Permitting” ................................................................. 24

40 CFR 60 Subpart OOOO (NSPS OOOO), “Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015” ................................................................................................................................. 25

40 CFR 64, “Compliance Assurance Monitoring (CAM)” ................................................................................................. 29

Wellsite Storage Vessels .................................................................................................................................................. 30

TABLE 6: STORAGE TANK SUMMARY ....................................................................................................................... 30

STATE REGULATIONS ............................................................................................................................................... 30

ADEM Admin. Code R. 335-3-16 “TITLE V” ........................................................................................................... 30
ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting” 30
ADEM Admin. Code R. 335-3-6-.03, “Loading and Storage of VOC” 31
ADEM Admin. Code R. 335-3-6-.04, “Fixed-Roof Petroleum Liquid Storage Vessels” 31
40 CFR 60 Subpart OOOO (NSPS OOOO), “Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015” 31
40 CFR 64, “Compliance Assurance Monitoring (CAM)” 33

SWEETENING UNIT [AMINE UNIT] 34

STATE REGULATIONS 34

ADEM Admin. Code R. 335-3-16 “TITLE V” 34
ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting” 34
ADEM Admin. Code R. 335-3-5-.03(2) and (3), “Petroleum Production” 34
40 CFR 64, “Compliance Assurance Monitoring (CAM)” 35

FLARES 36

STATE REGULATIONS 37

ADEM Admin. Code R. 335-3-16 “TITLE V” 37
ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting” 37
ADEM Admin. Code R. 335-3-5-.03(2) and (3), “Petroleum Production” 37
ADEM Admin. Code R. 335-3-5-.01(1) “Fuel Combustion” 38
40 CFR 60.18, “General control device and work practice requirements” 38
40 CFR 64, “Compliance Assurance Monitoring (CAM)” 39
STATEMENT OF BASIS

The proposed Title V Major Source Operating Permit (MSOP) would be issued under the provisions of ADEM Admin. Code R. 335-3-16. The above named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans, and other documents attached hereto or on file with the Air Division of Alabama Department of Environmental Management, in accordance with the terms and the conditions of this permit.

Pruet Production Company (Pruet) was issued its original Title V on January 1, 2008 and most recent Title V on December 12, 2012 with an expiration date of December 31, 2017. Per ADEM Rule 335-3-16-.12(2), an application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration for the permit. Pruets submitted its application June 20, 2017, which is considered timely.

PROCESS DESCRIPTION

Well Process Descriptions
There are two types of wells located in Area No. 1—Oil & Gas Extraction Wells and a Gas Injection Well.

Oil & Gas Extraction Wells
Oil and associated sour gas flows from a well into a low pressure separator. In the process, the primary separation of gas and liquids from the well occurs in the separator. After the separator, the gas goes to the sour gas flare or to the nearby gas plant on this site. The liquids leave the separator and pass through a heater treater which primarily separates oil and water which flow into the storage tanks. A Vapor Recovery Unit (VRU) is used to capture stock tank vapors and send the vapors to either the gas plant or the onsite well flares. A power oil pump engine is used to pump oil from one of the tanks back into the ground in order to facilitate the extraction process. In the event that the gas plant is offline, these wells may be used to produce oil. This process is similar to the oil and gas extraction process except that the gas is continuously flared.

Gas Injection Well
Gas is re-injected into the underground formation to facilitate oil production. Currently, the 20-12 well is being used as a gas injection site.
Plant Process Description
Gas gathered from numerous production and storage sites, primarily operated by Pruet, is brought to the gas treating and processing plant via a gas pipeline gathering system. Gas entering the plant goes through a gas/oil/water separator in order to phase separate the inlet stream into component streams. Following the separator, the oil is sent through a stabilizer where the lighter hydrocarbon compounds are removed through lowering the vapor pressure.

Following the separator and stabilizer, the gas is sent to a dual train sweetening unit where it is contacted with a lean amine solution that removes carbon dioxide (CO\textsubscript{2}) and hydrogen sulfide (H\textsubscript{2}S) compounds. The rich amine solvent leaving the amine contactor is sent to a regeneration column where the CO\textsubscript{2} and H\textsubscript{2}S are removed, producing an acid gas stream and a lean amine stream. This acid gas stream is burned in the flare while the lean amine is recycled back to the contacting column.

Sweet gas leaving the gas sweetening contactor is sent to dual glycol dehydration, refrigeration, and extraction trains. The glycol dehydration train removes entrained solution water from the gas stream, thus allowing the gas to be cooled to a much lower temperature without freezing. The gas then goes through a refrigeration and extraction train where the gas is cooled in order to condense the natural gas liquids (NGLs) from the gas stream. The sweetened gas is then metered and sold through a pipeline while the NGLs are stored onsite until sale or custody transfer.

Equipment List
Comprised of 17 wells (13 constructed, 4 planned) Cedar Creek, Area No. Gas Treating & Processing Plant & Gas Production Wells is currently equipped with the following equipment capable of emissions:
### Equipment for Wells:

<table>
<thead>
<tr>
<th>Unit Name</th>
<th>Well No.</th>
<th>Unit No.</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heater Treater*</td>
<td>19-15</td>
<td>1915C</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>30-3</td>
<td>3001C</td>
<td>1.40 MMBTU/hr</td>
</tr>
<tr>
<td>Emergency Flare</td>
<td>30-3 &amp; 19-15</td>
<td>3001A</td>
<td>N/A</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>20-6</td>
<td>2006C</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>20-12</td>
<td>2012C</td>
<td>1.35 MMBTU/hr</td>
</tr>
<tr>
<td>Emergency Flare</td>
<td>20-6 &amp; 20-12</td>
<td>2012A</td>
<td>N/A</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>20-7</td>
<td>2007C</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>20-15</td>
<td>2015C</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Emergency Flare</td>
<td>20-7 &amp; 20-15</td>
<td>2015A</td>
<td>N/A</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>29-16</td>
<td>2916C</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Emergency Flare</td>
<td>29-14</td>
<td>2914C</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>29-14</td>
<td>2914A</td>
<td>N/A</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>31-NE</td>
<td>31-NEC</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Emergency Flare</td>
<td>31-NE</td>
<td>31-NEA</td>
<td>N/A</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>31-NW</td>
<td>31-NWC</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Emergency Flare</td>
<td>31-NW</td>
<td>31-NWA</td>
<td>N/A</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>31-SE</td>
<td>31-SEC</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Emergency Flare</td>
<td>31-SE</td>
<td>31-SEA</td>
<td>N/A</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>31-SW</td>
<td>31-SWC</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Emergency Flare</td>
<td>31-SW</td>
<td>31-SWA</td>
<td>N/A</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>32-1</td>
<td>3201C</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Emergency Flare</td>
<td>32-1</td>
<td>3201A</td>
<td>N/A</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>32-3</td>
<td>3203C</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Emergency Flare</td>
<td>32-3</td>
<td>3203A</td>
<td>N/A</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>32-9</td>
<td>3209C</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Emergency Flare</td>
<td>32-9</td>
<td>3209A</td>
<td>N/A</td>
</tr>
<tr>
<td>Heater Treater*</td>
<td>32-11</td>
<td>3211C</td>
<td>0.50 MMBTU/hr</td>
</tr>
<tr>
<td>Emergency Flare</td>
<td>CCL&amp;T 32-11</td>
<td>3211A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Storage Tanks w/Vapor Recovery Unit:

<table>
<thead>
<tr>
<th>Type</th>
<th>Quantity</th>
<th>Unit</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>(24) Crude Oil Storage Tanks</td>
<td>All</td>
<td>N/A</td>
<td>400 BBL</td>
</tr>
<tr>
<td>(10) Salt Water Storage Tank</td>
<td>All</td>
<td>N/A</td>
<td>400 BBL</td>
</tr>
<tr>
<td>(1) Produced Water Storage Tank</td>
<td>All</td>
<td>N/A</td>
<td>400 BBL</td>
</tr>
<tr>
<td>(11) Power Oil Storage Tank</td>
<td>All</td>
<td>N/A</td>
<td>500 BBL</td>
</tr>
</tbody>
</table>

### Electric Motor Driven Power Oil Pump

<table>
<thead>
<tr>
<th>Type</th>
<th>Quantity</th>
<th>Unit</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Motor Driven Power Oil Pump</td>
<td>All</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Table 1: Well Equipment Summary**
Gas Plant Equipment:

<table>
<thead>
<tr>
<th>Unit Name</th>
<th>Unit No.</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amine Reboiler No. 1*</td>
<td>H-501</td>
<td>0.15 MMBTU/hr</td>
</tr>
<tr>
<td>Amine Reboiler No. 2*</td>
<td>H-502</td>
<td>2.25 MMBTU/hr</td>
</tr>
<tr>
<td>Condensate Stabilizer Reboiler*</td>
<td>H-101</td>
<td>2.50 MMBTU/hr</td>
</tr>
<tr>
<td>Glycol Reboiler No. 1*</td>
<td>H-1</td>
<td>0.60 MMBTU/hr</td>
</tr>
<tr>
<td>Glycol Reboiler No. 2*</td>
<td>H-21</td>
<td>1.50 MMBTU/hr</td>
</tr>
<tr>
<td>Inlet Compressor No. 4</td>
<td>IC04</td>
<td>1500 BHP</td>
</tr>
<tr>
<td>Inlet Compressor No. 5</td>
<td>IC05</td>
<td>1500 BHP</td>
</tr>
<tr>
<td>Refrigeration Compressor Engine No. 2</td>
<td>RC02</td>
<td>163 BHP</td>
</tr>
<tr>
<td>Refrigeration Compressor Engine No. 3</td>
<td>RC03</td>
<td>163 BHP</td>
</tr>
<tr>
<td>Refrigeration Compressor Engine No. 7</td>
<td>RC07</td>
<td>225 BHP</td>
</tr>
<tr>
<td>Refrigeration Compressor Engine No. 8</td>
<td>RC08</td>
<td>456 BHP</td>
</tr>
<tr>
<td>Refrigeration Compressor Engine No. 9</td>
<td>RC09</td>
<td>95 BHP</td>
</tr>
<tr>
<td>Continuous Generator Engine No. 4</td>
<td>PLB4</td>
<td>163 BHP</td>
</tr>
<tr>
<td>Emergency Generator Engine No. 5</td>
<td>PLB5</td>
<td>217 BHP</td>
</tr>
<tr>
<td>Tornado Continuous Acid Gas Flare</td>
<td>Tornado</td>
<td>N/A</td>
</tr>
<tr>
<td>LLC Emergency Plant Flare</td>
<td>LLC</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Table 2: Gas Plant Equipment Summary

*Trivial and Insignificant Sources

Notable Changes

Since the issuance of the last Title V (December 12, 2012), Pruet has constructed six of its permitted wells (29-16, 29-14, CCL&T 32-1, CCL&T 32-3, CCL&T 32-9, and CCL&T 32-11). They have also added 10 heater treaters, 10 emergency flares, and 40 storage tanks for the new wells (and planned wells). Refrigeration Compressor Engine No. 1 was replaced with Refrigeration Compressor Engine No. 9, a similar engine. The 1.5 MMBTU/hr condensate stabilizer reboiler was replaced with a 2.5 MMBTU/hr model. Inlet Compressor No. 5 was replaced with an engine of the same model and rated power. Pruet requested and was approved to change out their amine unit in 2012. The new amine unit was put into the Title V renewal, Pruet but never physically replaced the old unit. The original amine unit is still operating on site, and thus the new amine unit is being removed from Pruet’s permit and being replaced with the old amine unit. The permit is being corrected to reflect that the old amine unit is still subject to 40 CFR 60 subpart KKK instead of 40 CFR 60 subpart OOOO.
FACILITY-WIDE EMISSION REQUIREMENTS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POLLUTANT</th>
<th>EMISSION LIMIT</th>
<th>REGULATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility-Wide VOC</td>
<td>VOC</td>
<td>&lt;= 245 Ton/yr</td>
<td>Rule 335-3-14-.04 (Anti-PSD)</td>
</tr>
<tr>
<td>Facility-Wide CO</td>
<td>CO</td>
<td>&lt;= 245 Ton/yr</td>
<td>Rule 335-3-14-.04 (Anti-PSD)</td>
</tr>
<tr>
<td>Facility-Wide NOx</td>
<td>NOx</td>
<td>&lt;= 245 Ton/yr</td>
<td>Rule 335-3-14-.04 (Anti-PSD)</td>
</tr>
<tr>
<td>Facility-Wide SOx</td>
<td>SOx</td>
<td>&lt;= 245 Ton/yr</td>
<td>Rule 335-3-14-.04 (Anti-PSD)</td>
</tr>
</tbody>
</table>

The facility’s applicability to the state and federal regulations are discussed in the following sections.

STATE REGULATIONS

ADEM Admin. Code R. 335-3-16-.03, “Major Source Operating Permits” (MSOP)

Applicability:
The facility has been deemed a major source of criteria pollutants under this regulation since the nitrogen oxide (NOx), volatile organic compounds (VOC), and carbon monoxide (CO) emissions from the facility have the potential to exceed the 100 TPY threshold for criteria pollutants.

ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting”

Applicability:
The major source threshold for criteria pollutants for this type of facility is 250 TPY (oil and gas wells are not one of the 28 source categories listed in this regulation). Pruets would have PTE above 250 TPY for CO and VOC if all their sources were constructed and operated without sending gas down the sales pipeline.

Standards:
Pruet requested and received 245 TPY anti-PSD limits on NOx emissions from the facility in their 2012 Air Permit. Pruets also requested and received 245 TPY anti-PSD limits on SO2, CO, and VOC though their calculated PTE for those criteria pollutants was (and still is) under 250 TPY.

The Title V permit for Pruets’s Area 1 will retain the 245 TPY anti-PSD limit on VOC, NOx, SO2, and CO to avoid exceeding the PSD threshold.
Compliance and Performance Test Methods and Procedures:

Pruet will perform tests on each unit as described in the unit-specific sections of the permit and this analysis.

Emissions Monitoring:

To meet the facility-wide anti-PSD limit, Pruet currently calculates its monthly CO, NO\textsubscript{X}, and VOC emissions from all engines each month and its monthly CO, VOC, NO\textsubscript{X}, and SO\textsubscript{2} emissions from all flares each month. Pruet has requested their testing frequency to be lowered due to historically low emissions and never coming close to exceeding their limits. I recommend granting this request and reducing the frequency of testing to quarterly. Pruet also will adhere to a periodic monitoring plan with duty to report to the Department if 186 TPY (approximately 245 TPY [limit] – 353*2/12 TPY [PTE]) is calculated to have been exceeded for any 12-month period.

Recordkeeping and Reporting Requirements:

Pruet will keep record of each month’s tons-per-month and tons-per-12-months calculations plus any permit deviations for a period of 5 years. Pruet will report the most recent tons-per-12-months calculation on a semiannual basis. Unit-specific information needed to perform the calculations such as engine operating hours and flared gas flow rate shall be recorded as specified in those units’ permit provisos.

FEDERAL REGULATIONS


Applicability:

Provided that the facility is subject to one of the applicable subparts found under this part, the facility shall comply with this regulation as specified in that subpart.

\textit{40 CFR Part 64, “Compliance Assurance Monitoring (CAM)”}

CAM will be discussed in unit-specific sections of this analysis.

Applicability:

This subpart is applicable to an emission source provided the source meets the following criteria: it is subject to an emission limit or standard, it uses a control device to achieve compliance with the emissions limit or standard, and it has pre-controlled emissions from a regulated air pollutants that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source [40 CFR §64.2(a)].
FACILITY-WIDE EMISSIONS

Facility wide actual emissions were obtained from the 2016 Air Emission Report.

<table>
<thead>
<tr>
<th>FACILITY WIDE EMISSIONS (TPY)</th>
<th>SO₂</th>
<th>NO₂</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual</td>
<td>37.70</td>
<td>48.71</td>
<td>88.81</td>
<td>81.98</td>
</tr>
</tbody>
</table>

Table 3. Facility Wide Emissions
### VARIOUS HEATING UNITS

<table>
<thead>
<tr>
<th>EMISSION POINT(S)</th>
<th>POLLUTANT</th>
<th>EMISSION LIMIT</th>
<th>REGULATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sixteen (16) 0.5 MMBTU/hr Heater Treaters</td>
<td>SO₂</td>
<td>No more than 2.0 lb/hr per Unit</td>
<td>Rule 335-3-5-.01(b)</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>No more than 0.94 lb/hr per Unit</td>
<td>Rule 335-3-4-.03(2)</td>
</tr>
<tr>
<td>One (1) 1.35 MMBTU/hr Heater Treater</td>
<td>SO₂</td>
<td>No more than 5.4 lb/hr</td>
<td>Rule 335-3-5-.01(b)</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>No more than 1.63 lb/hr</td>
<td>Rule 335-3-4-.03(2)</td>
</tr>
<tr>
<td>One (1) 1.40 MMBTU/hr Heater Treater</td>
<td>SO₂</td>
<td>No more than 5.6 lb/hr</td>
<td>Rule 335-3-5-.01(b)</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>No more than 1.67 lb/hr</td>
<td>Rule 335-3-4-.03(2)</td>
</tr>
<tr>
<td>One (1) 0.15 MMBTU/hr Amine Reboiler</td>
<td>SO₂</td>
<td>No more than 0.6 lb/hr</td>
<td>Rule 335-3-5-.01(b)</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>No more than 0.48 lb/hr</td>
<td>Rule 335-3-4-.03(2)</td>
</tr>
<tr>
<td>One (1) 2.25 MMBTU/hr Amine Reboiler</td>
<td>SO₂</td>
<td>No more than 9.0 lb/hr</td>
<td>Rule 335-3-5-.01(b)</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>No more than 2.17 lb/hr</td>
<td>Rule 335-3-4-.03(2)</td>
</tr>
<tr>
<td>One (1) 2.5 MMBTU/hr Condensate Stabilizer Reboiler</td>
<td>SO₂</td>
<td>No more than 10.0 lb/hr</td>
<td>Rule 335-3-5-.01(b)</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>No more than 2.31 lb/hr</td>
<td>Rule 335-3-4-.03(2)</td>
</tr>
<tr>
<td>One (1) 0.6 MMBTU/hr Glycol Reboiler</td>
<td>SO₂</td>
<td>No more than 2.4 lb/hr</td>
<td>Rule 335-3-5-.01(b)</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>No more than 1.04 lb/hr</td>
<td>Rule 335-3-4-.03(2)</td>
</tr>
<tr>
<td>One (1) 1.5 MMBTU/hr Glycol Reboiler</td>
<td>SO₂</td>
<td>No more than 6.0 lb/hr</td>
<td>Rule 335-3-5-.01(b)</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>No more than 1.73 lb/hr</td>
<td>Rule 335-3-4-.03(2)</td>
</tr>
</tbody>
</table>

Table 4: Emission Limits for Various Heaters
STATE REGULATIONS

ADEM Admin. Code R. 335-3-4-.03(4), “Fuel Burning Equipment” for Control of Particulate Emissions

Applicability:
The various heating devices are all subject to the requirements of this regulation.

Emission Standards:
This regulation requires all new indirect heating units, regardless of location, to meet a particulate limit of:

\[ \text{Emission Limit (lb/MMBTU)} = 1.38 \times [\text{Heat Input (MMBTU/hr)}]^{-0.44} \]

In terms of pounds per hour, this limit may be represented as:

\[ \text{Emissions Limit (lb/hr)} = \text{Emission Limit (lb/MMBTU)} \times \text{Heating Capacity (MMBTU/hr)} \]

Simplifying:

\[ \text{Emissions Limit (lb/hr)} = 1.38 \times [\text{Heating Capacity (MMBTU/hr)}]^{0.56} \]

The emission limits for each individual unit based on this calculation are shown in Table 4. Fuel for each unit would be pipeline-quality natural gas, which would result in minimal Particulate Matter emissions.

Emissions Monitoring:
No monitoring is required for Trivial & Insignificant sources, such as these.

ADEM Admin. Code R. 335-3-5-.01(1)(b), “Fuel Combustion” for Control of Sulfur Compound Emissions

Applicability:
This regulation requires all indirect heating units located in Conecuh County, a category two county, to meet a limit of 4.0 lb SO2/MMBTU Heat Input. Table 4 shows the emission limits for each individual unit based on this calculation, along with the combined limit for all units. Fuel for each unit would be pipeline-quality natural gas, which would result in minimal SO2 emissions.
ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting”

Applicability:
This facility is a 250-Ton source for the purposes of PSD. Even though the facility as a whole has a limit to be a synthetic minor source with respect to PSD, none of these heaters have a limit assigned by this regulation.

ADEM Admin. Code R. 335-3-16 “TITLE V”

Applicability:
These units are subject to this regulation. However, according to the Trivial and Insignificant Activities list (Section 2, Part A), any fuel burning equipment with a rating between 0.5 MMBTU/hr and 5 MMBTU/hr is considered trivial and insignificant, provided it is not subject to an NSPS or a MACT regulation, and is located at a Title V facility. All of these heating units fall within this rating range, and no MACT regulations or NSPS regulations apply to any of these heating units. Therefore, all of these heaters may be considered Trivial and Insignificant.

FEDERAL REGULATIONS

40 CFR 60 Subpart Dc [NSPS Dc] “Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units”

Applicability:
Per §60.40c(a), this regulation applies to steam generating units rated between 10 MMBTU/hr and 100 MMBTU/hr. Since each of these units is rated below 10 MMBTU/hr, this regulation does not apply.


Applicability:
This regulation was promulgated on March 21, 2011, and applies to facilities that are major sources of Hazardous Air Pollutants [HAPs]. Since this facility is not a major source of HAPs, this regulation does not apply.
**Applicability:**

This regulation was promulgated on March 21, 2011. Per 40 CFR 63.11194, this regulation applies to boilers located at Area Sources of HAPs. The following definitions from 40 CFR 63.11237 will be used:

1. **Boiler** means an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. Waste heat boilers are excluded from this definition.

2. **Gas-fired boiler** includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

3. **Natural gas** means:
   a. A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane including intermediate gas streams generated during processing of natural gas at production sites or at gas processing plants; or
   b. Liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §63.14).
   c. A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).
   d. Propane or propane-derived synthetic natural gas. Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C3H8.

Based on these definitions, the Heater Treaters are not subject to this regulation since they are classified as process heaters. Per 40 CFR 63.11195(e), a gas-fired boiler is exempt from this regulation. Since the reboilers each burn natural gas, the reboilers are also not subject to this regulation.
PRUET PRODUCTION COMPANY  
CEDAR CREEK, AREA NO. 1 GAS TREATING & PROCESSING PLANT & GAS PRODUCTION WELLS  
Facility No.: 103-0011  
Statement of Basis  

40 CFR 64, “Compliance Assurance Monitoring (CAM)”

Applicability:
This subpart is applicable to an emission source provided the source meets the following criteria: it is subject to an emission limit or standard, it uses a control device to achieve compliance with the emissions limit or standard, and it has pre-controlled emissions from a regulated air pollutants that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source [40 CFR 64.2(a)]. The various heating units are required to comply with emissions standards. However, they are not equipped with a control device and the emissions from the units would not exceed a major source threshold. Therefore, the various heating units would not be subject to the requirements of this subpart.
## ENGINE REQUIREMENTS

<table>
<thead>
<tr>
<th>EMISSION POINT(S)</th>
<th>POLLUTANT</th>
<th>EMISSION LIMIT</th>
<th>REGULATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC04 and IC05 (1500 BHP)</td>
<td>Opacity</td>
<td>No more than one 6 min avg. &gt; 20% AND</td>
<td>Rule 335-3-4-.01(1)(a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No 6 min avg. &gt; 40%</td>
<td>Rule 335-3-4-.01(1)(b)</td>
</tr>
<tr>
<td></td>
<td>NOx</td>
<td>No more than 15.60 lb/hr</td>
<td>Rule 335-3-14-.04 [Anti-PSD]</td>
</tr>
<tr>
<td></td>
<td>CO</td>
<td>No more than 4.80 lb/hr</td>
<td>Rule 335-3-14-.04 [Anti-PSD]</td>
</tr>
<tr>
<td></td>
<td>VOC</td>
<td>No more than 4.80 lb/hr</td>
<td>Rule 335-3-14-.04 [Anti-PSD]</td>
</tr>
<tr>
<td>RC02, RC03, and PLB4 (163 BHP)</td>
<td>Opacity</td>
<td>No more than one 6 min avg. &gt; 20% AND</td>
<td>Rule 335-3-4-.01(1)(a)</td>
</tr>
<tr>
<td></td>
<td>NOx</td>
<td>No more than 1.70 lb/hr per unit</td>
<td>Rule 335-3-14-.04 [Anti-PSD]</td>
</tr>
<tr>
<td></td>
<td>CO</td>
<td>No more than 0.52 lb/hr per unit</td>
<td>Rule 335-3-14-.04 [Anti-PSD]</td>
</tr>
<tr>
<td></td>
<td>VOC</td>
<td>No more than 0.52 lb/hr per unit</td>
<td>Rule 335-3-14-.04 [Anti-PSD]</td>
</tr>
<tr>
<td>RC07 (225 BHP)</td>
<td>Opacity</td>
<td>No more than one 6 min avg. &gt; 20% AND</td>
<td>Rule 335-3-4-.01(1)(a)</td>
</tr>
<tr>
<td></td>
<td>NOx</td>
<td>No more than 2.34 lb/hr</td>
<td>Rule 335-3-14-.04 [Anti-PSD]</td>
</tr>
<tr>
<td></td>
<td>CO</td>
<td>No more than 0.72 lb/hr</td>
<td>Rule 335-3-14-.04 [Anti-PSD]</td>
</tr>
<tr>
<td></td>
<td>VOC</td>
<td>No more than 0.72 lb/hr</td>
<td>Rule 335-3-14-.04 [Anti-PSD]</td>
</tr>
<tr>
<td>RC08 (456 BHP)</td>
<td>Opacity</td>
<td>No more than one 6 min avg. &gt; 20% AND</td>
<td>Rule 335-3-4-.01(1)(a)</td>
</tr>
<tr>
<td></td>
<td>NOx</td>
<td>No more than 5.00 lb/hr</td>
<td>Rule 335-3-14-.04 [Anti-PSD]</td>
</tr>
<tr>
<td></td>
<td>CO</td>
<td>No more than 1.60 lb/hr</td>
<td>Rule 335-3-14-.04</td>
</tr>
</tbody>
</table>
STATE REGULATIONS

ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting”

Applicability:
This facility is a 250-Ton source for the purposes of PSD. Each of these units has limits in place to avoid a PSD review.

Recordkeeping Requirements:
Periodic monitoring shall be utilized to assure compliance with the requested Anti-PSD emission rate limits for NOX, CO, and VOC limits. This monitoring plan will consist of three parts: emission calculations, catalyst parameters for these units, and the standards required by 40 CFR 63 Subpart ZZZZ.

Emission Calculations: The facility is required to perform monthly emissions calculations on each unit. These calculations are based on the unit operating hours, fuel gas consumption, and emission factors measured during the most recent emissions test. The fuel gas usage and operating hours are to be recorded on a monthly basis.

Catalyst Parameters: Since each unit is equipped with a non-selective catalytic converter, monitoring of the catalyst will be required since the accuracy of the emission factors, either measured during the compliance test or the manufacturer’s factors, is a function of the effectiveness of the catalyst. This monitoring plan will be accomplished by monitoring the pressure differential across the catalyst bed and the inlet temperature to the catalyst bed.

MACT ZZZZ Standards: The facility shall comply with the standards specified by §63.6603.

PM & SO2 Emissions: Periodic monitoring for these pollutants will consist of burning only natural gas that meets the appropriate sulfur content.
ADEM Admin. Code 335-3-5-.03(1-2), "Petroleum Production"

ADEM Admin. Code 335-35-.03(1-2) covers sulfur emissions for petroleum production. Hydrogen Sulfide may not be emitted in a greater quantity than 0.10 grain per standard cubic foot (scf), or 160 ppmv, unless it is properly burned to maintain a ground concentration of less than 20 ppb beyond property limits, as averaged over a 30 minute period. The facility would be subject to this regulation. Based on the expected emissions from the engine, monitoring for H₂S for the engine would consist of monitoring fuel gas and usage.

FEDERAL REGULATIONS

40 CFR Part 60 Subpart A, "General Provisions"

Applicability:
Provided that the facility is subject to one of the applicable subparts found under this part, the facility shall comply with this regulation as specified in that subpart.

40 CFR 60 Subpart JJJJ, "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines" [NSPS JJJJ]

Applicability:
Per §60.4230(a)(4), this regulation applies to owners/operators and manufacturers of emergency spark ignition sources where construction was commenced after June 12, 2006, with date of construction defined as the date the unit was ordered. Units RC02, and RC03 are not subject to this regulation since these units were installed before June 12, 2006.

Per §60.4230(a)(6), units ordered after June 12, 2006, regardless of rating, are required to comply with §60.4236. Per §60.4236(e), the requirements of 40 CFR 60 Subpart JJJJ do not apply to units moved from one location to another. Based on the Dates of Manufacture shown, Units IC04, IC05, RC07, RC08, and PLB4 are exempt from this regulation.

RC09 is subject to 40 CFR 60 Subpart JJJJ. The engine was manufactured in 1990 and assumed to have been reconstructed in 2012. Owners and operators of stationary SI RICE with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006 and manufactured prior to July 1, 2008, are required to meet the emission standards according to the requirements in 40 CFR 60.4233(f)(4).

Recordkeeping and Reporting:
The Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air
pollution control practice for minimizing emissions. (40 CFR 60.4243(b)(2)(i) & 60.4243(c)).

The Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards. (40 CFR 60.4243(b)(2)(i) & 60.4243(c)).

The Permittee must follow the test methods and procedures according to the requirements in 40 CFR 60.4244(a),(b),(c),(e) and Table 2 to Subpart JJJJ of Part 60.

The Permittee must follow the notification, recordkeeping and reporting requirements in 40 CFR 60.4244(a),(d).


Applicability:

This regulation potentially applies to Reciprocating Internal Combustion Engines [RICE]. This regulation contains requirements for Stationary RICE located at both Major sources of Hazardous Air Pollutants [HAPs] and Area sources of HAPs. This facility is an Area source of Hazardous Air Pollutants. This regulation applies to all units at this facility.

Per §63.6590(a)(1)(iii), units located at an Area source of HAPs are considered existing if they were constructed or reconstructed before June 12, 2006. Per §63.2, construction does not include the removal of all equipment of an affected source from an existing location, and re-installation at a new location. Based on the Date of Manufactures, each unit qualifies as an existing unit. ADEM has not adopted the area source provisions of Subpart ZZZZ, but to comply with federal regulations the requirements under Subpart ZZZZ must be met. §63.6590(c)(1) states that the requirements of Subpart ZZZZ are met by complying with Part 60 Subpart JJJJ.

40 CFR 60 Subpart OOOO, “Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution”

Applicability:

RC09 is subject to the applicable requirements of 40 CFR 60 Subpart OOOO—which applies to natural gas production wells and natural gas processing plants constructed, reconstructed, or modified after August 23, 2011. 40 CFR 63.5385 requires the facility to replace the reciprocating compressor rod packing either (1) before the compressor has operated 26,000 hours from initial startup or the last packing replacement (which requires continuous monitoring of the hours of operation); or (2) prior to 36 months from startup or the last rod packing replacement.
Recordkeeping and Reporting:

The Permittee must replace the reciprocating compressor rod packing according to the requirements in either 40 CFR 60.5385(a)(1) or (2).

The Permittee must demonstrate initial compliance with the standards for each reciprocating compressor according to the requirements in 40 CFR 60.5410(c).

The Permittee must demonstrated continuous compliance according to the requirements in 40 CFR 60.5415(c).

The Permittee must follow the recordkeeping and reporting requirements in 40 CFR 60.5420(b) & (c)(3).

40 CFR 64, “Compliance Assurance Monitoring (CAM)”

Applicability:
CAM applies to units with a permit limit, a control device to meet that limit, and the potential to emit more than 100 Ton/yr uncontrolled of any criteria pollutant.

Engines IC04 & IC05:
Units IC04 and IC05 are subject to CAM since each unit’s uncontrolled NO\textsubscript{x} emissions would exceed 100 Ton/yr, each unit has NO\textsubscript{x} limits in place, and each unit has a non-selective catalytic converter. Monitoring for CAM would be the same as that outlined for the Catalytic Converters as required by 40 CFR 63 Subpart ZZZZ.

Engines RC02, RC03, RC07, RC08, RC09, & PLB4:
CAM does not apply to these units since they do not have the potential to exceed 100 Ton/yr of any criteria pollutant, even though they do have emission limits and catalytic converters.
**ENGINE ACTUAL EMISSIONS**

The engine’s actual emissions are from the 2016 Air Emissions Report.

<table>
<thead>
<tr>
<th>EMISSION SOURCE</th>
<th>(TPY)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CO</td>
<td>NO₂</td>
<td>VOC</td>
</tr>
<tr>
<td>IC04</td>
<td>6.164</td>
<td>1.628</td>
<td>18.549</td>
</tr>
<tr>
<td>IC05</td>
<td>14.186</td>
<td>31.834</td>
<td>19.881</td>
</tr>
<tr>
<td>RC02</td>
<td>0.317</td>
<td>1.020</td>
<td>0.193</td>
</tr>
<tr>
<td>RC03</td>
<td>0.608</td>
<td>0.401</td>
<td>0.297</td>
</tr>
<tr>
<td>RC07</td>
<td>0.841</td>
<td>0.226</td>
<td>2.824</td>
</tr>
<tr>
<td>RC08</td>
<td>0.736</td>
<td>0.020</td>
<td>6.518</td>
</tr>
<tr>
<td>RC09</td>
<td>0.002</td>
<td>0.000</td>
<td>0.002</td>
</tr>
<tr>
<td>PLB4</td>
<td>1.103</td>
<td>0.118</td>
<td>2.284</td>
</tr>
</tbody>
</table>

**TABLE 5: ENGINE EMISSIONS**
**EMERGENCY ENGINE**

<table>
<thead>
<tr>
<th>EMISSION POINT</th>
<th>POLLUTANT(S)</th>
<th>EMISSION LIMIT</th>
<th>REGULATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>One (1) 217 BHP Diesel-fired emergency natural gas-fired engine</td>
<td>NMHC/VOC and NOx</td>
<td>No more than 4.0 g/kW-hr combined</td>
<td>§63.6590(c)(1) and §60.4202(a)(2)</td>
</tr>
<tr>
<td></td>
<td>CO</td>
<td>No more than 3.5 g/kW-hr</td>
<td>§63.6590(c)(1) and §60.4202(a)(2)</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>No more than 0.20 g/kW-hr</td>
<td>§63.6590(c)(1) and §60.4202(a)(2)</td>
</tr>
<tr>
<td></td>
<td>Opacity</td>
<td>&lt;= 20% during acceleration mode &lt;= 15% during lugging mode &lt;= 50% during peaks in either acceleration or lugging modes</td>
<td>§60.4211(a)</td>
</tr>
</tbody>
</table>

**STATE REGULATIONS**

**ADEM Admin. Code R. 335-3-16 “TITLE V”**

**Applicability:**
This engine is subject to all Title V source requirements.

**FEDERAL REGULATIONS**

**40 CFR 60 Subpart IIII (NSPS IIII) “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines”**

**Applicability:**
Per §60.4230(a)(4)(iv), this regulation applies to owners/operators and manufacturers of spark ignition sources constructed after June 12, 2006, and manufactured after January 1, 2009. This unit is, and will continue to be, subject to this regulation.

**Emissions Monitoring:**
PM, NOx, CO, & VOC Emissions:
Periodic monitoring for each of these units will consist of the installation of a non-resettable hour meter [§60.4209(a)]. Additionally, each unit is to be maintained and operated according to the manufacturer’s specifications for the life of each engine [§60.4206, §60.4210(a), & §60.4211(a)].
SO₂ Emissions:
Periodic monitoring for this pollutant will consist of burning only Diesel fuel that meets the appropriate sulfur content.

Opacity:
Visible emissions observations shall be conducted with Method 9 or Method 22 from 40 CFR 60 Appendix A.

Requirements:
This engine shall not be operated more than 100 hours in non-emergency situations.


Applicability:
This regulation potentially applies to Reciprocating Internal Combustion Engines [RICE]. When this regulation was first promulgated on June 15, 2004, it contained only requirements for RICE located at Major Sources of Hazardous Air Pollutants [HAPs]. Since this facility was not a Major Source of Hazardous Air Pollutants at that time, the regulation did not apply.

On June 30, 2010, and August 20, 2010, EPA promulgated new requirements for Area Sources of HAPs; Area Sources are defined as any non-Major Source of HAPs [§63.6585(c) & §63.6675]. Per §63.6590(c)(1), units complying with either NSPS IIII are in compliance with the MACT ZZZZ. Therefore, compliance with NSPS IIII is sufficient.

40 CFR 64, “Compliance Assurance Monitoring (CAM)”

Applicability:
CAM applies to units with a permit limit, a control device, and the potential to emit more than 100 Ton/yr uncontrolled of any criteria pollutant. According to the CAM regulation, a work practice is considered an emission limit. Since this unit is not equipped with a control device, CAM is not applicable.
HYDRAULICALLY FRACATURED SITES & GAS PRODUCTION SITES

There are various stages of gas well completion [re-completion for wells that have slowed or ceased production]. One of the last steps involves puncturing, or perforating, the underground rock formation to release the natural gas and associated petroleum liquids. There are a number of methods used to accomplish this, including the insertion of acid into the ground. Of particular concern is hydraulic fracturing [hydro-fracking or fracking], which involves injecting a liquid chemical solution at a very high pressure into the underground formation.

This facility is comprised of 18 oil and gas production sites, comprising the well and other surface equipment, in various stages of completion. All of the completed wells have been designated as Oil Wells by the State of Alabama Oil & Gas Board. However, these wells do produce gas.

STATE REGULATIONS

ADEM Admin. Code R. 335-3-16 “TITLE V”

Applicability:
Each well would be subject to the requirements of this regulation.

ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting”

Applicability:
This facility is a 250-Ton source for the purposes of PSD. Even though the facility as a whole has a limit to be a synthetic minor source with respect to PSD, there are no limits set by this regulation for hydraulically fractured wells.

FEDERAL REGULATIONS

40 CFR 60 Subpart OOOO (NSPS OOOO), “Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015”

Applicability:
This rule was promulgated by EPA on April 17, 2012. This regulation applies to both hydraulically fractured wells [§60.5365(h) & §60.5340] and other gas wells [§60.5365(a) & §60.5430] that were completed or re-completed after August 23, 2011 and before September
18, 2015. Wells 29-16, 29-14, 31-1, 32-3, 32-9, and 32-11 are the only wells that were completed between August 23, 2011 and September 18, 2015. All of the other wells were completed and were producing prior to August 23, 2011. This area currently has no hydraulically fractured wells. Additionally, well re-completions that follow the procedures specified in NSPS OOOO are not considered modified sources.

**Monitoring Requirements:**
Periodic Monitoring will consist of sending reports and notifications required by NSPS OOOO to EPA for hydraulically fractured [and/or re-fractured] wells, and maintaining a daily completion log. One of the reports required by EPA is an initial completion notification. This report will be satisfied by the Temporary Authorization to Operate Request required by the Department prior to the well commencing production.

**Expected Emissions:**
The expected emissions from each completion operation should be minimal since most of the potential pollutants will be captured. The expected emissions for the Flares includes any emissions from the well completion phase.

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**40 CFR 60 Subpart OOOOa (NSPS OOOOa), “Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015”**

**Applicability:**
All of the unconstructed wells would fall into the applicable timeframe for the regulation when constructed.

<table>
<thead>
<tr>
<th>AFFECTED SOURCES</th>
<th>APPLICABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each well [§60.5365a(a)]</td>
<td>This applies to a single gas or oil well that is hydraulically fractured or re-fractured</td>
</tr>
<tr>
<td>Pneumatic Controller [§60.5365a(d)(1) and (2)]</td>
<td>This applies to a single continuous-bleed natural-gas-driven pneumatic controllers with a bleed rate of &gt; 6 scf/hr at an oil or natural gas production segment</td>
</tr>
<tr>
<td>Storage Vessels [§60.5365a(e)]</td>
<td>This applies to a single storage vessels located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment that has potential VOC emissions &gt; 6 TPY</td>
</tr>
<tr>
<td>Hydraulically Fractured Gas Wells [§60.5365a(i)]</td>
<td>This applies to the collection of fugitive emissions components at a well site</td>
</tr>
</tbody>
</table>
Single Well

The unconstructed wells are not expected to be hydraulically fractured and are therefore not affected sources under this subpart.

Pneumatic Controller

Department does not expect pneumatic controller affected sources as defined by this subpart to be present at the to-be-constructed wells.

Storage Vessels

The storage vessels at the planned wells will be constructed after September 18, 2015; the power oil tanks would be considered a Group 2 storage vessel under this subpart based on its uncontrolled emissions. At the wells, tank vapor is routed to a flare for combustion. §60.5365a(e) however only applies to tanks with an uncontrolled PTE of greater than 6 TPY of VOCs, and the determination of PTE “may take into account requirements under a legally and practically enforceable limit in an operating permit or other requirement established under a Federal, State, local or tribal authority”. Post-control device, the VOC emissions from all tanks are <6 TPY, and the tanks do not meet the definition of storage vessels under Subpart OOOOa.

Fugitive Emissions Components at a Well Site

Fugitive emissions components at the planned wells applicable to this regulation will include the pumps, pressure relief devices, valves, connectors, and other required devices/systems (except compressors) in capable of leaking methane or VOC. As outlined in §60.5397a(a), the aforementioned equipment are subject to the leak standards in §60.5397a(b)-(g), the reporting requirements of §60.5397a(j) and the recordkeeping requirements of §60.5397a(i).

40 CFR 64, “Compliance Assurance Monitoring (CAM)”

Applicability:

For a unit to be subject to Compliance Assurance Monitoring (CAM), that unit must have a permit limit, a control device, and the potential to emit (PTE), pre-control, greater than 100 Ton/yr of any criteria pollutant or 10 Ton/yr of one Hazardous Air Pollutant (HAP) or 25 Ton/yr of all HAPs. Since none of the wellheads is a major source on its own, CAM is not applicable.
EQUIPMENT IN VOC/HAP'S SERVICE

The plant and each associated wellsite has equipment in Volatile Organic Compound (VOC) and/or Hazardous Air Pollutant service. This includes pumps, compressors, piping and pipe fittings, and pneumatic controllers. Pumps may be used to direct petroleum products from one location to another, including injection into the ground. Pneumatic controllers are run on a pressurized gas, some of which may escape as the valve operated by the controller opens and closes. Wellsite compressors are used for water injection, oil injection, or gas injection, in order to increase the underground reservoir pressure, resulting in better production. Plant compressors are used to keep the gas in the system at the appropriate operating pressure, and to run the refrigeration plant. Piping and pipe fittings [valves, flanges, etc] are located throughout each wellsite and the plant.

This facility is comprised of seventeen (17) oil and gas production sites in various stages of completion, and a gas processing plant. Each of the completed wells is planned to have a power oil pump driven by an electric motor.

<table>
<thead>
<tr>
<th>Subpart applicable to well</th>
<th>Well No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OOOO</td>
<td>29-16, 29-14, 31-1, 32-3, 32-9, and 32-11</td>
</tr>
<tr>
<td>OOOo</td>
<td>31-NE, 31-NW, 31-SE, and 31-SW</td>
</tr>
<tr>
<td>KKK</td>
<td>19-15, 30-3, 20-6, 20-7 and 20-15</td>
</tr>
</tbody>
</table>

STATE REGULATIONS

ADEM Admin. Code R. 335-3-16 “TITLE V”

Applicability:
The equipment is subject to the requirements of this regulation.

ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting”

Applicability:
This facility is a 250-Ton source for the purposes of PSD. Even though the facility as a whole has a limit to be a synthetic minor source with respect to PSD, none of the controllers, pumps, or compressors has a limit assigned by this regulation.
FEDERAL REGULATIONS

40 CFR 60 Subpart OOOO (NSPS OOOO), “Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015”

Applicability:
This rule was promulgated by EPA on April 17, 2012. This regulation applies to pumps, pneumatic controllers, and compressors [both reciprocating and centrifugal] constructed after August 23, 2011, located at both wellsites and gas treating and processing plants. Equipment installed prior to this date is subject to 40 CFR 60 Subpart KKK [discussed above]. The following equipment is covered by this regulation:

Centrifugal & Reciprocating Compressors: Per §60.5365(b) and (c), this regulation only applies to compressors located between the wellhead and the point of custody transfer, defined as follows, from §60.5430:

1. Custody transfer means the transfer of natural gas after processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation.
2. Wellhead means the piping, casing, tubing and connected valves protruding above the earth’s surface for an oil and/or natural gas well. The wellhead ends where the flow line connects to a wellhead valve. The wellhead does not include other equipment at the well site except for any conveyance through which gas is vented to the atmosphere.
3. Centrifugal compressor means any machine for raising the pressure of a natural gas by drawing in low pressure natural gas and discharging significantly higher pressure natural gas by means of mechanical rotating vanes or impellers. Screw, sliding vane, and liquid ring compressors are not centrifugal compressors for the purposes of this subpart.

Each well is planned to have a screw-type centrifugal compressor as part of the Vapor Recovery Unit [VRU] used to capture the stock tank vapors and route them to the flare, fuel gas, or the plant pipeline. This area currently has no reciprocating compressors. Additionally, the screw-type VRU compressors do not meet the definition of a centrifugal compressor, as defined above. Therefore, this portion of the regulation does not apply.

RC09 was reconstructed on December 7, 2012 and is therefore subject to this regulation. The rest of the plant compressors were installed, and in operation, prior to August 23, 2011. Therefore, none of these compressors are subject to this regulation.
Pneumatic Controllers: Per §60.5365(d), this regulation applies to all natural gas-driven pneumatic controllers with a continuous natural gas bleed rate of 6 Scf/hr, or greater, located between a wellhead and custody transfer. The following definitions from §60.5430 must be considered:

1. **Pneumatic controller** means an automated instrument used for maintaining a process condition such as liquid level, pressure, delta-pressure and temperature.
2. **Natural gas-driven pneumatic controller** means a pneumatic controller powered by pressurized natural gas.
3. **Non-natural gas-driven pneumatic controller** means an instrument that is actuated using other sources of power than pressurized natural gas; examples include solar, electric, and instrument air.
4. **Intermittent/snap-action pneumatic controller** means a pneumatic controller that vents non-continuously.
5. **Bleed rate** means the rate in standard cubic feet per hour at which natural gas is continuously vented (bleeds) from a pneumatic controller.
6. **Continuous bleed** means a continuous flow of pneumatic supply natural gas to the process control device (e.g., level control, temperature control, pressure control) where the supply gas pressure is modulated by the process condition, and then flows to the valve controller where the signal is compared with the process set-point to adjust gas pressure in the valve actuator.

The pneumatic controllers in use at the wellsites only open as needed. Thus, they do not have a continuous bleed rate, and may be classified as Intermittent/Snap Action pneumatic controllers. Therefore, they do not meet the definition of a Continuous bleed Natural gas-driven pneumatic controller, and there are no applicable requirements.

The pneumatic controllers at the plant are air-operated, and were installed prior to August 23, 2011. Therefore, the plant pneumatic controllers are also not subject to this regulation.

Pumps, Piping, & Pipe Fittings: Per §60.5365(f)(2), only pumps and other ancillary equipment in VOC service located at a natural gas processing plant site are subject to the regulation. Only the sweetening unit equipment is subject to the regulation.

**Applicability:**

The condensate stabilizer was constructed after September 18, 2015.
Monitoring:
Per §60.5365(g), facilities that have a design capacity less than 2 long tons per day (LT/D) of hydrogen sulfide (H2S) in the acid gas (expressed as sulfur) are exempt from the periodic monitoring requirements.

Recordkeeping:
Per §60.5423a(c), to certify that a facility is exempt from the control requirements of these standards, for each facility with a design capacity less than 2 LT/D of H2S in the acid gas (expressed as sulfur) the facility must keep, for the life of the facility, an analysis demonstrating that the facility's design capacity is less than 2 LT/D of H2S expressed as sulfur.


Applicability:
This regulation applies to Oil and Gas Production facilities, and contains requirements for new onshore natural gas processing plants constructed after January 20, 1984, but before August 23, 2011. Some of the equipment at the plant is subject to this regulation; this regulation does not apply to equipment at wellsites. The following equipment is covered by this regulation:

Compressors: Per 40 CFR 60.630(a)(2), all compressors, except RC09, are subject to control and monitoring requirements. However, per 40 CFR 60.633(f), reciprocating compressors in wet gas service are exempt from compressor control requirements. Thus, both of the inlet compressors are exempt from the control requirements of this regulation.

Each of the refrigeration compressors at the plant, except RC09, was installed, and in operation, prior to August 23, 2011. Therefore, each of the refrigeration compressors, except RC09, is subject to both the control requirements and the monitoring requirements. These control requirement options consist of the compressor design, or capturing the off-gases from the compressor and routing them to a flare or other combustion device. The facility is routing these gases to the fuel gas system or the flare, as needed. The flare is subject to design and operational requirements stated in 40 CFR 60.18 [§60.633(g)]. This includes the requirement to operate the flare with no visible emissions, except for five minutes, during a continuous two hour period. This requirement will be implemented into the flare section.

Ancillary Equipment: Per 40 CFR 60.630(a)(3), all equipment in Volatile Organic Compound [VOC] service is subject to the monitoring requirements of the regulation. Per 40 CFR 60.631, “equipment” means flanges, valves, piping, ductwork, pressure relief devices, pumps, open-ended lines, open-ended valves, and/or other connectors in VOC or wet gas service. Per 40 CFR 60.481, “in VOC service” is defined to mean that the stream is at least 10% VOC by weight. Methods and procedures for determining VOC content are stated in 40 CFR 60.485(d); allowed substitutions may be found in §60.632(f).
The monitoring requirement for these components consists of checking them periodically for leaks, utilizing procedures laid out in 40 CFR 60.485, except as allowed by 40 CFR 60.633(h). Each component’s section under NSPS VV specifies the required monitoring frequency, although most components’ frequency begins at monthly.

All of the equipment, except equipment associated with the stabilizer, is subject to this regulation.

**Monitoring:**

Per §60.633(d), pumps in light liquid service, valves in gas/vapor or light liquid service, and pressure relief devices in gas/vapor service located at a non-fractionating plant with a design capacity of less than 10 MMScf/Day are exempt from the periodic monitoring requirements. These requirements generally entail a monthly inspection utilizing Method 21. Monitoring will consist of Audio, Visual, and Olfactory inspections of plant equipment, particularly for the closed vent system [§60.482-10(f)]. A record of each inspection shall be maintained onsite.

**40 CFR 63 Subpart HH [MACT HH], “National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities”**

**Applicability:**

This regulation applies to oil and gas production facilities that produce, upgrade, or store petroleum liquids and/or natural gas prior to custody transfer. This regulation contains both Major Source and Area Source requirements.

**Major Source Requirements:** The Major Source requirements of this regulation apply to equipment in HAPs service, including piping, and glycol dehydrators.

Per the definitions in §63.761, the Major Source determination is based on glycol dehydration unit HAPs emissions and Storage Tanks emissions from each wellsite, independent of any other wellsites in the vicinity. The plant is equipped with an Ethylene Glycol Dehydrator, but no wellsite is equipped with a glycol dehydrator. Additionally, the Storage Tanks should have negligible emissions since each tank is to be equipped with a closed vent system, as discussed later. Therefore, this area may be classified as an Area Source, and the Major Source requirements do not apply.

**Area Source Requirements:** The Area Source requirements of this regulation apply only to sites equipped with a Tri-ethylene Glycol [TEG] dehydration unit. Since neither the plant, nor any wellsite is equipped with a TEG, the Area Source requirements do not apply.
40 CFR 64, “Compliance Assurance Monitoring (CAM)”

Applicability:
For a unit to be subject to Compliance Assurance Monitoring (CAM), that unit must have a permit limit, a control device, and the potential to emit (PTE), pre-control, greater than 100 Ton/yr of any criteria pollutant or 10 Ton/yr of one Hazardous Air Pollutant (HAP) or 25 Ton/yr of all HAPs.

This regulation is not applicable since none of this equipment has the potential to emit greater than 100 Ton/yr.
WELLSITE STORAGE VESSELS

Each wellsite is equipped with the storage tank battery comprised of the tanks shown in Table 6 below. There are no tanks that serve the facility, other than pressurized tanks, which are not subject to any regulations. Per Section 1E(1) of the Title V Trivial & Insignificant Activity List, pressurized tanks do not have to be listed in the permit. It should be noted that the capacity of 10,567 [~250 BBL] comes from the Trivial & Insignificant Activity List.

<table>
<thead>
<tr>
<th>Tank Type</th>
<th>Capacity (BBL)</th>
<th>No. Tanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil Storage</td>
<td>400</td>
<td>24</td>
</tr>
<tr>
<td>Power Oil Pump</td>
<td>500</td>
<td>11</td>
</tr>
<tr>
<td>Produced Water Storage</td>
<td>500</td>
<td>1</td>
</tr>
<tr>
<td>Salt Water Storage</td>
<td>400</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 6: Storage Tank Summary

STATE REGULATIONS

ADEM Admin. Code R. 335-3-16 “TITLE V”

Applicability:
These units are subject to this regulation. However, vapors from these tanks are captured and sent to the flare. Therefore, compliance with the flare requirements is sufficient.

ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting”

Applicability:
This facility is a 250-Ton source for the purposes of PSD since it is not one of the 28 source categories. Pruet has requested a facility-wide emissions limit of 245 Ton/yr for all criteria pollutants. Since any vapors released in the tanks would be captured and sent either to the wellsite flare or to the pipeline, these emissions have already been accounted for. Therefore, monitoring for the flare will be sufficient.

Requirements:
Each storage vessel shall be equipped with a closed vent system that routes tank vapors to the produced gas line, the fuel gas line, or the flare.
ADEM Admin. Code R. 335-3-6-.03, “Loading and Storage of VOC”

Applicability:
This regulation applies to the loading and storage of volatile organic compounds. Per Rule 335-3-6-.03(4), this regulation does not apply to crude petroleum produced, separated, treated, or stored in the field. Since these tanks each store crude petroleum at the production source in the field, this regulation does not apply.

ADEM Admin. Code R. 335-3-6-.04, “Fixed-Roof Petroleum Liquid Storage Vessels”

Applicability:
This regulation applies to fixed roof petroleum liquid storage tanks. Per Rule 335-3-6-.03(3)(b), this regulation does not apply to storage tanks with a capacity less than 423,000 gallons, and used to store crude petroleum oil prior to custody transfer. Since these tanks each store crude oil prior to custody transfer, this regulation does not apply.

FEDERAL REGULATIONS

40 CFR 60 Subpart OOOO (NSPS OOOO), “Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015”

Applicability:
This rule was promulgated by EPA on April 17, 2012. This regulation applies storage vessels constructed after August 23, 2011 [§60.5356(e)]. Therefore, all storage vessels to be located at wells 29-16, 29-14 and S32 are subject to this regulation. All other storage vessels would only be subject if they are reconstructed or modified.

Monitoring:
Periodic monitoring would consist of conducting required inspections and submitting required reports for the closed vent system according to the methods and procedures specified in §60.5416. [§60.5410, §60.5411, and §60.5415]

Expected Emissions:
Since the storage tanks are to be equipped with a closed vent system, all stock tank vapors are captured and routed to the flare, the processing plant, or the fuel gas system. Therefore, the expected emission from these sources have been accounted for as discussed in the Flares section below.
Requirements:

Each storage vessel constructed, reconstructed, or modified after August 23, 2011, is subject to the requirements of 40 CFR 60 Subpart OOOO. Storage vessels with uncontrolled emissions of 6 Ton/yr of VOC, or greater, shall be equipped with a cover and/or a closed vent system routed to an approved control device, such as a flare in order to reduce VOC emissions by 95% or more.


Applicability:

This regulation applies to VOC tanks constructed after July 12, 1984. Per §60.110b(d)(4), vessels with a design storage capacity of less than, or equal to, 1590 m$^3$ (420,000 gallons) used for petroleum or condensate stored, treated, or processed prior to custody transfer are exempt from this regulation. Each of the tanks at these sites has a volume of less than 420,000 gallons, and stores condensate prior to custody transfer. Therefore, these tanks are exempt from this regulation.

40 CFR 63 Subpart HH [MACT HH], “National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities”

Applicability:

This regulation applies to oil and gas production facilities that produce, upgrade, or store petroleum liquids and/or natural gas prior to custody transfer. This regulation contains both Major Source and Area Source requirements.

Major Source Requirements: The Major Source requirements of this regulation also apply to Storage Vessels.

Per the definitions in §63.761, the Major Source determination is based on glycol dehydration unit HAPs emissions and Storage Tanks emissions from each wellsite, independent of any other wellsites in the vicinity. No wellsite is equipped with a glycol dehydrator. Additionally, the Storage Tanks should have negligible emissions since each tank is to be equipped with a closed vent system, as discussed later. Therefore, this area is classified as an Area Source, and the Major Source requirements do not apply.

Area Source Requirements: There are no Area Source requirements in this regulation for Storage Tanks.
40 CFR 64, “Compliance Assurance Monitoring (CAM)”

Applicability:
For a unit to be subject to Compliance Assurance Monitoring (CAM), that unit must have a permit limit, a control device, and the potential to emit (PTE), pre-control, greater than 100 Ton/yr of any criteria pollutant or 10 Ton/yr of one Hazardous Air Pollutant (HAP) or 25 Ton/yr of all HAPs.

This regulation is not applicable since none of these units has the potential to emit greater than 100 Ton/yr.
SWEETENING UNIT [AMINE UNIT]

This unit is used to remove sulfur compounds from the inlet gas stream. The sulfur compounds are routed to the continuous acid gas flare, while the rest of the gas is sent on for further processing.

STATE REGULATIONS

ADEM Admin. Code R. 335-3-16 “TITLE V”

Applicability:
This unit is subject to this regulation. However, vapors from the sweetening unit are captured and sent to the acid gas flare. Therefore, compliance with the flare requirements is sufficient.

ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting”

Applicability:
This facility is a 250-Ton source for the purposes of PSD. Even though the facility as a whole has a limit to be a synthetic minor source with respect to PSD, the sweetening unit does not have any limits assigned by this regulation.

ADEM Admin. Code R. 335-3-5-.03(2) and (3), “Petroleum Production”

Applicability:
Per ADEM Rule 335-3-5-.03(2), all process streams containing at least 0.10 grains H2S [~162 ppmv] shall be burned such that the offsite H2S concentration is 20 ppb or less, as averaged over a 30-minute period. Maintaining a continuous flame or spark at the Acid Gas Flare is required to demonstrate compliance with this regulation.

Per ADEM Rule 335-3-5-.03(3), there is no SO2 limit for a Category II County with a sulfur feedrate of 10 LTon/Day or less. This regulation is applicable. Since the maximum design capacity is 2 LTon/Day, there is no SO2 emission limit.

Requirements:
Each process gas stream containing more than 0.10 of a grain of hydrogen sulfide per Scf shall not be emitted into the atmosphere unless it is properly burned to maintain the ground level concentrations of hydrogen sulfide to less than twenty (20) parts per billion beyond plant property limits, averaged over a thirty (30) minute period.
Federal Regulations


Applicability:
Per §60.630(e), this regulation applies to sweetening units located at onshore natural gas processing plants. The plant has a sweetening unit that was installed between January 20, 1984 and August 23, 2011. Therefore, this unit is subject to this regulation.

40 CFR 60 Subpart LLL [NSPS LLL], “Standards of Performance for SO2 Emissions From Onshore Natural Gas Processing for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and on or Before August 23, 2011”

Applicability:
This New Source Performance Standard [NSPS] applies to onshore gas processing facilities equipped with sweetening units, and sweetening units followed by Sulfur Recovery Units that commenced construction or modification after January 20, 1984 [§60.640(a), (c), & (d)], but before August 23, 2011. This facility is equipped with a sweetening unit that was installed in that time period. Therefore, this regulation applies.

Monitoring:
Provided a facility has a design capacity of less than 2 Long Ton/Day, the requirements of this subpart will be met through keeping an onsite analysis demonstrating that the design capacity is less than 2 Long Ton/Day, per §60.640(b) and §60.647(c). The design capacity for the sweetening unit is 0.60 Long Ton/Day. Therefore, the requirements of Subpart LLL shall be met by an onsite analysis per §60.647(c).

40 CFR 64, “Compliance Assurance Monitoring (CAM)”

Applicability:
Compliance Assurance Monitoring [CAM] applies to process units that have the potential to emit at least 100 Ton/yr of any criteria pollutant, a permit limit, and a control device to meet this permit limit. CAM for the Sweetening Unit will be addressed in the Flare Section.
## FLARES

<table>
<thead>
<tr>
<th>Unit No.</th>
<th>Flare Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>3001A</td>
<td>Well Flare for Wells 19-15 &amp; 30-3</td>
<td>Burn full well stream when the plant is down; Burn excess fuel gas; Burn stock tank vapors.</td>
</tr>
<tr>
<td>2012A</td>
<td>Well Flare for Wells 20-6 &amp; 20-12</td>
<td></td>
</tr>
<tr>
<td>2007A</td>
<td>Well Flare for Wells 20-7 &amp; 20-15</td>
<td></td>
</tr>
<tr>
<td>29-16A</td>
<td>Well Flare for Well 29-16</td>
<td></td>
</tr>
<tr>
<td>29-14A</td>
<td>Well Flare for Well 29-14</td>
<td></td>
</tr>
<tr>
<td>31-NEA</td>
<td>Well Flare for Well 31-NE</td>
<td></td>
</tr>
<tr>
<td>31-NWA</td>
<td>Well Flare for Well 31-NW</td>
<td></td>
</tr>
<tr>
<td>31-SEA</td>
<td>Well Flare for Well 31-SE</td>
<td></td>
</tr>
<tr>
<td>31-SWA</td>
<td>Well Flare for Well 31-SW</td>
<td></td>
</tr>
<tr>
<td>CCL&amp;T 32-1A</td>
<td>Well Flare for Well CCL&amp;T 32-1</td>
<td>Continuously burn Acid Gas from sweetening unit; burn excess fuel gas.</td>
</tr>
<tr>
<td>CCL&amp;T 32-3A</td>
<td>Well Flare for Well CCL&amp;T 32-3</td>
<td></td>
</tr>
<tr>
<td>CCL&amp;T 32-9A</td>
<td>Well Flare for Well CCL&amp;T 32-9</td>
<td></td>
</tr>
<tr>
<td>CCL&amp;T 32-11A</td>
<td>Well Flare for Well CCL&amp;T 32-11</td>
<td></td>
</tr>
<tr>
<td>Tornado</td>
<td>Continuous Plant Acid Gas Flare</td>
<td></td>
</tr>
<tr>
<td>LLC</td>
<td>Emergency Plant Flare</td>
<td>Burn plant gas during shutdowns.</td>
</tr>
</tbody>
</table>
**ADEM Admin. Code R. 335-3-16 “TITLE V”**

**Applicability:**
Each flare is subject to this regulation.

**ADEM Admin. Code R. 335-3-14-.04, “Prevention of Significant Deterioration (PSD) Permitting”**

**Applicability:**
This facility is a 250-Ton PSD Source. The well flares and the Tornado Flare each have limits on gas volumes to be flared, along with monthly calculations, in order to avoid a PSD review.

**Requirements:**
The total volume from the well flares OR the LLC Flare shall not exceed 950 MScf/Day
The total volume flared from the Tornado Flare shall not exceed 8.0 MMScf/Day.

**ADEM Admin. Code R. 335-3-5-.03(2) and (3), “Petroleum Production”**

**Applicability:**
Per ADEM Rule 335-3-5-.03(2), all process streams containing at least 0.10 grains H₂S [~162 ppmv] shall be burned such that the offsite H₂S concentration is 20 ppb or less, as averaged over a 30-minute period. This regulation applies, and compliance is indicated by having a flame or pilot light present at all times.
Per ADEM Rule 335-3-5-.03(3), there is no SO₂ limit for a Category II County with a sulfur feedrate of 10 LTon/Day or less. This regulation is applicable.

**Requirements:**
Each process gas stream containing more than 0.10 of a grain of hydrogen sulfide per Scf shall not be emitted into the atmosphere unless it is properly burned to maintain the ground level concentrations of hydrogen sulfide to less than twenty (20) parts per billion beyond plant property limits, averaged over a thirty (30) minute period.
No person shall cause or permit the Sulfur Oxide emissions from any facility designed to dispose of or process natural gas or refinery gas containing more than 10 grains of Hydrogen Sulfide per standard cubic foot.
Applicability:
Each flare NOT used to comply with 40 CFR 60 Subpart KKK and/or Subpart OOOO shall meet the requirements specified below.

Requirements:
Except for one 6-minute period during any 60-minute period, the flare shall not discharge into the atmosphere particulate that results in an opacity greater than 20%, as determined by a 6-minute average.
At no time shall the flare discharge into the atmosphere particulate that results in an opacity greater than 40%, as determined by a 6-minute average.

FEDERAL REGULATIONS

40 CFR 60.18, “General control device and work practice requirements”

Applicability:
This citation references the federal requirement that flares used to comply with an NSPS should be operated with no visible emissions except for a 5-minute period during any consecutive 2-hour period. Each flare used to comply with NSPS OOOO [§60.5413(a)(1)] is subject to this regulation.

Monitoring:

Offsite Concentration: The requirement to maintain an off-site hydrogen sulfide concentration below a specific amount constitutes a facility wide emission cap and such limits are not considered to be an emission limitation that would trigger the applicability of Compliance Assurance Monitoring. Thus, periodic monitoring is applicable and shall consist of maintaining a spark or pilot light at the flare tip.

VOC & SO₂ Emissions: Periodic monitoring for these pollutants would consist of maintaining a continuous spark or pilot light at the flare tip. Additionally, monthly emissions calculations shall be maintained for each flaring event for these pollutants.

PM, NOₓ, & CO Emissions: Periodic monitoring for these pollutants will consist of maintaining monthly emission calculations.

Opacity: Periodic monitoring for the opacity standard for the flare will be required during flaring events as described in the following table.
Actual Emissions

The NOx, CO, VOC, and SO2 emissions were taken from the 2016 Air Emissions Report. Table 7 summarizes the flares’ actual emissions.

<table>
<thead>
<tr>
<th>Flare ID No.</th>
<th>CO</th>
<th>NO2</th>
<th>SO2</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-1A</td>
<td>9.965</td>
<td>1.831</td>
<td>0.413</td>
<td>2.702</td>
</tr>
<tr>
<td>20-12A</td>
<td>9.604</td>
<td>1.765</td>
<td>0.009</td>
<td>1.183</td>
</tr>
<tr>
<td>29-14A</td>
<td>0.614</td>
<td>0.113</td>
<td>0.001</td>
<td>0.232</td>
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<tr>
<td>29-16A</td>
<td>14.273</td>
<td>2.623</td>
<td>1.408</td>
<td>7.527</td>
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<tr>
<td>31-NEA</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
</tr>
<tr>
<td>31-NWA</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
</tr>
<tr>
<td>31-SEA</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
</tr>
<tr>
<td>31-SWA</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
</tr>
<tr>
<td>CCL&amp;T 32-1A</td>
<td>3.334</td>
<td>0.613</td>
<td>0.174</td>
<td>3.186</td>
</tr>
<tr>
<td>CCL&amp;T 32-3A</td>
<td>4.457</td>
<td>0.819</td>
<td>0.228</td>
<td>2.461</td>
</tr>
<tr>
<td>CCL&amp;T 32-9A</td>
<td>0.691</td>
<td>0.127</td>
<td>0.000</td>
<td>0.536</td>
</tr>
<tr>
<td>CCL&amp;T 32-11A</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
</tr>
<tr>
<td>Tornado</td>
<td>0.551</td>
<td>0.101</td>
<td>33.675</td>
<td>0.039</td>
</tr>
<tr>
<td>LLC</td>
<td>0.487</td>
<td>0.089</td>
<td>N/A*</td>
<td>1.959</td>
</tr>
</tbody>
</table>

Table 7: Expected Total Flare Emissions

*No pollutants reported

40 CFR 64, “Compliance Assurance Monitoring (CAM)”

Applicability:

The requirement to burn sulfur-laden gas in the flare is considered to be a work practice and not an emission limitation. As defined in the CAM regulation, an emission limitation may be expressed in the form of a work practice, process parameter or other form of specific design. Thus CAM is applicable and shall be utilized to assure compliance with the requirement to burn the gases. The parameter chosen to indicate the gases are being burned shall be the
presence of a spark or pilot light at the flare tip. See the following table for CAM methods and procedures.
RECOMMENDATIONS

This Statement of Basis indicates that these sources should meet the requirements of all federal and state rules and regulations, as described on the previous pages. Therefore, I recommend that Pruet Production Company be issued the renewal Major Source Operating Permit No. 103-0011 for these sources.

____________________________________  April 6, 2018
Hannah Thomascall  Date
State Intern
Air Division
Energy Branch
Industrial Minerals Section