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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	R13-3196
Plant ID No.:	103-00084
Applicant:	Stone Energy Corporation (Stone)
Facility Name:	Lemons Well Pad
Location:	New Martinsville, Wetzel County
NAICS Code:	211111 (Natural Gas Extraction)
Application Type:	Construction
Received Date:	June 9, 2014; Application Resubmittal August 7, 2014
Engineer Assigned:	Jerry Williams, P.E.
Fee Amount:	$2,000.00
Date Received:	June 9, 2014
Complete Date:	August 28, 2014
Due Date:	November 26, 2014
Applicant Ad Date	June 18, 2014
Newspaper:	*The Wetzel Chronicle*
UTM's:	Easting: 517.692 km Northing: 4,389.051 km Zone: 17
Description:	This permitting action is for a natural gas production facility.

DESCRIPTION OF PROCESS

The following process description was taken from Permit Application R13-3196:

The Lemons facility is an existing natural gas production well pad that commenced operation on July 1, 2013. Natural gas and associated liquids (condensate and water) are produced from six (6) wells on location: Wells 1H, 3H, 4H, 5H, 6H, 7H and 8H. Each individual well stream is passed through a 0.75 million British Thermal Units per hour (MMBTU/hr) line heater (LH-1, LH-3 – LH-8) where it undergoes heating and pressure reduction. The well streams are then combined and routed through a three phase separator which

separates gas, condensate, and water. Gas and condensate are delivered to two (2) separate pipelines under pressure to an off-site facility for further processing. Water is dumped to a single 400 barrel (bbl) tank (T01), where it is then pumped into a water pipeline. Electricity is provided to the site by one (1) 104.7 horsepower (HP) natural gas fired generator (GE-1) with a backup 50 HP emergency generator (GE-2). A transfer switch is used to ensure that only one (1) generator operates at a time. The generators and heaters use natural gas fuel provided on site which is extracted from the gas flow line by a fuel gas separator system. A small quantity of condensate (0.27 bbl/day) which falls out during the fuel gas conditioning process is dumped to a 210 bbl tank (T02). A tank truck (L01) removes 8 bbl of condensate from the site per month. Fugitive emissions from component leaks of valves and fittings also occur on site.

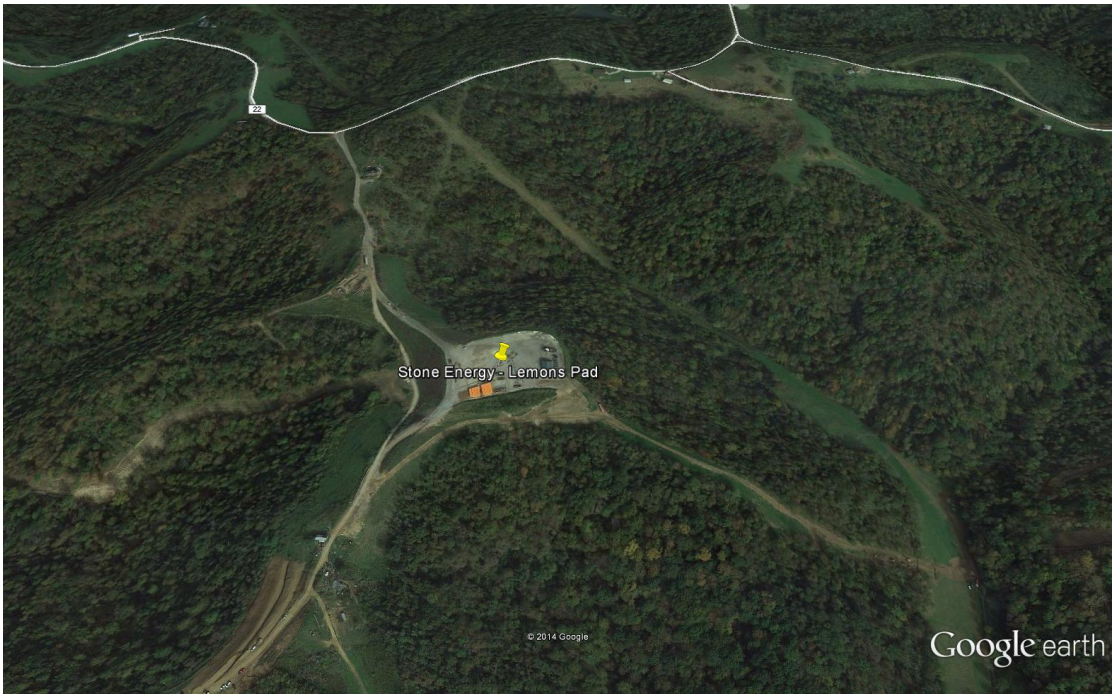
SITE INSPECTION

A site inspection was conducted in July 2014 by Doug Hammell of the DAQ Enforcement Section. According to Mr. Hammell, the site location is appropriate for the proposed facility. The closest residence is approximately 1,300 feet from the facility.

Latitude: 39.651072
Longitude: -80.793781

Directions as given in the permit application are as follows:

From the intersection of State Highway 2 and County Route 3 in New Martinsville, travel 0.5 miles east on County Route 3. Turn left on County Route 3/1 and go 4.7 miles. Turn right onto access road and go 0.3 miles and the facility will be on the left.



ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions associated with this construction application consist of the emissions from two (2) natural gas fired generators (GE-1, GE-2), seven (7) line heaters (LH-1, LH-3 – LH-8), two (2) storage vessels, one (1) truck loadout and fugitive emissions. Fugitive emissions for the facility are based on calculation methodologies presented in 40CFR Part 98. The following table indicates which methodology was used in the emissions determination:

Emission Unit ID#	Process Equipment	Calculation Methodology
GE-1	104.7 hp Cummins Natural Gas Fired Generator w/ NSCR	Manufacturer's Data, EPA AP-42 Emission Factors
GE-2	50 hp Tradewinds Natural Gas Fired Generator	Manufacturer's Data, EPA AP-42 Emission Factors
LH-1, LH-3 – LH-8	0.75 MMBTU/hr Line Heaters	EPA AP-42 Emission Factors
T01 T02	400 bbl Produced Water Storage Tank 210 bbl Condensate Storage Tank	Tanks 4.0 (Working/Breathing) and GOR Method (Flashing)
TL01	Condensate Truck Loadout (4,000 gal/yr)	EPA AP-42 Emission Factors

Stone shall install, maintain, and operate all above-ground piping, valves, pumps, etc. that service lines in the transport of potential sources of regulated air pollutants to prevent any substantive fugitive escape of regulated air pollutants. Any above-ground piping, valves, pumps, etc. that shows signs of excess wear and that have a reasonable potential for substantive fugitive emissions of regulated air pollutants shall be replaced.

The following table indicates the control device efficiencies that are required for this facility:

Emission Unit	Pollutant	Control Device	Control Efficiency
Natural Gas Generator (GE-1)	Nitrogen Oxides	NSCR 3-way catalyst	90 %
	Carbon Monoxide		90 %
	Volatile Organic Compounds		90 %

The total facility PTE, including fugitive emissions for the Lemons Well Pad is shown in the following table:

Pollutant	Facility Wide PTE (tons/year)
Nitrogen Oxides	2.45
Carbon Monoxide	2.86
Volatile Organic Compounds	4.60
Particulate Matter-10/2.5	0.20
Sulfur Dioxide	<0.01
Total HAPs	0.15
Carbon Dioxide Equivalent	3,465

Maximum detailed controlled point source emissions were calculated by Stone and checked for accuracy by the writer and are summarized in the table on the next page.

Stone Energy Corporation – Lemons Well Pad (R13-3196)

Emission	Source	NO_x		CO		VOC		PM-10/2.5		SO_2		Formaldehyde		Total HAPs		CO_2e
Unit ID#		lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	ton/year
GE-1	Natural Gas Generator	0.01	0.05	0.08	0.36	0.01	0.05	<0.01	0.03	<0.01	<0.01	0.02	0.07	0.03	0.11	748
GE-2	Natural Gas Generator	0.59	0.15	2.40	0.60	0.59	0.15	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	13
LH-1	Line Heater	0.07	0.32	0.06	0.27	<0.01	0.02	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	383
LH-3	Line Heater	0.07	0.32	0.06	0.27	<0.01	0.02	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	383
LH-4	Line Heater	0.07	0.32	0.06	0.27	<0.01	0.02	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	383
LH-5	Line Heater	0.07	0.32	0.06	0.27	<0.01	0.02	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	383
LH-6	Line Heater	0.07	0.32	0.06	0.27	<0.01	0.02	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	383
LH-7	Line Heater	0.07	0.32	0.06	0.27	<0.01	0.02	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	383
LH-8	Line Heater	0.07	0.32	0.06	0.27	<0.01	0.02	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	383
T01	Produced Water Tank	0.00	0.00	0.00	0.00	0.07	0.29	0.00	0.00	0.00	0.00	0.00	0.00	<0.01	<0.01	0
T02	Condensate Tank	0.00	0.00	0.00	0.00	0.69	3.04	0.00	0.00	0.00	0.00	0.00	0.00	<0.01	<0.01	0
TL1	Truck Loadout	0.00	0.00	0.00	0.00	<0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	<0.01	<0.01	0
Total Point Source		**1.12**	**2.45**	**2.92**	**2.86**	**1.36**	**3.66**	**0.05**	**0.20**	**<0.01**	**<0.01**	**0.02**	**0.07**	**0.04**	**0.15**	**3442**
Fugitive	Fugtive Emissions	0.00	0.00	0.00	0.00	0.22	0.94	0.00	0.00	0.00	0.00	0.00	0.00	<0.01	<0.01	23
Total Fugitive		**0.00**	**0.00**	**0.00**	**0.00**	**0.22**	**0.94**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**<0.01**	**<0.01**	**23**
Total Sitewide		**1.12**	**2.45**	**2.92**	**2.86**	**1.58**	**4.60**	**0.02**	**0.20**	**<0.01**	**<0.01**	**0.02**	**0.07**	**0.04**	**0.15**	**3465**

REGULATORY APPLICABILITY

The following rules apply to the facility:

45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers)

The purpose of 45CSR2 is to establish emission limitations for smoke and particulate matter which are discharged from fuel burning units. 45CSR2 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 4 (weight emission standard), 5 (control of fugitive particulate matter), 6 (registration), 8 (testing, monitoring, recordkeeping, reporting) and 9 (startups, shutdowns, malfunctions). 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.

The individual heat input of the proposed line heaters (LH-1, LH-3 – LH-8) are below 10 MMBTU/hr. Therefore, these units are exempt from the aforementioned sections of 45CSR2.

Stone would also be subject to the opacity requirements in 45CSR2, which is 10% opacity based on a six minute block average.

45CSR10 (To Prevent and Control Air Pollution from the Emissions of Sulfur Oxides)

The purpose of 45CSR10 is to establish emission limitations for sulfur dioxide which are discharged from fuel burning units. 45CSR10 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 3 (weight emission standard), 6 (registration), 7 (permits), and 8 (testing, monitoring, recordkeeping, reporting). 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.

The individual heat input of the proposed line heaters (LH-1, LH-3 – LH-8) are below 10 MMBTU/hr. Therefore, these units are exempt from the aforementioned sections of 45CSR10.

45CSR13 (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

45CSR13 applies to this source due to the fact that Stone is subject to a substantive requirement of an emission control rule promulgated by the Secretary (40CFR60 Subparts JJJJ and OOOO, 40CFR63 Subpart ZZZZ).

Stone paid the appropriate application fee and published the required legal advertisement for a construction permit application.

45CSR16 (Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60)

45CSR16 applies to this source by reference of 40CFR60, Subparts JJJJ and OOOO. These requirements are discussed under that rule below.

45CSR22 (Air Quality Management Fee Program)

Stone is not subject to 45CSR30. The Lemons Well Pad is subject to 40CFR60 Subparts JJJJ and OOOO, however they are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided they are not required to obtain a permit for a reason other than their status as an area source.

Stone is required to pay the appropriate annual fees and keep their Certificate to Operate current.

40CFR60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI ICE))

40CFR60 Subpart JJJJ establishes emission standards for applicable SI ICE. Stone submitted EPA Certificate of Conformity's for both engines (GE-1, GE-2) which states that these emission standards will be met. Therefore, as long as these engines are operated in a certified manner, performance testing is not required.

40CFR60 Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution)

EPA published in the Federal Register new source performance standards (NSPS) and air toxics rules for the oil and gas sector on August 16, 2012. 40CFR60 Subpart OOOO establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO_2) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011. The following affected sources which commence construction, modification or reconstruction after August 23, 2011 are subject to the applicable provisions of this subpart:
Each gas well affected facility, which is a single natural gas well.

a. Each gas well affected facility, which is a single natural gas well.

The gas wells that currently exist at the Lemons Well Pad were drilled principally for the production of natural gas and were done so after August 23, 2011. Therefore, these wells would be considered affected facilities under this subpart. The compliance date for these hydraulically fractured wells is October 15, 2012. Stone is required under §60.5410 to submit an initial notification, initial annual report, maintain a log of records for each well completion, and maintain records of location and method of compliance. §60.5420 requires Stone demonstrate continuous compliance by submitting reports and maintaining records for each completion operation.

b. Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. For the purposes of this subpart, your centrifugal compressor is considered to have commenced construction on the date the compressor is installed (excluding relocation) at the facility. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

There are no centrifugal compressors at the Lemons Well Pad. Therefore, all requirements regarding centrifugal compressors under 40 CFR 60 Subpart OOOO would not apply.

c. Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. For the purposes of this subpart, your reciprocating compressor is considered to have commenced construction on the date the compressor is installed (excluding relocation) at the facility. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

There are no reciprocating compressors at the Lemons Well Pad. Therefore, all requirements regarding reciprocating compressors under 40 CFR 60 Subpart OOOO would not apply.

d. Pneumatic Controllers

- Each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 scfh which commenced construction after August 23, 2011, and is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not located at a natural gas processing plant.

- Each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller which commenced construction after August 23, 2011, and is located at a natural gas processing plant.

All pneumatic controllers at the facility are required to meet these criteria.

e. Each storage vessel affected facility, which is a single storage vessel, located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment.

40CFR60 Subpart OOOO defines a storage vessel as a unit that is constructed primarily of non-earthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provides structural support and is designed to contain an

accumulation of liquids or other materials. The following are not considered storage vessels:

- Vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), and are intended to be located at a site for less than 180 consecutive days. If the source does not keep or are not able to produce records, as required by §60.5420(c)(5)(iv), showing that the vessel has been located at a site for less than 180 consecutive days, the vessel described herein is considered to be a storage vessel since the original vessel was first located at the site.

- Process vessels such as surge control vessels, bottoms receivers or knockout vessels.

- Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.

This rule requires that the permittee determine the VOC emission rate for each storage vessel affected facility utilizing a generally accepted model or calculation methodology within 30 days of startup, and minimize emissions to the extent practicable during the 30 day period using good engineering practices. For each storage vessel affected facility that emits more than 6 tpy of VOC, the permittee must reduce VOC emissions by 95% or greater within 60 days of startup. The compliance date for applicable storage vessels is October 15, 2013.

In order to quantify the emissions from the storage vessels, Stone sampled the separators feeding the storage vessels in order to assess the flashing emissions potential. The results were obtained for gas to oil and gas to water ratio measurements related to organic and aqueous fractions removed from the separator. The storage vessels (T01, T02) located at the Lemons Well Pad have a potential to emit of less than 6 tons per year. Therefore, all requirements regarding storage vessels under 40 CFR 60 Subpart OOOO would not apply.

f. The group of all equipment, except compressors, within a process unit is an affected facility.

- Addition or replacement of equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

- Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§60.5400, 60.5401, 60.5402, 60.5421 and 60.5422 of this subpart if it is located at an onshore natural gas processing plant. Equipment not located at the onshore natural gas processing plant site is exempt from the provisions of §§60.5400, 60.5401, 60.5402, 60.5421 and 60.5422 of this subpart.

- The equipment within a process unit of an affected facility located at onshore natural gas processing plants and described in paragraph (f) of this section are exempt from this subpart if they are subject to and controlled according to subparts VVa, GGG or GGGa of this part.

The Lemons Well Pad is not a natural gas processing plant. Therefore, Leak Detection and Repair (LDAR) requirements for onshore natural gas processing plants would not apply.

g. Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.

- Each sweetening unit that processes natural gas is an affected facility; and

- Each sweetening unit that processes natural gas followed by a sulfur recovery unit is an affected facility.

- Facilities that have a design capacity less than 2 long tons per day (LT/D) of hydrogen sulfide (H_2S) in the acid gas (expressed as sulfur) are required to comply with recordkeeping and reporting requirements specified in §60.5423(c) but are not required to comply with §§60.5405 through 60.5407 and paragraphs 60.5410(g) and 60.5415(g) of this subpart.

- Sweetening facilities producing acid gas that is completely reinjected into oil-or-gas-bearing geologic strata or that is otherwise not released to the atmosphere are not subject to §§60.5405 through 60.5407, 60.5410(g), 60.5415(g), and 60.5423 of this subpart.

There are no sweetening units at the Lemons Well Pad. Therefore, all requirements regarding sweetening units under 40 CFR 60 Subpart OOOO would not apply.

40CFR63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines)

Subpart ZZZZ establishes national emission limitations and operating limitations for HAPs emitted from stationary RICE located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. The engines at the Lemons Well Pad are subject to the area source requirements for non-emergency spark ignition engines.

The applicability requirements for new stationary RICEs located at an area source of HAPs, is the requirement to meet the standards of 40CFR60 Subpart JJJJ. These requirements were outlined above. The proposed engines meet these standards.

The following rules do not apply to the facility:

45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants)

45CSR19 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment)

The Lemons Well Pad is located in Wetzel County, which is an unclassified county for all criteria pollutants, therefore the Lemons Well Pad is not applicable to 45CSR19.

As shown in the following table, Stone is not a major source subject to 45CSR14 or 45CSR19 review. According to 45CSR14 Section 2.43.e, fugitive emissions are not included in the major source determination because it is not listed as one of the source categories in Table 1. Therefore, the fugitive emissions are not included in the PTE below.

Pollutant	**PSD (45CSR14) Threshold (tpy)**	**NANSR (45CSR19) Threshold (tpy)**	**Lemons Pad PTE (tpy)**	**45CSR14 or 45CSR19 Review Required?**
Carbon Monoxide	250	NA	2.86	No
Nitrogen Oxides	250	NA	2.45	No
Sulfur Dioxide	250	NA	<0.01	No
Particulate Matter 2.5	250	NA	0.20	No
Ozone (VOC)	250	NA	3.66	No

45CSR30 (Requirements for Operating Permits)

Stone is not subject to 45CSR30. The Lemons Well Pad is subject to 40CFR60 Subparts JJJJ and OOOO, however they are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided they are not required to obtain a permit for a reason other than their status as an area source.

40CFR60 Subpart Kb (Standards of Performance for VOC Liquid Storage Vessels)

40CFR60 Subpart Kb does not apply to storage vessels with a capacity less than 75 cubic meters. The largest tank that Stone has proposed to install is 63.59 cubic meters each. Therefore, Stone would not be subject to this rule.

40CFR60 Subpart KKK (Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants)

40CFR60 Subpart KKK applies to onshore natural gas processing plants that commenced construction after January 20, 1984, and on or before August 23, 2011. The Lemons Well Pad is not a natural gas processing facility, therefore, Stone is not subject to this rule.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

The majority of non-criteria regulated pollutants fall under the definition of HAPs which, with some revision since, were 188 compounds identified under Section 112(b) of the Clean Air Act (CAA) as pollutants or groups of pollutants that EPA knows or suspects may cause cancer or other serious human health effects. HAPs are those pollutants that are specifically identified in section 112(b) of the Clean Air Act. To be listed as a HAP, EPA must find that the chemical in question may present a threat to human health and cause adverse environmental effects. If the facility has the potential to emit 10 tons per year of any pollutant on the HAP list, or any combination of pollutants on that list for a total of 25 tons per year, the facility is considered a major source of HAPs. Otherwise, it is considered an area source.

Stone included the following HAPs as emitted in substantive amounts in their emissions estimate: Formaldehyde. The following table lists each HAP's carcinogenic risk (as based on analysis provided in the Integrated Risk Information System (IRIS)):

HAPs	Type	Known/Suspected Carcinogen	Classification
Formaldehyde	VOC	Yes	Category B1 - Probable Human Carcinogen

All HAPs have other non-carcinogenic chronic and acute effects. These adverse health effects may be associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect variability in humans such as genetics, age, health status (e.g., the presence of pre-existing disease) and lifestyle. As stated previously, *there are no federal or state ambient air quality standards for these specific chemicals*. For a complete discussion of the known health effects of each compound refer to the IRIS database located at *www.epa.gov/iris*.

AIR QUALITY IMPACT ANALYSIS

Modeling was not required of this source due to the fact that the facility is not subject to 45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants) or 45CSR19 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment) as shown in the table listed in the Regulatory Discussion section under 45CSR14/45CSR19.

SOURCE AGGREGATION

"Building, structure, facility, or installation" is defined as all the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous and adjacent properties, and are under the control of the same person.

The Lemons Well Pad is located in Wetzel County and will be operated by Stone.

1. There are other facilities operated by Stone that share the same two-digit major SIC code. Therefore, the Lemons Well Pad does share the same SIC code as other Stone facilities.

2. "Contiguous or Adjacent" determinations are made on a case by case basis. These determinations are proximity based, and it is important to focus on this and whether or not it meets the common sense notion of a plant. The terms "contiguous" or "adjacent" are not defined by USEPA. Contiguous has a dictionary definition of being in actual contact; touching along a boundary or at a point. Adjacent has a dictionary definition of not distant; nearby; having a common endpoint or border.

   There are no Stone properties in question that are considered to be on contiguous or adjacent property with the Lemons Well Pad. The closest Stone well site is approximately 0.6 mile from this site. The land between these sites is not owned or managed by Stone. Operations separated by these distances do not meet the common sense notion of a plant. Therefore, the properties in question are not considered to be on contiguous or adjacent property.

3. Common control. The Lemons Well Pad has the ability to transfer its products via pipeline to midstream compression companies, which are located on properties that are not contiguous or adjacent with this site. Additionally, these sources are not under common control with the Lemons Well Pad site.

Because the facilities are not considered to be on contiguous or adjacent properties and are not under common control, the emissions from the Lemons Well Pad should not be aggregated with other facilities in determining major source or PSD status.

MONITORING OF OPERATIONS

Stone will be required to perform the following monitoring and recordkeeping:

- Monitor and record quantity of natural gas consumed and hours of operation for all combustion sources.
- Monitor and record quantity of produced water and condensate throughput of the storage tanks.
- Monitor and record quantity of condensate at the liquids loadout.
- Monitor opacity from all fuel burning units.
- Maintain records of testing conducted in accordance with the permit. Said records shall be maintained on-site or in a readily accessible off-site location
- Maintain the corresponding records specified by the on-going monitoring requirements of and testing requirements of the permit.
- Maintain records of the visible emission opacity tests conducted per the permit.
- Maintain a record of all potential to emit (PTE) HAP calculations for the entire facility. These records shall include the natural gas compressor engine and ancillary equipment.
- Maintain records of all applicable requirements of 40CFR60 Subpart JJJJ, and 40CFR63 Subpart ZZZZ.
- The records shall be maintained on site or in a readily available off-site location maintained by Stone for a period of five (5) years.

RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates that Stone meets all the requirements of applicable regulations. Therefore, impact on the surrounding area should be minimized and it is recommended that the Lemons Well Pad should be granted a 45CSR13 construction permit for their facility.

_____
Jerry Williams, P.E.
Engineer

_____
Date