OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

MEMORANDUM June 29, 2022

TO: Lee Warden, P.E., Permits and Engineering Group Manager

THROUGH: Richard Kienlen, P.E., Engineering Manager, New Source Permits Section

THROUGH: Junru Wang, P.E., Existing Source Permits Section

FROM: Caleb Jobe, E.I., Existing Source Permits Section

SUBJECT: Evaluation of Permit Application No. **2021-5276-O**

Enable Gas Gathering, LLC

Verden Compressor Station (SIC 4922/NAICS 486210)

Facility ID No.: 4285

Section 23, Township 7N, Range 9W, Caddo County, Oklahoma

Latitude: 35.05797°N and Longitude: 98.12202°W

Directions: From the west side of Verden, travel approximately one (1) mile west on US-62, one (1) mile south, and one-half (½) mile west. The

facility is on the north side of the road.

SECTION I. INTRODUCTION

Enable Gas Gathering, LLC (EGG or the applicant) has requested a minor facility operating permit modification for their Verden Compressor Station in Caddo County, Oklahoma. The facility is currently operating under individual minor source Permit No. 2017-1801-O, issued on December 20, 2018, and General Permit for Oil and Gas Facilities (GP-OGF) NOI to Construct Authorization No. 2021-5276-NOI, received and issued on October 22, 2021. This permit will incorporate the new units whose construction was authorized by Authorization No. 2021-5276-NOI. There are no as-built changes from the construction permit.

Based on data provided by EGG, the facility has uncontrolled emissions of 0.86 TPY NOx, 0.72 TPY CO, 64.68 TPY VOC, and 0.3 TPY HAPs. The total emissions from the facility are below the major source thresholds. This facility, therefore, qualifies for a "synthetic minor" permit because the controlled emissions of each of the criteria pollutants are below the major source threshold of 100 TPY and the HAP emissions are below the 10 TPY threshold for a single HAP and below the 25 TPY threshold for any combination of HAPs. On issuance, this permit will be a FESOP.

SECTION II. FACILITY DESCRIPTION

The facility is a natural gas gathering compressor station responsible for the compression of natural gas into a pipeline. Natural gas dehydration and storage of condensate occur on-site as well.

Natural gas is transported to the facility via a pipeline gathering system. The gas stream enters the facility through an inlet separator, where water and condensate are removed from the inlet stream. The liquids then flow into the three (3) 400-bbl condensate storage tanks (TANK1, TANK2, and TANK3). The liquids are then removed from the facility via trucks (LOAD1).

The gas stream is then compressed by the two (2) electric driven compressors. After the inlet gas passes through the compressors, the gas then enters the glycol dehydration unit before exiting the facility for transmission via pipeline.

The glycol dehydration unit (DEHY1) is used to remove water from the gas before the gas exits the facility. In the dehydration process, gas passes through the contactor vessel where water is absorbed by the glycol. The "rich" glycol containing water goes to the TEG reboilers, where heat is used to boil off the water. The heat in the reboilers is supplied by two (2) 1.0-MMBTUH burners (HEAT1 and HEAT2), which exhaust to the atmosphere. The dehydrator still vent (DEHY1) is equipped with a condenser and combustion device to reduce VOC and HAP emissions.

SECTION III. EQUIPMENT

The following is a list of current equipment.

Point	Equipment Type	Size/Rating	Manufacture Date
DEHY1	Glycol Dehydrator	65.0-MMSCFD ⁽¹⁾	1999
DEHY1	Glycol Dehydrator (uncontrolled 200 hours)	65.0-MMSCFD ⁽¹⁾	-
HEAT1	Glycol Dehydrator Reboiler	1.00-MMBTUH	1999
HEAT2	Glycol Dehydrator Reboiler	1.00-MMBTUH	1999
TANKS	(3) Condensate Storage Tanks	400-bbl (each)	Before 8/23/2011
LOAD1	Condensate Truck Loading	-	-
FUG1	Fugitive VOC Emissions	-	-

⁽¹⁾ Permitted capacity.

SECTION IV. FACILITY-SPECIFIC OR REPRESENTATIVE SAMPLE

TANKS

Tank flashing emissions were based on the Vazquez-Beggs Equation based on gasoline (RVP 10) and therefore a sample was not required.

DEHYDRATION UNIT

Glycol Dehydrator Considerations	Yes	No
The facility submitted a facility-specific extended gas analysis of the inlet gas.	X	
The sample was no older than three (3) calendar years at the time of submittal.	X	

FUGITIVES

Natural Gas Compressor Station (Transmission) Fugitive Considerations	Yes	No
The facility submitted a facility-specific sample of the inlet gas or sales gas.	X	
The facility submitted a representative facility sample of the inlet gas or sales		
gas from a representative facility that is upstream on the same pipeline from the		X
actual facility.		
The facility did not submit a liquid sample and assumed 100% VOC content	X	
for the liquid service components.	Λ	
The facility submitted a facility-specific sample of the VOC containing liquid.		X
The sample was no older than three (3) calendar years at the time of submittal.	X	

SECTION V. EMISSIONS

All emissions calculations are based on continuous operation (8,760 hours per year), unless otherwise noted.

GLYCOL DEHYDRATION UNIT

VOC and HAP emissions from the TEG dehydrator (DEHY1) are estimated using GRI-GLYCalcTM Version 4.0, "Atmospheric Rich/Lean" (ARL) data, an extended gas analysis, a maximum glycol recirculation rate of 24.0 gpm, and a natural gas throughput of 65-MMSCFD. The vapors from the DEHY1 still vent are routed through the condenser, with the uncondensed vapors from the condenser routed to the reboiler firebox when it is firing or an igniter when the reboiler is not firing, with an overall combustion efficiency of 95%. Emissions from the still vent include a 200% safety factor to allow for variability in the composition of the natural gas stream. The glycol dehydrator is equipped with a flash tank. The flash tank vents back to the process (e.g., facility inlet) resulting in 100% control of VOC and HAP emissions. In addition, EGG requested a separate limit allowing uncontrolled operation of the dehydration unit for up to 200 hours per year in order to provide operational flexibility.

Glycol Dehydrator Emissions

Data
TEG
65
Electric/Pneumatic
24.0
24.0
t
Condenser/Combustion Device
100
95
3.23(1)
180
45
-

Parameter	Data
Control Type or Recycle	Route to Inlet
Overall Control Efficiency, %	100
VOC Emissions, TPY	-
Total Emissions, 7	TPY ⁽¹⁾
Benzene	0.01
Toluene	0.04
Ethylbenzene	< 0.01
Xylene	0.02
n-Hexane	0.03
Total HAPs	0.11
Total VOC	3.23

⁽¹⁾ Includes a 200% safety factor (1+200%).

DEHY1 VOC and HAP Emissions during Uncontrolled Operation

Pollutant	Still Vent Emissions	Flash Tank Emissions	Uncontrolled	Total Uncontrolled Emissions			
	lb/hr	lb/hr	hours/year	lb/hr	TPY		
n-Hexane	0.13	0.21	200	0.34	0.03		
Benzene	0.06	< 0.01	200	0.07	0.01		
Toluene	0.58	0.02	200	0.6	0.06		
Ethylbenzene	0.01	< 0.01	200	0.01	< 0.01		
Xylene	0.83	0.01	200	0.85	0.08		
Total HAPs	1.61	0.25	-	1.86	0.19		
Total VOC	39.46	18.24	- 57.71		5.77		

REBOILERS

Emission estimates for the glycol dehydrator reboilers (HEAT1 and HEAT2) are based on AP-42 (7/98), Section 1.4, Table 1.4-1 through Table 1.4-3 for small commercial boilers, the ratings listed below, and a fuel heating value of 1,020-BTU/SCF.

Reboiler Emission Factors

Point	NOx (lb/MMSCF)	CO (lb/MMSCF)	VOC (lb/MMSCF)	
HEAT1 - 1.00-MMBTUH	100.0	84.0	5.5	
HEAT2 – 1.00-MMBTUH	100.0	84.0	5.5	

Reboiler Emissions

Point NOx		CO		VOC		
Point	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
HEAT1	0.10	0.43	0.08	0.36	0.01	0.02
HEAT2	0.10	0.43	0.08	0.36	0.01	0.02

TANKS

Estimated emissions of working and breathing losses for the three condensate storage tanks (TANKS) are based on AP-42 (6/20), Section 7.1, assuming the tank contents to be Gasoline (RVP

10). Flashing emissions for TANKS are based on Vasquez-Beggs Equation. Flash emissions at the storage tanks result as liquids under pressure enter the tanks at atmospheric pressure. The condensate storage tanks are uncontrolled.

TANKS Emissions

Parameter	Data
Throughput, gal/yr	600,000
Flash Calculation Method/Tool	VBE
Working/Breathing Method/Tool	AP-42 (6/20), Section 7.1
VOC Emissions, TPY	51.96

LOADING

Emissions from loading condensate into tank trucks were estimated using AP-42 (6/08), Section 5.2, Equation 1, and the parameters listed in the table below.

Loading Parameters and Emissions

Louding 1 at affected and Emissions				
Parameter	LOAD1			
Liquids Loaded	Condensate			
Throughput, gal/yr	600,000			
Saturation Factor	0.6			
Temp., °F	62.56			
TVP, psia	6.39			
MW, lb/lbmol	66			
VOC, wt.%	100			
Emission Factor, lb/10 ³ gal	6.03			
VOC Emissions, TPY	1.81			

FUGITIVES

Emissions from fugitive equipment leaks (FUG1) are based on EPA's "Protocol for Equipment Leak Emission Estimates" (11/95, EPA-453/R-95-017), an estimated number of components, and the VOC (C_{3+}) content of the materials handled.

Fugitive Emissions

Point	VOC, TPY		
FUG1	1.87		

FACILITY-WIDE EMISSIONS

Point	Source	NO _X		CO		VOC	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
DEHY1	65.0-MMSCFD Glycol Dehydrator	-	-	-	İ	0.74	3.23
DEHY1	65.0-MMSCFD Glycol Dehydrator (uncontrolled 200 hours)	-	-	-	1	57.71	5.77
HEAT1	1.0 MMBTUH Glycol Dehydrator Reboiler	0.10	0.43	0.08	0.36	0.01	0.02

Point	Source	NOx		NOx		СО		VOC	
	Source	lb/hr TPY	lb/hr	TPY	lb/hr	TPY			
HEAT2	1.0 MMBTUH Glycol Dehydrator Reboiler	0.10	0.43	0.08	0.36	0.01	0.02		
TANKS	(3) 400-bbl Condensate Storage Tanks	-	-	-	i	-	51.96		
LOAD1	Condensate Truck Loading	-	-	-	İ	-	1.81		
FUG1	Fugitive VOC Emissions	-	-	-	İ	0.43	1.87		
	Total Emissions	0.20	0.86	0.16	0.72	58.90	64.68		
	Previous Emissions (Permit No. 2017-1801-O)	0.30	1.29	0.24	1.08	1.10	57.81		
	Change in Emissions	-0.10	-0.43	-0.08	-0.36	57.80	6.87		

The total emissions from the EGG equipment at the facility do not exceed the major source thresholds of 100 TPY for criteria pollutants and 10/25 TPY for individual HAPs and total HAPs, respectively.

SECTION VI. OKLAHOMA AIR POLLUTION CONTROL RULES

OAC 252:100-1 (General Provisions)

[Applicable]

Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-2 (Incorporation by Reference)

[Applicable]

This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations. These requirements are addressed in the "Federal Regulations" section.

OAC 252:100-3 (Air Quality Standards and Increments)

[Applicable]

Primary Standards are in Appendix E and Secondary Standards are in Appendix F of the Air Pollution Control Rules. At this time, all of Oklahoma is in attainment of these standards.

OAC 252:100-5 (Registration, Emission Inventory, and Annual Fees)

[Applicable]

The owner or operator of any facility that is a source of air emissions shall submit a complete emission inventory annually on forms obtained from the Air Quality Division. Required annual information (Turn-Around Document) shall be provided to Air Quality.

OAC 252:100-7 (Permits for Minor Facilities)

[Applicable]

Subchapter 7 sets forth the permit application fees and the basic substantive requirements of permits for minor facilities. Since controlled criteria pollutant emissions are less than 100 TPY for each pollutant, and emissions of HAP will not exceed 10 TPY for any one HAP or 25 TPY for any aggregate of HAP, the facility is defined as a "synthetic minor" source.

OAC 252:100-9 (Excess Emission Reporting Requirement)

[Applicable]

Except as provided in OAC 252:100-9-7(a)(1), the owner or operator of a source of excess emissions shall notify the Director as soon as possible but no later than 4:30 p.m. the following working day of the first occurrence of excess emissions in each excess emission event. No later than thirty (30) calendar days after the start of any excess emission event, the owner or operator of an air contaminant source from which excess emissions have occurred shall submit a report for

each excess emission event describing the extent of the event and the actions taken by the owner or operator of the facility in response to this event. Request for mitigation, as described in OAC 252:100-9-8, shall be included in the excess emission event report. Additional reporting may be required in the case of ongoing emission events and in the case of excess emissions reporting required by 40 CFR Parts 60, 61, and 63.

OAC 252:100-13 (Open Burning)

[Applicable]

Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter.

OAC 252:100-19 (Particulate Matter)

[Applicable]

<u>Section 19-4</u> regulates emissions of PM from new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. Fuel-burning equipment is defined in OAC 252:100-19 as any internal combustion engine or gas turbine, or other combustion device used to convert the combustion of fuel into usable energy. Thus, the reboilers are subject to the requirements of this subchapter. OAC 252:100, Appendix C specifies a PM emission limitation of 0.60 lbs/MMBTU for all equipment at this facility with a heat input rating of 10-MMBTUH or less. Table 1.4-2 of AP-42 (7/98) lists the total PM emissions for natural gas-fired heaters to be 7.6 lb/MMft³or about 0.0075 lb/MMBTU. This permit requires the use of natural gas for all fuel-burning equipment to ensure compliance with Subchapter 19.

Doint	Equipment	Maximum	Emissions (lb/MMBTU)		
Point	Equipment	Heat Input	Appendix C	Potential	
HEAT1	1.00-MMBTUH Glycol Dehydrator Reboiler	1.00	0.60	< 0.01	
HEAT2	1.00-MMBTUH Glycol Dehydrator Reboiler	1.00	0.60	< 0.01	

<u>Section 19-12</u> limits emissions of particulate matter from industrial processes and direct-fired fuel-burning equipment based on their process weight rates. Since there are no significant particulate emissions from the nonfuel-burning processes at the facility compliance with the standard is assured without any special monitoring provisions.

OAC 252:100-25 (Visible Emissions and Particulate Matter)

[Applicable]

No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. The permit will require that any on-site equipment be fueled only with natural gas to ensure compliance with this requirement.

OAC 252:100-29 (Fugitive Dust)

[Applicable]

No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. Under normal operating conditions, this facility will not cause a problem in this area; therefore it is not necessary to require specific precautions to be taken.

OAC 252:100-31 (Sulfur Compounds)

[Applicable]

Part 2 limits the ambient air concentration of H₂S emissions from any facility to 0.2 ppmv (24-hour average) at standard conditions which is equivalent to 283 μg/m³. Based on modeling conducted for the general permit for oil and gas facilities, the ambient impacts of H₂S from oil and gas facilities combusting natural gas with a maximum H₂S content of 162 ppmv and storing condensate or sweet crude oil will be in compliance with the H₂S ambient air concentration limit. Part 5 limits sulfur dioxide emissions from new petroleum or natural gas process equipment (constructed after July 1, 1972). For gaseous fuels the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. For fuel gas having a gross calorific value of 1,000-BTU/SCF, this limit corresponds to fuel sulfur content of 1,203 ppmv. Gas produced from oil and gas wells having 162 ppmv or less total sulfur will ensure compliance with Subchapter 31. The permit requires the use of pipeline-grade natural gas or field gas with a maximum sulfur content of 162 ppmv for all fuel-burning equipment to ensure compliance with Subchapter 31.

OAC 252:100-33 (Nitrogen Oxides)

[Not Applicable]

This subchapter limits new gas-fired fuel-burning equipment with rated heat input greater than or equal to 50-MMBTUH to emissions of 0.2 lb of NOx per MMBTU. There are no equipment items that exceed the 50-MMBTUH threshold.

OAC 252:100-35 (Carbon Monoxide)

[Not Applicable]

This facility has none of the affected sources: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit.

OAC 252:100-37 (Volatile Organic Compounds)

[Applicable]

<u>Part 3</u> requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5-psia at maximum storage temperature to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. The condensate tanks at this facility are subject to this requirement.

<u>Part 3</u> requires VOC loading facilities with a throughput equal to or less than 40,000 gallons per day to be equipped with a system for submerged filling of tank trucks or trailers if the capacity of the vehicle is greater than 200 gallons. The three (3) 16,800-gal condensate storage tanks at the facility are equipped with permanent submerged fill pipes.

<u>Part 5</u> limits the VOC content of coatings from any coating line or other coating operation. This facility does not normally conduct coating or painting operations except for routine maintenance of the facility and equipment. The VOC emission is less than 100 pound per day and so is exempt. <u>Part 7</u> requires fuel-burning and refuse-burning equipment to be operated to minimize emissions of VOC. The equipment at this location is subject to this requirement.

<u>Part 7</u> requires all effluent water separator openings which receive water containing more than 200 gallons per day of any VOC, to be sealed or the separator to be equipped with an external floating roof or a fixed roof with an internal floating roof or a vapor recovery system. No effluent water separators are located at this facility.

OAC 252:100-42 (Toxic Air Contaminants (TAC))

[Applicable]

This subchapter regulates TAC that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained unless a modification is approved by the

Director. Since no AOC has been designated anywhere in the state, there are no specific requirements for this facility at this time.

OAC 252:100-43 (Testing, Monitoring, and Recordkeeping) [Applicable] This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any EPA Reference Method stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

SECTION VII. FEDERAL REGULATIONS

NSPS, 40 CFR Part 60 [Not Applicable] <u>Subpart Kb</u>, Volatile Organic Liquid (VOL) Storage Vessels. This subpart regulates hydrocarbon storage tanks larger than 19,813-gallons capacity and built after July 23, 1984. The three (3) 400-bbl condensate tanks at the site have capacities less than the threshold, 19,813 gallons. Therefore,

this subpart is not applicable.

Subpart GG, Stationary Gas Turbines. There are none at this facility.

<u>Subpart VV</u>, Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry (SOCMI). The equipment is not in a SOCMI plant.

<u>Subpart KKK</u>, Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. The facility does not engage in natural gas processing.

<u>Subpart LLL</u>, Onshore Natural Gas Processing: SO₂ Emissions. This subpart affects sweetening units and sweetening units followed by sulfur recovery units. This facility does not have a sweetening unit.

<u>Subpart IIII</u>, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. There are no compression ignition engines located at this facility.

<u>Subpart JJJJ</u>, Stationary Spark Ignition Internal Combustion Engines (SI-ICE). This subpart promulgates emission standards for all new SI engines ordered after June 12, 2006, and all SI

engines modified or reconstructed after June 12, 2006, regardless of size. The specific emission standards (either in g/hp-hr or as a concentration limit) vary based on engine class, engine power rating, lean-burn or rich-burn, fuel type, duty (emergency or non-emergency), and numerous manufacture dates. There is no equipment at this facility subject to this subpart

<u>Subpart OOOO</u>, Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015. This subpart affects the following onshore affected facilities:

- (a) Each gas well affected facility, which is a single natural gas well.
- (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.
- (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.
- (d) Each pneumatic controller affected facility, which is:
 - (1) For the oil production segment (between the wellhead and the point of custody transfer to an oil pipeline): a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 SCFH.
 - (2) For the natural gas production segment (between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not including natural gas processing plants): a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 SCFH.
 - (3) For natural gas processing plants: a single continuous bleed natural gas-driven pneumatic controller.
- (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, that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water and has the potential for VOC emissions equal to or greater than 6 TPY.
- (f) The group of all equipment, except compressors, within a process unit located at an onshore natural gas processing plant is an affected facility.
- (g) Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.

There are no gas wells at this facility, there are no natural gas-driven pneumatic controllers operating at a natural gas bleed rate greater than 6 SCFH at this facility, this facility is not a gas plant, there are no sweetening units at this facility, and the tanks on-site were manufactured before August 23, 2011. There is no equipment at this facility subject to this subpart.

<u>Subpart OOOOa</u>, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015. This subpart affects the following onshore affected facilities:

(a) Each well affected facility, which is a single well that conducts a well completion operation

- following hydraulic fracturing or refracturing.
- (b) Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals. 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.
- (c) Each reciprocating compressor affected facility, which is a single reciprocating compressor. 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.
- (d) Each pneumatic controller affected facility:
 - (1) Each pneumatic controller affected facility not located at a natural gas processing plant, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 SCFH.
 - (2) Each pneumatic controller affected facility located at a natural gas processing plant, which is a single continuous bleed natural gas-driven pneumatic controller.
- (e) Each storage vessel affected facility, which is a single storage vessel with the potential for VOC emissions equal to or greater than 6 TPY as determined according to §60.5365a(e).
- (f) The group of all equipment within a process unit located at an onshore natural gas processing plant is an affected facility. Equipment within a process unit of an affected facility located at onshore natural gas processing plants are exempt from this subpart if they are subject to and controlled according to Subparts VVa, GGG, or GGGa.
- (g) Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.
- (h) Each pneumatic pump affected facility:
 - (1) For natural gas processing plants, each pneumatic pump affected facility, which is a single natural gas-driven diaphragm pump.
 - (2) For well sites, each pneumatic pump affected facility, which is a single natural gasdriven diaphragm pump.
- (i) The collection of fugitive emissions components at a well site, as defined in §60.5430a, is an affected facility, except as provided in § 60.5365a(i)(2).
- (j) The collection of fugitive emissions components at a compressor station, as defined in § 60.5430a, is an affected facility.

There are no gas wells at this facility, there are no natural gas-driven pneumatic controllers operating at a natural gas bleed rate greater than 6 SCFH at this facility, this facility is not a gas plant, and there are no sweetening units at this facility. The facility was constructed prior to September 18, 2015; therefore, the facility is not subject to the fugitive emissions leak monitoring requirements of this rule. Storage vessels constructed, modified or reconstructed after September 18, 2015, with VOC emissions equal to or greater than 6 TPY after enforceable limits must reduce VOC emissions by 95.0% or greater. The tanks on-site were manufactured prior to September 18, 2015, and are therefore not subject to this subpart.

NESHAP, 40 CFR Part 61

[Not Applicable]

There are no emissions of any of the pollutants subject to 40 CFR 61 (arsenic, asbestos, radionuclides, coke oven emissions, mercury, beryllium, vinyl chloride, and benzene) except for benzene. Subpart J affects process streams, which contain more than 10% benzene by weight. Benzene is present only in trace amounts in any product stream in this facility.

NESHAP, 40 CFR Part 63

[Subpart HH Applicable]

Subpart HH, Oil and Natural Gas Production Facilities. This subpart applies to affected emission points that are located at facilities that are major sources of HAP and either process, upgrade, or store hydrocarbons prior to the point of custody transfer or prior to which the natural gas enters the natural gas transmission and storage source category. The facility was a previously a major source of HAP after the initial compliance date of this subpart and therefore under prior EPA OIAI guidance the facility was subject to this subpart. However, the facility is currently an area source of HAP; therefore, under the updated EPA OIAI guidance the facility is no longer subject to the major source requirements of this subpart. This MACT was extended to area sources on January 3, 2007. Even though the dehydration unit at this facility will be considered an affected area source it is exempt from the requirements of § 63.764(d)(2). The TEG dehydration unit at this facility has benzene emissions less than one (1) TPY; therefore, it will only be subject to the recordkeeping provisions of this subpart. All applicable requirements have been incorporated into the permit.

<u>Subpart HHH</u>, affects Natural Gas Transmission and Storage Facilities that are major sources of HAP. Because this facility is an area source, this subpart does not apply.

<u>Subpart ZZZZ</u>, Reciprocating Internal Combustion Engines (RICE). This subpart affects any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions. Owners and operators of the following new or reconstructed RICE must meet the requirements of Subpart ZZZZ by complying with either 40 CFR Part 60 Subpart IIII (for CI engines) or 40 CFR Part 60 Subpart JJJJ (for SI engines):

- 1) Stationary RICE located at an area source;
- 2) The following Stationary RICE located at a major source of HAP emissions:
 - i) 2SLB and 4SRB stationary RICE with a site rating of \leq 500 brake HP;
 - ii) 4SLB stationary RICE with a site rating of < 250 brake HP;
 - iii) Stationary RICE with a site rating of ≤ 500 brake HP which combust landfill or digester gas equivalent to 10% or more of the gross heat input on an annual basis;
 - iv) Emergency or limited use stationary RICE with a site rating of ≤ 500 brake HP; and
 - v) CI stationary RICE with a site rating of \leq 500 brake HP.

No further requirements apply for engines subject to NSPS under this part. A stationary RICE located at an area source of HAP emissions is existing if construction commenced before June 12, 2006. Based on emission calculations, this facility is an area source of HAP. There is no equipment at this facility subject to this subpart.

<u>Subpart DDDD</u>, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters at major sources of HAPs. Because this facility is an area source, this subpart does not apply.

<u>Subpart JJJJJJ</u>, Industrial, Commercial, and Institutional Boilers. This subpart affects new and existing boilers located at area sources of HAP, except for gas-fired boilers. 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. There are no boilers located at this facility.

SECTION VIII. COMPLIANCE

TIER CLASSIFICATION AND PUBLIC REVIEW

This application has been determined to be **Tier I** based on the request for Modification of a minor operating permit that did not undergo the FESOP Enhanced NSR Process [Traditional NSR]. The draft permit will undergo public notice on the DEQ's web site as required in OAC 252:4-7-13(g). The public, tribal governments, and the EPA will have 30 days to comment on the draft permit. Permits available for public review and comment are found at this location: https://www.deq.ok.gov/permits-for-public-review/.

The applicant has submitted an affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certifies that the applicant has a current easement given to accomplish the permitted purpose.

FEE PAID

The applicant submitted a total of \$2,250 in fees to cover the difference between the individual minor facility construction permit application fee (\$2,000) and the minor facility general permit authorization to construct application fee (\$500) and to cover the individual minor facility operating permit application fee (\$750).

COMPLIANCE AND ENFORCEMENT CASE

There are no active Air Quality compliance or enforcement issues concerning this facility.

INSPECTION

A full compliance evaluation was conducted on February 14, 2019. Present for the inspection was Sean Walker with EGG, and Jenney Brixey of Air Quality Division. No violations of Air Quality rules were noted. Since the modification did not increase the criteria pollutants by 50 TPY, an inspection was not necessary for the issuance of the permit.

SECTION IX. SUMMARY

The facility was constructed and is operating as described in the permit application. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues that would prevent issuance of the permit. Issuance of the operating permit is recommended, contingent on public review.

PERMIT TO OPERATE AIR POLLUTION CONTROL FACILITY SPECIFIC CONDITIONS

Enable Gas Gathering, LLC Verden Compressor Station

FESOP No. 2021-5276-O

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on April 21, 2022, and supplemental information. The Evaluation Memorandum dated June 29, 2022, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein:

1. Points of emissions and emission limitations for each point:

Point	Source	NOx	NOx		СО		VOC	
	Source	lb/hr	lb/hr TPY	lb/hr	TPY	lb/hr	TPY	
DEHY1	Glycol Dehydrator	-	-	-	-	0.74	3.23	
DEHY1	Glycol Dehydrator (uncontrolled 200 hours)	-	-	-	-	57.71	5.77	
HEAT1	1.0 MMBTUH Glycol Dehydrator Reboiler	-	0.43	-	0.36	-	0.02	
HEAT2	1.0 MMBTUH Glycol Dehydrator Reboiler	-	0.43	-	0.36	-	0.02	
TANKS	(3) 400-bbl Condensate Storage Tanks	-	-	-	-	-	51.96	
LOAD1	Condensate Truck Loading	-	-	-	-	-	1.81	

- 2. The fuel-burning equipment shall be fired with pipeline grade natural gas or other gaseous fuel with sulfur content less than 162 ppmv. Compliance can be shown by the following methods: for pipeline grade natural gas, a current gas company bill; for other gaseous fuel, a current lab analysis, stain-tube analysis, gas contract, tariff sheet, etc. Compliance shall be demonstrated at least once every calendar year.
- 3. The permittee shall be authorized to operate this facility continuously (24 hours per day, every day of the year, 8,760 hours).
- 4. The permittee shall comply with all applicable requirements of the NESHAP for Oil and Natural Gas Production, Subpart HH, for each affected dehydration unit including but not limited to the following:
 - a. An owner or operator of a glycol dehydration unit that meets the exemption criteria of \$63.764(e)(1) shall maintain the records specified in \$63.774(d)(1) for that glycol dehydration unit.

- 5. Condensate throughput at the facility shall not exceed 600,000 gallons (12-month rolling total). The condensate tanks shall be bottom filled or operated with submerged fill pipes.
- 6. The glycol dehydration unit shall be installed and operated as follows:
 - (a) Maximum throughput of natural gas (monthly average) shall be no greater than 65-MMSCFD.
 - (b) Glycol circulation rate shall be 24.0 gallons/minute (gal/min) or less.
 - (c) The glycol dehydrator still vent shall be equipped with a condenser.
 - (d) All emissions from the glycol dehydration unit's still vent shall be routed to the condenser, with the uncondensed vapors from the condenser routed to the reboiler firebox when it is firing, an igniter when the reboiler is not firing, or an approved, equally-effective (overall combustion efficiency of 95%) VOC/HAP emissions control system, except as allowed by Specific Condition No. 6(g).
 - (e) The glycol dehydrator shall be equipped with a flash tank on the rich glycol stream.
 - (f) The off-gases from the flash tank shall be routed to the process (e.g., facility inlet), or an approved, equally-effective emission control system (100% control efficiency), except as allowed by Specific Condition No. 6(g).
 - (g) The glycol dehydration unit may be operated up to 200 hours per year without emissions controls.
 - (h) The permittee shall monitor and record the lean glycol circulation rate at least once a month. When three consecutive months show no exceedance of the limit, the frequency may be reduced to quarterly. Upon any showing of non-compliance, the monitoring and recordkeeping frequency shall revert to monthly. With each inspection the lean glycol circulation rate shall be recorded as follows:

Circulation rate, as found (gal/min, strokes/min)	
Circulation rate, as left (gal/min, strokes/min)	
Date of inspection	
Inspected by	

The requirement to monitor and record glycol circulation rate shall not apply if the pump capacity does not exceed 24.0 gal/min. If so, the manufacturer's rating or the performance data for the model of pump that verifies the maximum pump rate at any operational conditions shall be maintained and available for inspection.

- 7. The permittee shall maintain records of operations as listed below. These records shall be maintained on-site or at a local field office for at least five years after the date of recording and shall be provided to regulatory personnel upon request.
 - (a) For the fuel(s) burned, the appropriate document(s) as described in Specific Condition No. 2.
 - (b) Facility condensate throughput (monthly and 12-month rolling total).
 - (c) Uncontrolled operating hours for the glycol dehydration unit, if operated without emissions controls (monthly and 12-month rolling total).

- (d) Glycol pump circulation rate (monthly / quarterly) if applicable, based on Specific Condition No. 6(h).
- (e) Facility natural gas throughput, MMSCFD (monthly average).
- (f) Records required under NESHAP 40 CFR Part 63, Subpart HH.
- 8. Replacement of any equipment with emissions specified in this permit are authorized under OAC 252:100-7-15(a)(2)(C), provided the replacement unit does not require a change in any emission limit and the owner or operator notifies the DEQ in writing within fifteen (15) days of the startup of the replacement unit. The replacement unit shall meet the definition under OAC 252:100-7-1.1.
- 9. Upon issuance, FESOP No. 2021-5276-O replaces and supersedes all previous Air Quality authorizations and/or permits issued to this facility, which are now cancelled.



PERMIT

AIR QUALITY DIVISION
STATE OF OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY
707 N. ROBINSON, SUITE 4100
P.O. BOX 1677
OKLAHOMA CITY, OKLAHOMA 73101-1677

FESOP No. <u>2021-5276-O</u>

Enable Gas Gathering, LLC,

having complied with the requirements of the law, is hereby granted permission to operate the Verden Compressor Station located in Section 23, Township 7N, Range 9W, Caddo County, Oklahoma, and subject to the Standard Conditions dated February 13, 2020, and Specific Conditions, both attached.

DRAFT	
Lee Warden, P.E.	Issuance Date

Permits and Engineering Group Manager



Enable Gas Gathering, LLC Attn.: Mr. Jason Lee P.O. Box 24300, MC LS700 Oklahoma City, Oklahoma 73124

Re: FESOP No. 2021-5276-O

Verden Compressor Station Facility ID No.: 4285

Section 23, Township 7N, Range 9W, Caddo County, Oklahoma

Dear Mr. Lee:

Enclosed is the permit authorizing operation of the referenced facility above. Please note that this permit is issued subject to standard and specific conditions, which are attached. These conditions must be carefully followed since they define the limits of the permit and will be confirmed by periodic inspections.

Also note that you are required to annually submit an emissions inventory for this facility. An emissions inventory must be completed through DEQ's electronic reporting system by April 1st of every year. Any questions concerning the submittal process should be referred to the Emissions Inventory Staff at (405) 702-4100.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact me at <u>Caleb.Jobe@deq.ok.gov</u>, or (405) 702-4187.

Sincerely,

Caleb Jobe, E.I.

Existing Source Permits Section AIR QUALITY DIVISION

Enclosures

MINOR SOURCE PERMIT TO OPERATE / CONSTRUCT AIR POLLUTION CONTROL FACILITY STANDARD CONDITIONS

(February 13, 2020)

- A. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ) in accordance with and under the authority of the Oklahoma Clean Air Act. The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. This specifically includes compliance with the rules of the other Divisions of DEQ: Land Protection Division and Water Quality Division.
- B. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-7-15(g)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced. [OAC 252:100-7-15(f)]
- C. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation. [OAC 252:100-7-18(a)]
- D. Unless specified otherwise, the term of an operating permit shall be unlimited.
- E. Notification to the Air Quality Division of DEQ of the sale or transfer of ownership of this facility is required and shall be made in writing by the transferor within 30 days after such date. A new permit is not required.

 [OAC 252:100-7-2(f)]
- F. The following limitations apply to the facility unless covered in the Specific Conditions:
- 1. No person shall cause or permit the discharge of emissions such that National Ambient Air Quality Standards (NAAQS) are exceeded on land outside the permitted facility.

[OAC 252:100-3]

- 2. All facilities that emit air contaminants are required to file an emission inventory and pay annual operating fees based on the inventory. Instructions are available on the Air Quality section of the DEQ web page. www.deq.ok.gov [OAC 252:100-5]
- 3. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements. [OAC 252:100-9]
- 4. Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning subchapter.

[OAC 252:100-13]

- 5. No particulate emissions from new fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lbs/MMBTU. [OAC 252:100-19]
- 6. No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity.

 [OAC 252:100-25]
- 7. No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent

- properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]
- 8. No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lbs/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide.

 [OAC 252:100-31]
- 9. Volatile Organic Compound (VOC) storage tanks built after December 28, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with an organic material vapor-recovery system. [OAC 252:100-37-15(b)]
- 10. All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]
- G. Any owner or operator subject to provisions of NSPS shall provide written notification as follows: [40 CFR 60.7 (a)]
- 1. A notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
- 2. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
- 3. A notification of the actual date of initial start-up of an affected facility postmarked within 15 days after such date.
- 4. If a continuous emission monitoring system is included in the construction, a notification of the date upon which the test demonstrating the system performance will commence, along with a pretest plan, postmarked no less than 30 days prior to such a date.
- H. Any owner or operator subject to provisions of NSPS shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility or any malfunction of the air pollution control equipment. [40 CFR 60.7 (b)]
- I. Any owner or operator subject to the provisions of NSPS shall maintain a file of all measurements and other information required by this subpart recorded in a permanent file suitable for inspection. This file shall be retained for at least five years following the date of such measurements, maintenance, and records.

 [40 CFR 60.7 (f)]
- J. Any owner or operator subject to the provisions of NSPS shall conduct performance test(s) and furnish to AQD a written report of the results of such test(s). Test(s) shall be conducted within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up. [40 CFR 60.8]

Department of Environmental Quality (DEQ) Air Quality Division (AQD) Acronym List 9-10-21

ACFM	Actual Cubic Feet per Minute	GDF	Gasoline Dispensing Facility
AD	Applicability Determination	GEP	Good Engineering Practice
AFRC	Air-to-Fuel Ratio Controller	GHG	Greenhouse Gases
API	American Petroleum Institute	GR	Grain(s) (gr)
ASTM	American Society for Testing and		
	Materials	H_2CO	Formaldehyde
		H_2S	Hydrogen Sulfide
BACT	Best Available Control Technology	HAP	Hazardous Air Pollutants
BAE	Baseline Actual Emissions	HC	Hydrocarbon
BBL	Barrel(s)	HCFC	Hydrochlorofluorocarbon
BHP	Brake Horsepower (bhp)	HFR	Horizontal Fixed Roof
BTU	British thermal unit (Btu)	HON	Hazardous Organic NESHAP
		HP	Horsepower (hp)
C&E	Compliance and Enforcement	HR	Hour (hr)
CAA	Clean Air Act		, ,
CAM	Compliance Assurance Monitoring	I&M	Inspection and Maintenance
CAS	Chemical Abstract Service	IBR	Incorporation by Reference
CAAA	Clean Air Act Amendments	ICE	Internal Combustion Engine
CC	Catalytic Converter		C
CCR	Continuous Catalyst Regeneration	LAER	Lowest Achievable Emission Rate
CD	Consent Decree	LB	Pound(s) [Mass] (lb, lbs, lbm)
CEM	Continuous Emission Monitor	LB/HR	Pound(s) per Hour (lb/hr)
CFC	Chlorofluorocarbon	LDAR	Leak Detection and Repair
CFR	Code of Federal Regulations	LNG	Liquefied Natural Gas
CI	Compression Ignition	LT	Long Ton(s) (metric)
CNG	Compressed Natural Gas		
CO	Carbon Monoxide or Consent Order	M	Thousand (Roman Numeral)
COA	Capable of Accommodating	MAAC	Maximum Acceptable Ambient
COM	Continuous Opacity Monitor		Concentration
		MACT	Maximum Achievable Control Technology
D	Day	MM	Prefix used for Million (Thousand-
DEF	Diesel Exhaust Fluid		Thousand)
DG	Demand Growth	MMBTU	Million British Thermal Units (MMBtu)
DSCF	Dry Standard (At Standard Conditions)	MMBTUH	Million British Thermal Units per Hour
	Cubic Foot (Feet)		(MMBtu/hr)
		MMSCF	Million Standard Cubic Feet (MMscf)
EGU	Electric Generating Unit	MMSCFD	Million Standard Cubic Feet per Day
EI	Emissions Inventory	MSDS	Material Safety Data Sheet
EPA	Environmental Protection Agency	MWC	Municipal Waste Combustor
ESP	Electrostatic Precipitator	MWe	Megawatt Electrical
EUG	Emissions Unit Group		
EUSGU	Electric Utility Steam Generating Unit	NA	Nonattainment
		NAAQS	National Ambient Air Quality Standards
FCE	Full Compliance Evaluation	NAICS	North American Industry Classification
FCCU	Fluid Catalytic Cracking Unit		System
FESOP	Federally Enforceable State Operating	NESHAP	National Emission Standards for
	Permit		Hazardous Air Pollutants
FIP	Federal Implementation Plan	NH ₃	Ammonia
FR	Federal Register	NMHC	Non-methane Hydrocarbon
G A CT		NGL	Natural Gas Liquids
GACT	Generally Achievable Control Technology	NO ₂	Nitrogen Dioxide
GAL	Gallon (gal)	NOx	Nitrogen Oxides

NSCR Non-Selective Catalytic Reduction NSPS New Source Performance Standards NSR New Source Review SO2 Sulfur Dioxide SOX Sulfur Oxides	on tion
O3 Ozone SOP Standard Operating Procedure O&G Oil and Gas SRU Sulfur Recovery Unit O&M Operation and Maintenance	
O&NG Oil and Natural Gas T Tons	
OAC Oklahoma Administrative Code TAC Toxic Air Contaminant	
OC Oxidation Catalyst TEG Triethylene Glycol	
THC Total Hydrocarbons	
PAH Polycyclic Aromatic Hydrocarbons TPY Tons per Year	
PAE Projected Actual Emissions TRS Total Reduced Sulfur PAI Plant wide Applicability Limit TSP Total Sugmented Portionletes	
PAL Plant-wide Applicability Limit TSP Total Suspended Particulates Pb Lead TV Title V of the Federal Clean Ai	r. A at
PBR Permit by Rule	1 ACt
PCB Polychlorinated Biphenyls µg/m³ Micrograms per Cubic Meter	
PCE Partial Compliance Evaluation US EPA U. S. Environmental Protection	Agency
PEA Portable Emissions Analyzer	rigency
PFAS Per- and Polyfluoroalkyl Substance VFR Vertical Fixed Roof	
PM Particulate Matter VMT Vehicle Miles Traveled	
PM _{2.5} Particulate Matter with an Aerodynamic VOC Volatile Organic Compound	
Diameter <= 2.5 Micrometers VOL Volatile Organic Liquid	
PM ₁₀ Particulate Matter with an Aerodynamic VRT Vapor Recovery Tower	
Diameter <= 10 Micrometers VRU Vapor Recovery Unit	
POM Particulate Organic Matter or Polycyclic	
Organic Matter YR Year	
ppbParts per BillionppmParts per Million2SLB2-Stroke Lean Burn	
ppmParts per Million2SLB2-Stroke Lean BurnppmvParts per Million Volume4SLB4-Stroke Lean Burn	
ppmvd Parts per Million Dry Volume 4SRB 4-Stroke Rich Burn	
PSD Prevention of Significant Deterioration	
psi Pounds per Square Inch	
psia Pounds per Square Inch Absolute	
psig Pounds per Square Inch Gage	
RACT Reasonably Available Control Technology	
RATA Relative Accuracy Test Audit	
RAP Regulated Air Pollutant or	
Reclaimed Asphalt Pavement	
RFG Refinery Fuel Gas	
RICE Reciprocating Internal Combustion Engine	
RO Responsible Official ROAT Regional Office at Tules	
ROAT Regional Office at Tulsa RVP Reid Vapor Pressure	
RVP Reid Vapor Pressure	
SCC Source Classification Code	
SCF Standard Cubic Foot	
SCFD Standard Cubic Feet per Day	
COTTA C. 1 1 C.11 T	
SCFM Standard Cubic Feet per Minute	
SCR Selective Catalytic Reduction	
1	