DRAFT

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MEMORANDUM **July 16, 2021**

TO: Phillip Fielder, P.E., Chief Engineer

THROUGH: Richard Groshong, Manager, Compliance and Enforcement

THROUGH: Phil Martin, P.E., Engineering Manager, Existing Source Permit Section

THROUGH: Joseph K. Wills, P.E., Engineering Section

FROM: Calin Hoots, E.I., Existing Source Permit Section

SUBJECT: Evaluation of Permit Application No. **2020-0309-TVR4**
Madill Gas Processing Company, L.L.C.
North Madill Compressor Station
Facility ID No. 1091
Latitude: 34.11875°N, Longitude: 96.75878°W
Section 15, Township 5S, Range 5E, Madill, Marshall County
Driving Directions: From intersection of Hwy. 70 and Hwy. 377 in Madill, proceed northeast approximately 2.5 miles on Hwy. 377, then west approximately 1.25 miles and north 1/4 mile on county road.

SECTION I. INTRODUCTION

Madill Gas Processing Company, L.L.C. has applied for a renewed Title V operating permit for their North Madill Compressor Station (SIC 4922/NAICS 486210). The facility is currently operating under Permit No. 2015-0087-TVR3, issued on April 19, 2016. The applicant has requested to remove two (2) natural gas-fired compressor engines CM-4 and CM-5 from the permit. The two engines are permanently shut down but are currently still located on site. Since the facility emits more than 100 TPY of a regulated pollutant, it is subject to Title V permitting requirements. The facility is a minor source under NSR and a minor source of HAP emissions.

SECTION II. FACILITY DESCRIPTION

The North Madill Compressor Station gathers low pressure natural gas from surrounding gas wells in Marshall County Oklahoma. The gas is brought to the station via pipelines at a pressure of approximately 5 psig and travels through inlet gas separation scrubbers for water removal. It is then compressed up to approximately 125 psig using a 400 HP Clark RA-4 and/or a 660 HP Cooper Bessemer GX-1 engine. After compressing, the gas is then sent to the Madill Gas Processing Plant for processing.

SECTION III. PERMIT HISTORY

Permits	Date Issued	Description
91-004-C (M-1)	1/23/1992	Modification to transfer an engine.
91-004-O	12/23/1992	Operating permit including the engine that was transferred.
97-249-TV	8/30/1999	Initial Title V permit.
97-249-C (M-1)	12/30/2003	Modification to add 810-hp 4SLB engine.
2004-072-TVR	3/30/2005	Renewal of 97-249-TV.
2009-444-TVR2	7/16/2010	Renewal of 2004-072-TVR.
2015-0087-TVR3	4/19/2016	Renewal of 2009-444-TVR2 to include that the grandfathered engines are now subject to NESHAP Subpart ZZZZ.

SECTION IV. REQUESTED CHANGES

The applicant has requested to remove two (2) natural gas-fired compressor engines CM-4 and CM-5 from the permit.

SECTION V. EQUIPMENT

Emission units have been arranged into Emission Unit Groups (EUGs) as outlined below. Emission units that emit the same regulated air pollutants, trigger the same applicable requirements, share the same compliance demonstration methods, and share the same proposed compliance assurance certifications are combined as one EUG.

EUG-1 Facility-Wide

This emission unit group is facility-wide. It includes all emission units and is established to discuss the applicability of those rules or compliance demonstrations which may affect all sources within the facility.

EUG-2 Grandfathered Compressor Engines

EU	Point	Description	HP	Serial #	Const. Date
EU-CM-2	P-CM-2	Clark RA-4	400	19565	Pre-1972
EU-CM-3	P-CM-3	Cooper Bessemer GX-1	660	44243	Pre-1972

EUG-3 Removed

EUG-4 Not Installed

EUG-5 Miscellaneous Process Piping Fugitives

Component	Service	Number of Components
Valves	Gas/Vapor	210
Compressor Seals	All	18
Relief Valves	All	11

Component	Service	Number of Components
Connectors	All	1189

EUG-6 Storage Tanks

EU	Point	Description	Capacity (gallons)	Install Date
EU-TK-1	P-TK-1	Lube Oil Tank	500	Pre-2006
EU-TK-2	P-TK-2	Lube Oil Tank	2,000	Pre-2006
EU-TK-3	P-TK-3	Lube Oil Tank	2,000	Pre-2006
EU-TK-4	P-TK-4	50/50 Water/Antifreeze Tank	1,000	Pre-2006

Stack Parameters

Point	Source make/model	Height feet	Diameter feet	Flow ACFM	Temp. ºF
EU-CM-2	400-HP Clark RA-4	19.00	0.70	159.30	1,102
EU-CM-3	660-HP Cooper Bessemer GX-1	36.00	2.00	107.20	750

SECTION VI. EMISSIONS

ENGINES

Engine emissions are based on manufacturer's data and continuous operation.

EU	Source	HP	NOx g/hp-hr	CO g/hp-hr	VOC* g/hp-hr
EU-CM-2	Clark RA-4	400	18.00	18.00	2.00
EU-CM-3	Cooper Bessemer GX-1	660	18.00	18.00	2.00

*-It is assumend VOC does not include formaldehyde.

EU	Source	HP	NOx		CO		VOC	
			(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
EU-CM-2	Clark RA-4	400	15.87	69.53	15.87	69.53	1.76	7.73
EU-CM-3	Cooper Bessemer GX-1	660	26.19	114.72	26.19	114.72	2.91	12.75
TOTALS			**42.06**	**184.25**	**42.06**	**184.25**	**4.67**	**20.47**

Engines emit HAPs, the most significant being formaldehyde. Emission estimates for

formaldehyde, based on emission factors from AP-42, (7/00), Table 3.2-1, are listed in the following table.

Source	HP	Fuel MMBTU/hp-hr	Emission Factor (lb/MMBTUH)	Emissions	
				lb/hr	TPY
EU-CM-2	400	0.01525*	0.055	0.34	1.47
EU-CM-3	660	0.01152*	0.055	0.42	1.84
Total				**0.76**	**3.31**

*Heat capacity based on 1996 turn around document.

TANKS

Working and breathing emissions from the storage tanks are based on AP-42 Section 7 (06/20). The tanks are insignificant, uncontrolled, and have no flash emissions. Crude RVP-5 was used as a surrogate for Lube Oil and the throughputs are very conservative. Glycol is not a mixture in AP-42. TK-4 will have negligible emissions.

Tank Emissions

Parameter	EU-TK-1	EU-TK-2	EU-TK-3	EU-TK-4
Throughput, gal/yr	26,000	104,000	104,000	N/A – Antifreeze and Water
Flash Calculation Method/Tool	N/A	N/A	N/A	--
Working/Breathing Method/Tool	AP-42 Section 7 (06/20)	AP-42 Section 7 (06/20)	AP-42 Section 7 (06/20)	--
Control Type	None	None	None	--
VOC Emissions, TPY	**0.03**	**0.13**	**0.13**	**--**

FUGITIVES

Fugitive emissions are based on continuous operation and EPA's "Protocol for Equipment Leak Emission Estimate," EPA Document 453/R-93-026, June 1993, the number of components shown in the following table, and the VOC (C3+) content of the materials handled.

Component	Service	Number of Components	Emission Factors lb/hr-component	VOC Percent in Stream
Valves	Gas/Vapor	210	0.0099	1.266%
Compressor Seals	All	18	0.0194	1.266%
Relief Valves	All	11	0.0194	1.266%
Connectors	All	1189	0.0004	65.6%

Fugitive Emissions

EU #	VOC, TPY
FUG	1.6

Facility-Wide Emissions

EU	NOx		CO		VOC	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-2	15.87	69.53	15.87	69.53	1.76	7.73
EU-CM-3	26.19	114.72	26.19	114.72	2.91	12.75
EUG-5	-	-	-	-	-	1.6
EUG-6	-	-	-	-	0.35	1.51
Total	**42.06**	**184.25**	**42.06**	**184.25**	**5.02**	**23.59**

Potential emissions of any single HAP are less than 10 TPY, and potential emissions of total HAP are less than 25 TPY. The facility is a minor source for HAPs.

Greenhouse Gases (GHG)

The applicant estimated potential GHG emissions at the facility to be 48,075.90 metric tons per year of CO_2-equivalent.

SECTION VII. INSIGNIFICANT ACTIVITIES

The insignificant activities identified and justified on Part 1b of the forms in the application and duplicated below were confirmed by the initial operating permit inspection. Appropriate recordkeeping is required on activities indicated below with "*".

> *Activities having the potential to emit no more than 5 TPY (actual) of any criteria pollutant. None are identified but may occur in the future. There is one 1,000-gallon, 50/50 water/antifreeze tank on-site.

SECTION VIII. 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) [Not 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, Emissions Inventory and Annual Operating Fees) [Applicable]
Subchapter 5 requires sources of air contaminants to register with Air Quality, file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. Emission inventories have been submitted and fees paid for the past years.

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable]
Part 5 includes the general administrative requirements for Part 70 permits. Any planned changes in the operation of the facility which result in emissions not authorized in the permit and which exceed the "Insignificant Activities" or "Trivial Activities" thresholds require prior notification to AQD and may require a permit modification. Insignificant activities mean individual emission units that either are on the list in Appendix I (OAC 252:100) or whose actual calendar year emissions do not exceed the following limits:

- 5 TPY of any one criteria pollutant; and
- 2 TPY of any one HAP or 5 TPY of multiple HAPs or 20% of any threshold less than 10 TPY for a single HAP that the EPA may establish by rule

Emission limitations and operational requirements necessary to assure compliance with all applicable requirements for all sources are taken from the operating permit application, previous issued permits, or are developed from the applicable requirement.

OAC 252:100-9 (Excess Emission Reporting Requirements) [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, or 63.

OAC 252:100-13 (Prohibition of 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]
This subchapter limits particulate emissions from fuel-burning equipment with a rated heat input of 10 million BTU per hour (MMBTUH) or less to 0.6 lb/MMBTU. For 2-cycle lean-burn (2SLB), 4-cycle lean-burn (4SLB), and 4-cycle rich-burn engines (4SRB), AP-42 (7/00), Section 3.2 lists the total PM emissions for natural gas to be 0.0483 lbs/MMBTU, 0.0099 lbs/MMBTU, and 0.0194 lbs/MMBTUH, respectively. This permit requires the use of natural gas for all fuel-burning equipment to ensure compliance with Subchapter 19.

This subchapter also 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 industrial activities 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. When burning natural gas, there is little possibility of exceeding the opacity standards.

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, 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 hydrogen sulfide (H_2S) emissions from any facility to 0.2 ppmv (24-hour average) at standard conditions which is equivalent to 283 µg/m3 (based on EPA standard conditions). Based on modeling conducted for the General Permit for Oil and Gas Facilities (GP-OGF), the ambient impacts of H_2S from oil and gas facilities handling, treating, and combusting sweet natural gas and storing sweet crude oil or condensate will be in compliance with the 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. The permit requires the use of pipeline-grade natural gas or field gas with a maximum sulfur content of 343 ppmv for all fuel-burning equipment to ensure compliance with Subchapter 31.

OAC 252:100-33 (Nitrogen Oxides) [Not Applicable]
This subchapter limits NOx emissions from new fuel-burning equipment with rated heat input greater than or equal to 50 MMBTUH to 0.2 lb of NOx per MMBTU. The engines do not exceed the 50 MMBTUH threshold.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]
None of the following affected processes are located at this facility: 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]
Part 3 requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. None of the tanks on-site are subject to this part.
Part 3 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. This facility does not have the physical equipment (loading arm and pump) to conduct this type of loading and is not subject to this requirement.

Part 5 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, which is exempt.
Part 7 requires fuel-burning and refuse-burning equipment to be operated to minimize emissions of VOC. Temperature and available air must be sufficient to provide essentially complete combustion. The engines are subject to this requirement.
Part 7 requires all effluent water separator openings or floating roofs to be sealed or equipped with an organic vapor recovery system. There are no effluent water separators located at this facility.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Not Applicable]
This Subchapter regulates toxic air contaminants (TAC) that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Oklahoma Department of Environmental Quality 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.

The following Oklahoma Air Pollution Control Rules are not applicable to this facility:

OAC 252:100-11	Alternative Emissions Reduction	Not requested
OAC 252:100-15	Mobile Sources	Not in source category
OAC 252:100-17	Incinerators	Not type of emission unit
OAC 252:100-23	Cotton Gins	Not type of emission unit
OAC 252:100-24	Grain Elevators	Not in source category
OAC 252:100-39	Nonattainment Areas	Not in area category
OAC 252:100-47	Municipal Solid Waste Landfills	Not in source category

SECTION IX. FEDERAL REGULATIONS

PSD, 40 CFR Part 52 [Not Applicable]

Total potential emissions of NO_X and CO are greater than the PSD threshold of 250 TPY. Any future emission increases must be evaluated for PSD if they exceed a significance level (40 TPY NO_X, 100 TPY CO, and 40 TPY VOC).

NSPS, 40 CFR Part 60 [Not Applicable]

Subpart Kb, Volatile Organic Liquid (VOL) Storage Vessels. This subpart regulates hydrocarbon storage tanks larger than 19,813 gallons capacity and built after July 23, 1984. All tanks on-site are less than the lowest threshold level of 19,813 gallons.

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

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

Subpart LLL, Onshore Natural Gas Processing: SO_2 Emissions. There is no natural gas sweetening operation at this site.

Subpart IIII, Stationary Compression Ignition Internal Combustion Engines. This subpart affects stationary compression ignition (CI) internal combustion engines (ICE) based on power and displacement ratings, depending on date of construction, beginning with those constructed after July 11, 2005. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator. There are no stationary compression ignition internal combustion engines at this facility.

Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI-ICE). This subpart was published in the Federal Register on January 18, 2008. It 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 manufacture date. Engine manufacturers are required to certify certain engines to meet the emission standards and may voluntarily certify other engines. An initial notification is required only for owners and operators of engines greater than 500 HP that are non-certified. Emergency engines will be required to be equipped with a non-resettable hour meter and are limited to 100 hours per year of operation excluding use in an emergency (the length of operation and the reason the engine was in operation must be recorded). All engines on-site were installed before June 12, 2006 and are not subject to this subpart.

Subpart OOOO, Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015. There are no wells, centrifugal compressors, or sweetening units located at this facility and this facility is not a gas plant. All of the equipment at this facility was constructed, modified, or reconstructed prior to August 23, 2011; therefore, none of the equipment at this facility is subject to this subpart.

Subpart OOOOa, Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015. This subpart applies to hydraulically fractured wells, centrifugal compressors, reciprocating compressors, pneumatic controllers and pumps, natural gas processing plants, storage vessels, equipment leaks, and natural gas sweetening units that commence construction, modification, or reconstruction after September 18, 2015. All

of the potentially affected equipment at this facility was constructed prior to September 18, 2015, and has not been modified or reconstructed. Therefore, this facility is not subject to this subpart.

NESHAP, 40 CFR Part 61 [Not Applicable]

There are no emissions of any of the regulated pollutants: arsenic, asbestos, beryllium, benzene, coke oven emissions, mercury, radionuclides, or vinyl chloride except for trace amounts of benzene. Subpart J (Equipment Leaks of Benzene) concerns only process streams which contain more than 10% benzene by weight. Analysis of Oklahoma natural gas indicates a maximum benzene content of less than 1%.

NESHAP, 40 CFR Part 63 [Subpart ZZZZ Applicable]

Subpart HH, Oil and Natural Gas Production Facilities. This subpart applies to affected sources that are located at facilities which are major and area sources of HAP. This facility is an area source of HAP emissions. The only affected units at an area source are TEG dehydrator units. There are no TEG dehydrator units located at this facility.

Subpart ZZZZ, 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 ≤ 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 ≤ 500 brake HP.

No further requirements apply for engines subject to NSPS under this part. Based on emission calculations, this facility is a minor source of HAPs. A stationary RICE located at an area source of HAP emissions is new if construction commenced on or after June 12, 2006. Affected existing stationary RICE with a maximum engine power greater than 500-hp are subject to emission limitations unless they meet the definition of remote stationary RICE. The grandfathered engines were constructed before June 12, 2006 and are considered existing stationary SI RICE located at an area source of HAP emissions. The engines are required to comply with all applicable requirements with an initial compliance date of October 19, 2013. The following summary shows the requirements for the existing SI RICE located at this facility.

Engine Category	
Remote	**Requirements**[1]
Non-emergency, non-black start 2SLB stationary RICE	Change oil and filter every 4,320 hours of operation or annually, whichever comes first;[2]
	Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and
	Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.

[1]During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
[2]Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement.

CAM, 40 CFR Part 64 [Not Applicable]
Compliance Assurance Monitoring (CAM), as published in the Federal Register on October 22, 1997, applies to any pollutant specific emission unit at a major source that is required to obtain a Title V permit, if it meets all of the following criteria:

- It is subject to an emission limit or standard for an applicable regulated air pollutant;
- It uses a control device to achieve compliance with the applicable emission limit or standard; and
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant in excess of major source levels.

All exempted engines are not subject to any emission limits.

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable]
The definition of a stationary source does not apply to transportation, including storage incident to transportation, of any regulated substance or any other extremely hazardous substance under the provisions of this part. The definition of a stationary source also does not include naturally occurring hydrocarbon reservoirs. Naturally occurring hydrocarbon mixtures, prior to entry into a natural gas processing plant or a petroleum refining process unit, including condensate, crude oil, field gas, and produced water, are exempt for the purpose of determining whether more than a threshold quantity of a regulated substance (Section 112r of the Clean Air Act 1990 amendment) is present at the stationary source. More information on this federal program is available on the web page: *www.epa.gov/rmp*.

Stratospheric Ozone Protection, 40 CFR Part 82 [Subparts A and F are Applicable]
These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and banning use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to Class I and Class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon

disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H).

Subpart A identifies ozone-depleting substances and divides them into two classes. Class I controlled substances are divided into seven groups; the chemicals typically used by the manufacturing industry include carbon tetrachloride (Class I, Group IV) and methyl chloroform (Class I, Group V). A complete phase-out of production of Class I substances is required by January 1, 2000 (January 1, 2002, for methyl chloroform). Class II chemicals, which are hydrochlorofluorocarbons (HCFCs), are generally seen as interim substitutes for Class I CFCs. Class II substances consist of 33 HCFCs. A complete phase-out of Class II substances, scheduled in phases starting by 2002, is required by January 1, 2030.

Subpart F requires that any persons servicing, maintaining, or repairing appliances except for motor vehicle air conditioners; persons disposing of appliances, including motor vehicle air conditioners; refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment comply with the standards for recycling and emissions reduction.

The Standard Conditions of the permit address the requirements specified in §82.156 for persons opening appliances for maintenance, service, repair, or disposal; §82.158 for equipment used during the maintenance, service, repair, or disposal of appliances; §82.161 for certification by an approved technician certification program of persons performing maintenance, service, repair, or disposal of appliances; §82.166 for recordkeeping; §82.158 for leak repair requirements; and §82.166 for refrigerant purchase records for appliances normally containing 50 or more pounds of refrigerant.

This facility does not utilize any Class I & II substances.

SECTION X. COMPLIANCE

The Specific Conditions of this permit contain various testing, monitoring, recordkeeping, and reporting requirements in order to document on-going compliance with emission limits. The specific method used to document compliance was based on the type of emission unit, the type of process equipment, the specific pollutants emitted, and the amount of permitted emissions taking into account other regulatory requirements that an emission unit may be subject to.

In addition to the permitting requirements, the following periodic inspections were conducted since issuance of the last Title V renewal permit.

Inspection Type	Date	Summary/Results
Full Inspection	6/11/2020	In compliance.
Full Inspection	10/6/2017	In compliance.
Full Inspection	3/28/2016	In compliance.

There have been no other enforcement actions since issuance of the last Title V renewal permit.

SECTION XI. TIER CLASSIFICATION, PUBLIC AND EPA REVIEW

This application has been determined to be **Tier II** based on the request for renewal of a Part 70 operating permit. Part 70 operating permit renewal fee of $7,500 has been received.

The applicant published the "Notice of Filing a Tier II Application" in *The Madill Record*, a local newspaper in Marshall County on July 30, 2020. The notice stated that the application was available for review electronically at the ODEQ website. The information on all permit actions is available for review by the public in the Air Quality section of the DEQ web page at https://www.deq.ok.gov.

The applicant will publish the "Notice of Tier II Draft Permit" as a legal notice in a newspaper of general circulation in the area where the source is located. The notice of draft permit will state that the draft permit will be available for public review at a location in the county where the facility is located, and that the draft permit will also be available for public review at the Air Quality Division main office. The draft permit will be available for a 30-day public review period. The draft permit will also be available for public review on the Air Quality section of the DEQ web page at https://www.deq.ok.gov.

At the appropriate time, the proposed permit will be sent to EPA for a 45-day review period.

This facility is located within 50 miles of the Oklahoma-Texas border. The state of Texas will be notified of the draft permit.

If the Administrator does not object in writing during the 45-day EPA review period, any person that meets the requirements of OAC 252:100-8-8 may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection. Any such petition shall be based only on objections to the permit that the petitioner raised with reasonable specificity during the public comment period provided for in 27A O.S. § 2-14-302.A.2., unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period. If the Administrator objects to the permit as a result of a petition filed under OAC 252:100-8-8, the DEQ shall not issue the permit until EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection. If the DEQ has issued a permit prior to receipt of an EPA objection under OAC 252:100-8-8, the DEQ will modify, terminate, or revoke such permit, and shall do so consistent with the procedures in 40 CFR §§ 70.7(g)(4) or (5)(i) and (ii) except in unusual circumstances. If the DEQ revokes the permit, it may thereafter issue only a revised permit that satisfies EPA's objection. In any case, the source will not be in violation of the requirement to have submitted a timely and complete application.

SECTION XII. SUMMARY

The facility 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. Issuance of the operating permit is recommended, contingent upon public and EPA reviews.

DRAFT

PERMIT TO OPERATE
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS

Madill Gas Processing LLC **Permit No. 2020-0309-TVR4**
North Madill Compressor Station

The permittee is authorized to operate in conformity with the specifications submitted to the Air Quality Division on July 23, 2020. The Evaluation Memorandum, dated July 16, 2021 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 emissions limitations for each point: [OAC 252:100-8-6(a)]

EUG-2: **Grandfathered Compressor Engines.** This emission group consists of grandfathered sources. There are no emission limits applied to these units under Title V but they are limited to the existing equipment as it is.

EU	Point	Description	HP	Serial #	Const. Date
EU-CM-2	P-CM-2	Clark RA-4	400	19565	Pre-1972
EU-CM-3	P-CM-3	Cooper Bessemer GX-1	660	44243	Pre-1972

EUG-5: Miscellaneous Process Piping Fugitives. Fugitive emissions are estimated based on existing equipment items but do not have a specific limitation.

EUG-6: Storage Tanks
Tank emissions are estimated to be insignificant based on existing equipment items and do not have a specific limitation.

EU	Point	Description	Capacity (gallon)
EU-TK-1	P-TK-1	Lube Oil Tank	500
EU-TK-2	P-TK-2	Lube Oil Tank	2,000
EU-TK-3	P-TK-3	Lube Oil Tank	2,000
EU-TK-4	P-TK-4	50/50 Water/Antifreeze Tank	1,000

2. The fuel-burning equipment shall be fired with pipeline grade natural gas or other gaseous fuel with a sulfur content less than 343 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, and other approved methods. Compliance shall be demonstrated at least once per calendar year. [OAC 252:100-31]

3. Each engine at the facility shall have a permanent identification plate attached that is accessible and legible, which shows the make, model number, and serial number.

[OAC 252:100-43]

4. The owner/operator shall comply with all applicable requirements of the NESHAP: Reciprocating Internal Combustion Engines, Subpart ZZZZ, for each affected facility including but not limited to: [40 CFR §§63.6580 through 63.6675]

What This Subpart Covers

a. § 63.6580 What is the purpose of subpart ZZZZ?
b. § 63.6585 Am I subject to this subpart?
c. § 63.6590 What parts of my plant does this subpart cover?
d. § 63.6595 When do I have to comply with this subpart?

Emission and Operating Limitations

e. § 63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

General Compliance Requirements

f. § 63.6605 What are my general requirements for complying with this subpart?

Testing and Initial Compliance Requirements

g. § 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?
h. § 63.6615 When must I conduct subsequent performance tests?
i. § 63.6620 What performance tests and other procedures must I use?
j. § 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?
k. § 63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

Continuous Compliance Requirements

l. § 63.6635 How do I monitor and collect data to demonstrate continuous compliance?
m. § 63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

Notifications, Reports, and Records

n. § 63.6645 What notifications must I submit and when?
o. § 63.6650 What reports must I submit and when?
p. § 63.6655 What records must I keep?
q. § 63.6660 In what form and how long must I keep my records?

Other Requirements and Information

r. § 63.6665 What parts of the General Provisions apply to me?
s. § 63.6670 Who implements and enforces this subpart?
t. § 63.6675 What definitions apply to this subpart?

5. The permittee shall keep operation and maintenance (O&M) records for the grandfathered/exempt engines. Such records shall at a minimum include the dates of operation,

and maintenance, type of work performed, and the increase, if any, in emissions as a result. [OAC 252:100-8-6 (a)(3)(B)]

6. 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. [OAC 252:100-8-6 (a)(3)(B)]

   a. O&M log for the engines.
   b. For fuel(s) burned, the appropriate document(s) as described in Specific Condition No. 2 and updated whenever the supplier changes.
   c. Records required by 40 CFR, Part 63 (NESHAP), Subpart ZZZZ.

7. No later than 30 days after each anniversary date of the issuance of the original Title V operating permit for this facility, (August 30, 1999), the permittee shall submit to the Air Quality Division of DEQ, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit. [OAC 252:100-8-6 (c)(5)(A) & (D)]

8. The following records shall be maintained on site to verify the status of insignificant activities. No recordkeeping is required for those operations that qualify as Trivial Activities. [OAC 252:100-8-6 (a)(3)(B)]

   a. For activities that have the potential to emit less than 5 TPY (actual) of any criteria pollutant: the type of activities, the amount of emissions (annual).

9. This Part 70 permit supersedes all other Air Quality operating permits for this facility, which are now canceled.

MAJOR SOURCE AIR QUALITY PERMIT
STANDARD CONDITIONS
(June 21, 2016)

SECTION I. DUTY TO COMPLY

A. This is a permit to operate / construct this specific facility in accordance with the federal Clean Air Act (42 U.S.C. 7401, et al.) and under the authority of the Oklahoma Clean Air Act and the rules promulgated there under. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

B. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ). The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed.
[40 C.F.R. §70.6(b), OAC 252:100-8-1.3 and OAC 252:100-8-6(a)(7)(A) and (b)(1)]

D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations. [OAC 252:100-8-6(a)(7)(B)]

SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS

A. Any exceedance resulting from an emergency and/or posing an imminent and substantial danger to public health, safety, or the environment shall be reported in accordance with Section XIV (Emergencies). [OAC 252:100-8-6(a)(3)(C)(iii)(I) & (II)]

B. 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 252:100-8-6(a)(3)(C)(iv)]

C. Every written report submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.[OAC 252:100-8-6(a)(3)(C)(iv)]

SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING

A. The permittee shall keep records as specified in this permit. These records, including monitoring data and necessary support information, shall be retained on-site or at a nearby field office for a period of at least five years from the date of the monitoring sample, measurement, report, or application, and shall be made available for inspection by regulatory personnel upon request. Support information includes all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Where appropriate, the permit may specify that records may be maintained in computerized form.

[OAC 252:100-8-6 (a)(3)(B)(ii), OAC 252:100-8-6(c)(1), and OAC 252:100-8-6(c)(2)(B)]

B. Records of required monitoring shall include:

(1) the date, place and time of sampling or measurement;
(2) the date or dates analyses were performed;
(3) the company or entity which performed the analyses;
(4) the analytical techniques or methods used;
(5) the results of such analyses; and
(6) the operating conditions existing at the time of sampling or measurement.

[OAC 252:100-8-6(a)(3)(B)(i)]

C. No later than 30 days after each six (6) month period, after the date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to AQD a report of the results of any required monitoring. All instances of deviations from permit requirements since the previous report shall be clearly identified in the report. Submission of these periodic reports will satisfy any reporting requirement of Paragraph E below that is duplicative of the periodic reports, if so noted on the submitted report. [OAC 252:100-8-6(a)(3)(C)(i) and (ii)]

D. If any testing shows emissions in excess of limitations specified in this permit, the owner or operator shall comply with the provisions of Section II (Reporting Of Deviations From Permit Terms) of these standard conditions. [OAC 252:100-8-6(a)(3)(C)(iii)]

E. In addition to any monitoring, recordkeeping or reporting requirement specified in this permit, monitoring and reporting may be required under the provisions of OAC 252:100-43, Testing, Monitoring, and Recordkeeping, or as required by any provision of the Federal Clean Air Act or Oklahoma Clean Air Act. [OAC 252:100-43]

F. Any Annual Certification of Compliance, Semi Annual Monitoring and Deviation Report, Excess Emission Report, and Annual Emission Inventory submitted in accordance with this permit shall be certified by a responsible official. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

[OAC 252:100-8-5(f), OAC 252:100-8-6(a)(3)(C)(iv), OAC 252:100-8-6(c)(1), OAC 252:100-9-7(e), and OAC 252:100-5-2.1(f)]

G. Any owner or operator subject to the provisions of New Source Performance Standards ("NSPS") under 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants ("NESHAPs") under 40 CFR Parts 61 and 63 shall maintain a file of all measurements and other information required by the applicable general provisions and subpart(s). These records shall be maintained in a permanent file suitable for inspection, shall be retained for a period of at least five years as required by Paragraph A of this Section, and shall include records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility, any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 C.F.R. §§60.7 and 63.10, 40 CFR Parts 61, Subpart A, and OAC 252:100, Appendix Q]

H. The permittee of a facility that is operating subject to a schedule of compliance shall submit to the DEQ a progress report at least semi-annually. The progress reports shall contain dates for achieving the activities, milestones or compliance required in the schedule of compliance and the dates when such activities, milestones or compliance was achieved. The progress reports shall also contain an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted. [OAC 252:100-8-6(c)(4)]

I.All testing must be conducted under the direction of qualified personnel by methods approved by the Division Director. All tests shall be made and the results calculated in accordance with standard test procedures. The use of alternative test procedures must be approved by EPA. When a portable analyzer is used to measure emissions it shall be setup, calibrated, and operated in accordance with the manufacturer's instructions and in accordance with a protocol meeting the requirements of the "AQD Portable Analyzer Guidance" document or an equivalent method approved by Air Quality. [OAC 252:100-8-6(a)(3)(A)(iv), and OAC 252:100-43]

J. The reporting of total particulate matter emissions as required in Part 7 of OAC 252:100-8 (Permits for Part 70 Sources), OAC 252:100-19 (Control of Emission of Particulate Matter), and OAC 252:100-5 (Emission Inventory), shall be conducted in accordance with applicable testing or calculation procedures, modified to include back-half condensables, for the concentration of particulate matter less than 10 microns in diameter (PM_{10}). NSPS may allow reporting of only particulate matter emissions caught in the filter (obtained using Reference Method 5).

K. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 C.F.R. Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-8-6(c)(1) and OAC 252:100, Appendix Q]

SECTION IV. COMPLIANCE CERTIFICATIONS

A. No later than 30 days after each anniversary date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to the AQD, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit and of any other applicable requirements which have become effective since the issuance of this permit.

[OAC 252:100-8-6(c)(5)(A), and (D)]

B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the methods used for determining compliance, currently and over the reporting period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source. [OAC 252:100-8-6(c)(5)(C)(i)-(v)]

C. The compliance certification shall contain a certification by a responsible official as to the results of the required monitoring. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." [OAC 252:100-8-5(f) and OAC 252:100-8-6(c)(1)]

D. Any facility reporting noncompliance shall submit a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable requirements. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the emissions unit or stationary source is in noncompliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based, except that a compliance plan shall not be required for any noncompliance condition which is corrected within 24 hours of discovery.
[OAC 252:100-8-5(e)(8)(B) and OAC 252:100-8-6(c)(3)]

SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

The permittee shall comply with any additional requirements that become effective during the permit term and that are applicable to the facility. Compliance with all new requirements shall be certified in the next annual certification. [OAC 252:100-8-6(c)(6)]

SECTION VI. PERMIT SHIELD

A. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC 252:100-8) shall be deemed compliance with the applicable requirements identified and included in this permit. [OAC 252:100-8-6(d)(1)]

B. Those requirements that are applicable are listed in the Standard Conditions and the Specific Conditions of this permit. Those requirements that the applicant requested be determined as not applicable are summarized in the Specific Conditions of this permit. [OAC 252:100-8-6(d)(2)]

SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories. The methods used to calculate emissions for inventory purposes shall be based on the best available information accepted by AQD.
[OAC 252:100-5-2.1, OAC 252:100-5-2.2, and OAC 252:100-8-6(a)(8)]

SECTION VIII. TERM OF PERMIT

A. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance. [OAC 252:100-8-6(a)(2)(A)]

B. A source's right to operate shall terminate upon the expiration of its permit unless a timely and complete renewal application has been submitted at least 180 days before the date of expiration. [OAC 252:100-8-7.1(d)(1)]

C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) 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 252:100-8-1.4(a)]

D. 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 252:100-8-4(b)(5)]

SECTION IX. SEVERABILITY

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
[OAC 252:100-8-6 (a)(6)]

SECTION X. PROPERTY RIGHTS

A. This permit does not convey any property rights of any sort, or any exclusive privilege.
[OAC 252:100-8-6(a)(7)(D)]

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued. [OAC 252:100-8-6(c)(6)]

SECTION XI. DUTY TO PROVIDE INFORMATION

A. The permittee shall furnish to the DEQ, upon receipt of a written request and within sixty (60) days of the request unless the DEQ specifies another time period, any information that the DEQ may request to determine whether cause exists for modifying, reopening, revoking, reissuing, terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit.
[OAC 252:100-8-6(a)(7)(E)]

B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. § 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment.

[OAC 252:100-8-6(a)(7)(E)]

C. Notification to the AQD of the sale or transfer of ownership of this facility is required and shall be made in writing within thirty (30) days after such sale or transfer.

[Oklahoma Clean Air Act, 27A O.S. § 2-5-112(G)]

SECTION XII. REOPENING, MODIFICATION & REVOCATION

A. The permit may be modified, revoked, reopened and reissued, or terminated for cause. Except as provided for minor permit modifications, the filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition.

[OAC 252:100-8-6(a)(7)(C) and OAC 252:100-8-7.2(b)]

B. The DEQ will reopen and revise or revoke this permit prior to the expiration date in the following circumstances: [OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]

(1) Additional requirements under the Clean Air Act become applicable to a major source category three or more years prior to the expiration date of this permit. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
(2) The DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable requirements.
(3) The DEQ or the EPA determines that inaccurate information was used in establishing the emission standards, limitations, or other conditions of this permit. The DEQ may revoke and not reissue this permit if it determines that the permittee has submitted false or misleading information to the DEQ.
(4) DEQ determines that the permit should be amended under the discretionary reopening provisions of OAC 252:100-8-7.3(b).

C. The permit may be reopened for cause by EPA, pursuant to the provisions of OAC 100-8-7.3(d). [OAC 100-8-7.3(d)]

D. The permittee shall notify AQD before making changes other than those described in Section XVIII (Operational Flexibility), those qualifying for administrative permit amendments, or those defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII). The notification should include any changes which may alter the status of a "grandfathered source," as defined under AQD rules. Such changes may require a permit modification.

[OAC 252:100-8-7.2(b) and OAC 252:100-5-1.1]

E. Activities that will result in air emissions that exceed the trivial/insignificant levels and that are not specifically approved by this permit are prohibited. [OAC 252:100-8-6(c)(6)]

SECTION XIII. INSPECTION & ENTRY

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(17) for confidential information submitted to or obtained by the DEQ under this section):

(1) enter upon the permittee's premises during reasonable/normal working hours where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
(2) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
(3) inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
(4) as authorized by the Oklahoma Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit.

[OAC 252:100-8-6(c)(2)]

SECTION XIV. EMERGENCIES

A. Any exceedance resulting from an emergency shall be reported to AQD promptly but no later than 4:30 p.m. on the next working day after the permittee first becomes aware of the exceedance. This notice shall contain a description of the emergency, the probable cause of the exceedance, any steps taken to mitigate emissions, and corrective actions taken.

[OAC 252:100-8-6 (a)(3)(C)(iii)(I) and (IV)]

B. Any exceedance that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to AQD as soon as is practicable; but under no circumstance shall notification be more than 24 hours after the exceedance. [OAC 252:100-8-6(a)(3)(C)(iii)(II)]

C. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. [OAC 252:100-8-2]

D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that: [OAC 252:100-8-6 (e)(2)]

(1) an emergency occurred and the permittee can identify the cause or causes of the emergency;
(2) the permitted facility was at the time being properly operated;
(3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.

E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [OAC 252:100-8-6(e)(3)]

F. Every written report or document submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.
[OAC 252:100-8-6(a)(3)(C)(iv)]

SECTION XV. RISK MANAGEMENT PLAN

The permittee, if subject to the provision of Section 112(r) of the Clean Air Act, shall develop and register with the appropriate agency a risk management plan by June 20, 1999, or the applicable effective date. [OAC 252:100-8-6(a)(4)]

SECTION XVI. INSIGNIFICANT ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate individual emissions units that are either on the list in Appendix I to OAC Title 252, Chapter 100, or whose actual calendar year emissions do not exceed any of the limits below. Any activity to which a State or Federal applicable requirement applies is not insignificant even if it meets the criteria below or is included on the insignificant activities list.

(1) 5 tons per year of any one criteria pollutant.
(2) 2 tons per year for any one hazardous air pollutant (HAP) or 5 tons per year for an aggregate of two or more HAP's, or 20 percent of any threshold less than 10 tons per year for single HAP that the EPA may establish by rule.

[OAC 252:100-8-2 and OAC 252:100, Appendix I]

SECTION XVII. TRIVIAL ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate any individual or combination of air emissions units that are considered inconsequential and are on the list in Appendix J. Any activity to which a State or Federal applicable requirement applies is not trivial even if included on the trivial activities list.
[OAC 252:100-8-2 and OAC 252:100, Appendix J]

SECTION XVIII. OPERATIONAL FLEXIBILITY

A. A facility may implement any operating scenario allowed for in its Part 70 permit without the need for any permit revision or any notification to the DEQ (unless specified otherwise in the permit). When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8-6(a)(10) and (f)(1)]

B. The permittee may make changes within the facility that:

(1) result in no net emissions increases,
(2) are not modifications under any provision of Title I of the federal Clean Air Act, and

(3) do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded;

provided that the facility provides the EPA and the DEQ with written notification as required below in advance of the proposed changes, which shall be a minimum of seven (7) days, or twenty four (24) hours for emergencies as defined in OAC 252:100-8-6 (e). The permittee, the DEQ, and the EPA shall attach each such notice to their copy of the permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield provided by this permit does not apply to any change made pursuant to this paragraph. [OAC 252:100-8-6(f)(2)]

SECTION XIX. OTHER APPLICABLE & STATE-ONLY REQUIREMENTS

A. The following applicable requirements and state-only requirements apply to the facility unless elsewhere covered by a more restrictive requirement:

(1) 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]

(2) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU. [OAC 252:100-19]

(3) For all emissions units not subject to an opacity limit promulgated under 40 C.F.R., Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for: [OAC 252:100-25]

(a) 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;

(b) Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;

(c) An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or

(d) Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.

(4) 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]

(5) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]

(6) 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 a vapor-recovery system. [OAC 252:100-37-15(b)]

(7) 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]

SECTION XX. STRATOSPHERIC OZONE PROTECTION

A. The permittee shall comply with the following standards for production and consumption of ozone-depleting substances: [40 CFR 82, Subpart A]

(1) Persons producing, importing, or placing an order for production or importation of certain class I and class II substances, HCFC-22, or HCFC-141b shall be subject to the requirements of §82.4;
(2) Producers, importers, exporters, purchasers, and persons who transform or destroy certain class I and class II substances, HCFC-22, or HCFC-141b are subject to the recordkeeping requirements at §82.13; and
(3) Class I substances (listed at Appendix A to Subpart A) include certain CFCs, Halons, HBFCs, carbon tetrachloride, trichloroethane (methyl chloroform), and bromomethane (Methyl Bromide). Class II substances (listed at Appendix B to Subpart A) include HCFCs.

B. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant. [40 CFR 82, Subpart B]

C. The permittee shall comply with the following standards for recycling and emissions reduction except as provided for MVACs in Subpart B: [40 CFR 82, Subpart F]

(1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156;
(2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158;
(3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161;
(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to § 82.166;
(5) Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.158; and
(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

SECTION XXI. TITLE V APPROVAL LANGUAGE

A. DEQ wishes to reduce the time and work associated with permit review and, wherever it is not inconsistent with Federal requirements, to provide for incorporation of requirements established through construction permitting into the Source's Title V permit without causing redundant review. Requirements from construction permits may be incorporated into the Title V permit through the administrative amendment process set forth in OAC 252:100-8-7.2(a) only if the following procedures are followed:

(1) The construction permit goes out for a 30-day public notice and comment using the procedures set forth in 40 C.F.R. § 70.7(h)(1). This public notice shall include notice to the public that this permit is subject to EPA review, EPA objection, and petition to EPA, as provided by 40 C.F.R. § 70.8; that the requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process; that the public will not receive another opportunity to provide comments when the requirements are incorporated into the Title V permit; and that EPA review, EPA objection, and petitions to EPA will not be available to the public when requirements from the construction permit are incorporated into the Title V permit.
(2) A copy of the construction permit application is sent to EPA, as provided by 40 CFR § 70.8(a)(1).
(3) A copy of the draft construction permit is sent to any affected State, as provided by 40 C.F.R. § 70.8(b).
(4) A copy of the proposed construction permit is sent to EPA for a 45-day review period as provided by 40 C.F.R.§ 70.8(a) and (c).
(5) The DEQ complies with 40 C.F.R. § 70.8(c) upon the written receipt within the 45-day comment period of any EPA objection to the construction permit. The DEQ shall not issue the permit until EPA's objections are resolved to the satisfaction of EPA.
(6) The DEQ complies with 40 C.F.R. § 70.8(d).
(7) A copy of the final construction permit is sent to EPA as provided by 40 CFR § 70.8(a).
(8) The DEQ shall not issue the proposed construction permit until any affected State and EPA have had an opportunity to review the proposed permit, as provided by these permit conditions.
(9) Any requirements of the construction permit may be reopened for cause after incorporation into the Title V permit by the administrative amendment process, by DEQ as provided in OAC 252:100-8-7.3(a), (b), and (c), and by EPA as provided in 40 C.F.R. § 70.7(f) and (g).
(10) The DEQ shall not issue the administrative permit amendment if performance tests fail to demonstrate that the source is operating in substantial compliance with all permit requirements.

B. To the extent that these conditions are not followed, the Title V permit must go through the Title V review process.

SECTION XXII. CREDIBLE EVIDENCE

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any provision of the Oklahoma implementation plan, 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. [OAC 252:100-43-6]

PART 70 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

Permit No. 2020-0309-TVR4

Madill Gas Processing, L.L.C.,

having complied with the requirements of the law, is hereby granted permission to operate at the North Madill Compressor Station located in Section 15, Township 5S, Range 5E, Marshall County, Oklahoma subject to the Standard Conditions dated July 21, 2016, and Specific Conditions, both attached.

The permit shall expire five (5) years from the date of issuance, except as Authorized under Section VIII of the Standard Conditions.

Division Director, Air Quality Division **Date**

SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT
Governor

Robert Mitchell
Madill Gas Processing Company, L.L.C.
6100 S. Yale, Suite 2050
Tulsa, OK 74136

SUBJECT: Title V Renewal Permit No. **2020-0309-TVR4**
Madill Gas Processing Company, L.L.C.
North Madill Compressor Station
Facility ID No. 1091
Section 15, Township 5S, Range 5E, Madill, Marshall County, Oklahoma

Dear Mr. Mitchell:

Air Quality has received the permit application for the referenced facility and completed initial review. This application has been determined to be a Tier II application. In accordance with 27A O.S. 2-14-301 and 302 and OAC 252:4-7-13(c), the enclosed draft permit is now ready for public review. The requirements for public review of the draft permit include the following steps, which you must accomplish.

1. Publish at least one legal notice (one day) in at least one newspaper of general circulation within the county where the facility is located. (Instructions enclosed)
2. Provide for public review, for a period of 30 days following the date of the newspaper announcement, a copy of the application and draft permit at a convenient location (preferentially at a public location) within the county of the facility.
3. Send AQD a signed affidavit of publication for the notice(s) from Item #1 above within 20 days of publication of the draft permit. Any additional comments or requested changes you have for the draft permit or the application should be submitted within 30 days of publication.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact the permit writer at Calin.Hoots@deq.ok.gov or at (405) 702-4207.

Sincerely,

Phillip Fielder

Phillip Fielder, P.E.
Chief Engineer
AIR QUALITY DIVISION

Enclosures

NOTICE OF DRAFT PERMIT
TIER II or TIER III AIR QUALITY PERMIT APPLICATION

APPLICANT RESPONSIBILITIES

Permit applicants are required to give public notice that a **Tier II** or **Tier III** draft permit has been prepared by DEQ. The notice must be published in one newspaper local to the site or facility. Upon publication, a signed affidavit of publication must be obtained from the newspaper and sent to AQD. Note that if either the applicant or the public requests a public meeting, this must be arranged through the Customer Services Division of the DEQ.

REQUIRED CONTENT (27A O.S. § 2-14-302 and OAC 252:4-7-13(c))

1. A statement that a Tier II or Tier III draft permit has been prepared by DEQ;
2. Name and address of the applicant;
3. Name, address, driving directions, legal description and county of the site or facility;
4. The type of permit or permit action being sought;
5. A description of activities to be regulated, including an estimate of emissions from the facility;
6. Location(s) where the application and draft permit may be reviewed (a location in the county where the site/facility is located must be included);
7. Name, address, and telephone number of the applicant and DEQ contacts;
8. Any additional information required by DEQ rules or deemed relevant by applicant;
9. A 30-day opportunity to request a formal public meeting on the draft permit.

SAMPLE NOTICE on page 2

SAMPLE NOTICE *(Italicized print is to be filled in by the applicant.)***:**

DEQ NOTICE OF TIER *…II or III…* **DRAFT PERMIT**

A Tier *…II or III…* **application for an air quality** *…type of permit or permit action being sought [e.g., Construction Permit for a Major Facility]…* **has been filed with the Oklahoma Department of Environmental Quality (DEQ) by applicant,** *…name and address.*

The applicant requests approval to *…brief description of purpose of application…* **at the** *…site/facility name … …[proposed to be]…* **located at** *…physical address (if any), driving directions, and legal description including county….*

In response to the application, DEQ has prepared a draft permit [modification] (Permit Number: *….xx-xxx-x…***), which may be reviewed at** *…locations (one must be in the county where the site/facility is located)…* **or at the Air Quality Division's main office (see address below). The draft permit is also available for review in the Air Quality Section of DEQ's Web Page: http://www.deq.ok.gov/**

This draft permit would authorize the facility to emit the following regulated pollutants: *(list each pollutant and amounts in tons per year (TPY))*

The public comment period ends 30 days after the date of publication of this notice. Any person may submit written comments concerning the draft permit to the Air Quality Division contact listed below. [Modifications only, add: **Only those issues relevant to the proposed modification(s) are open for comment.**] **A public meeting on the draft permit [modification] may also be requested in writing at the same address. Note that all public meetings are to be arranged and conducted by DEQ/CSD staff.**

In addition to the public comment opportunity offered under this notice, this draft permit is subject to U.S. Environmental Protection Agency (EPA) review, EPA objection, and petition to EPA, as provided by 40 CFR § 70.8. [For Construction Permits, add: **The requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process. Therefore, no additional opportunity to provide comments or EPA review, EPA objection, and petitions to EPA will be available to the public when requirements from the construction permit are incorporated into the Title V permit.**]

If the Administrator (EPA) does not object to the proposed permit, the public has 60 days following the Administrator's 45 day review period to petition the Administrator to make such an objection as provided in 40 CFR 70.8(d) and in OAC 252:100-8-8(j). Information on all permit actions and applicable review time lines is available in the Air Quality section of the DEQ Web page: http://www.deq.ok.gov/.

For additional information, contact *…names, addresses and telephone numbers of contact persons for the applicant,* **or contact DEQ at: Chief Engineer, Permits & Engineering Group, Air Quality Division, 707 N. Robinson, Suite 4100, P.O. Box 1677, Oklahoma City, OK, 73101-1677. Phone No. (405) 702-4100.**

SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT
Governor

Texas Commission on Environmental Quality
Operating Permits Division (MC 163)
P.O. Box 13087
Austin, TX 78711-3087

SUBJECT: Title V Renewal Permit No. **2020-0309-TVR4**
Madill Gas Processing Company, L.L.C.
North Madill Compressor Station
Facility ID No. 1091
Section 15, Township 5S, Range 5E, Madill, Marshall County, Oklahoma

Dear Sir / Madam:

The subject referenced facility has requested the renewal of a Title V operating permit. Air Quality Division has completed the initial review of the application and prepared a draft permit for public review. Since this facility is within 50 miles of the Oklahoma – Texas border, a copy of the proposed permit will be provided to you upon request. Information on all permits and a copy of this draft permit are available for review by the public in the Air Quality Section of the DEQ Web Page: http://www.deq.ok.gov.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact the permit writer at Calin.Hoots@deq.ok.gov or at (405) 702-4207.

Sincerely,

Phillip Fielder

Phillip Fielder, P.E.
Chief Engineer
AIR QUALITY DIVISION

Enclosures

SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT
Governor

Robert Mitchell
Madill Gas Processing Company, L.L.C.
6100 S. Yale, Suite 2050
Tulsa, OK 74136

SUBJECT: Title V Renewal Permit No. **2020-0309-TVR4**
Madill Gas Processing Company, L.L.C.
North Madill Compressor Station
Facility ID No. 1091
Section 15, Township 5S, Range 5E, Madill, Marshall County, Oklahoma

Dear Mr. Mitchell:

Enclosed is the permit authorizing operation of the referenced facility. Please note that this permit is issued subject to the certain standards 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 the permit writer at Calin.Hoots@deq.ok.gov or at (405) 702-4207.

Sincerely,

Phillip Fielder, P.E.
Chief Engineer
AIR QUALITY DIVISION

Enclosures

Department of Environmental Quality (DEQ)
Air Quality Division (AQD)
Acronym List
4-15-21

ACFM	Actual Cubic Feet per Minute
AD	Applicability Determination
AFRC	Air-to-Fuel Ratio Controller
API	American Petroleum Institute
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
BHP	Brake Horsepower (bhp)
BTU	British thermal unit (Btu)
C&E	Compliance and Enforcement
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstract Service
CAAA	Clean Air Act Amendments
CC	Catalytic Converter
CCR	Continuous Catalyst Regeneration
CD	Consent Decree
CEM	Continuous Emission Monitor
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CI	Compression Ignition
CNG	Compressed Natural Gas
CO	Carbon Monoxide or Consent Order
COA	Capable of Accommodating
COM	Continuous Opacity Monitor
D	Day
DEF	Diesel Exhaust Fluid
DG	Demand Growth
DSCF	Dry Standard (At Standard Conditions) Cubic Foot (Feet)
EGU	Electric Generating Unit
EI	Emissions Inventory
EPA	Environmental Protection Agency
ESP	Electrostatic Precipitator
EUG	Emissions Unit Group
EUSGU	Electric Utility Steam Generating Unit
FCE	Full Compliance Evaluation
FCCU	Fluid Catalytic Cracking Unit
FIP	Federal Implementation Plan
FR	Federal Register
GACT	Generally Achievable Control Technology
GAL	Gallon (gal)
GDF	Gasoline Dispensing Facility
GEP	Good Engineering Practice
GHG	Greenhouse Gases
GR	Grain(s) (gr)
H_2CO	Formaldehyde
H_2S	Hydrogen Sulfide
HAP	Hazardous Air Pollutants
HC	Hydrocarbon
HCFC	Hydrochlorofluorocarbon
HFR	Horizontal Fixed Roof
HON	Hazardous Organic NESHAP
HP	Horsepower (hp)
HR	Hour (hr)
I&M	Inspection and Maintenance
IBR	Incorporation by Reference
ICE	Internal Combustion Engine
LAER	Lowest Achievable Emission Rate
LB	Pound(s) [Mass] (lb, lbs, lbm)
LB/HR	Pound(s) per Hour (lb/hr)
LDAR	Leak Detection and Repair
LNG	Liquefied Natural Gas
LT	Long Ton(s) (metric)
M	Thousand (Roman Numeral)
MAAC	Maximum Acceptable Ambient Concentration
MACT	Maximum Achievable Control Technology
MM	Prefix used for Million (Thousand-Thousand)
MMBTU	Million British Thermal Units (MMBtu)
MMBTUH	Million British Thermal Units per Hour (MMBtu/hr)
MMSCF	Million Standard Cubic Feet (MMscf)
MMSCFD	Million Standard Cubic Feet per Day
MSDS	Material Safety Data Sheet
MWC	Municipal Waste Combustor
MWe	Megawatt Electrical
NA	Nonattainment
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NH_3	Ammonia
NMHC	Non-methane Hydrocarbon
NGL	Natural Gas Liquids

NO_2	Nitrogen Dioxide
NOx	Nitrogen Oxides
NOI	Notice of Intent
NSCR	Non-Selective Catalytic Reduction
NSPS	New Source Performance Standards
NSR	New Source Review
O_3	Ozone
O&G	Oil and Gas
O&M	Operation and Maintenance
O&NG	Oil and Natural Gas
OAC	Oklahoma Administrative Code
OC	Oxidation Catalyst
PAH	Polycyclic Aromatic Hydrocarbons
PAE	Projected Actual Emissions
PAL	Plant-wide Applicability Limit
Pb	Lead
PBR	Permit by Rule
PCB	Polychlorinated Biphenyls
PCE	Partial Compliance Evaluation
PEA	Portable Emissions Analyzer
PFAS	Per- and Polyfluoroalkyl Substance
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter with an Aerodynamic Diameter <= 2.5 Micrometers
PM_{10}	Particulate Matter with an Aerodynamic Diameter <= 10 Micrometers
POM	Particulate Organic Matter or Polycyclic Organic Matter
ppb	Parts per Billion
ppm	Parts per Million
ppmv	Parts per Million Volume
ppmvd	Parts per Million Dry Volume
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
RFG	Refinery Fuel Gas
RICE	Reciprocating Internal Combustion Engine
RO	Responsible Official
ROAT	Regional Office at Tulsa
RVP	Reid Vapor Pressure
SCC	Source Classification Code
SCF	Standard Cubic Foot
SCFD	Standard Cubic Feet per Day
SCFM	Standard Cubic Feet per Minute
SCR	Selective Catalytic Reduction
SER	Significant Emission Rate
SI	Spark Ignition
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SNCR	Selective Non-Catalytic Reduction
SO_2	Sulfur Dioxide
SOx	Sulfur Oxides
SOP	Standard Operating Procedure
SRU	Sulfur Recovery Unit
T	Tons
TAC	Toxic Air Contaminant
THC	Total Hydrocarbons
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulates
TV	Title V of the Federal Clean Air Act
$\mu g/m^3$	Micrograms per Cubic Meter
US EPA	U. S. Environmental Protection Agency
VFR	Vertical Fixed Roof
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
VOL	Volatile Organic Liquid
VRT	Vapor Recovery Tower
VRU	Vapor Recovery Unit
YR	Year
2SLB	2-Stroke Lean Burn
4SLB	4-Stroke Lean Burn
4SRB	4-Stroke Rich Burn