

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

MEMORANDUM

March 3, 2025

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

THROUGH: Phillip Martin, P.E., Engineering Manager, Existing Source Permits Section

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

FROM: Alex Johnson, E.I., New Source Permits Section

SUBJECT: Evaluation of Permit Application No. **2023-0577-C**
BCE Mach, LLC
Brian 27-34 S1H (SIC 1321/NAICS 211130)
Facility ID No.: 23696
Section 22, Township 1S, Range 4W, Stephens County, Oklahoma
Latitude: 34.44961°N and Longitude: 97.60086°W
Directions: From Ratliff City, travel west on State Hwy 7/W Main St for 5.1 mi. Turn right onto N3030 Rd. for 0.3 mi. Turn left onto Old Oklahoma 7 and proceed 0.2 mi to site.

SECTION I. INTRODUCTION

BCE Mach, LLC (BCE or the applicant) has requested an individual minor source construction permit for their Brian 27-34 S1H facility in Stephens County, Oklahoma. This permit authorizes the construction of one (1) heater treater, four (4) oil/condensate tanks, four (4) produced water tank, and one (1) combustor. Based on Oklahoma Corporation Commission records, the facility began production on April 14, 2021. The facility was purchased by BCE on October 24, 2024. This facility wishes to operate under the General Permit for Oil and Gas Facilities (GP-OGF). However, this facility cannot use Notice of Intent to Construct procedures under the GP-OGF due to the facility handling sour hydrocarbon liquids. Therefore, BCE has applied for an individual minor source construction permit to obtain enforceable limitations regarding handling of sour hydrocarbon liquids, which will be incorporated into the authorization to operate in the GP-OGF.

Based on data provided by BCE, the facility has uncontrolled emissions of 1.37 TPY NO_x, 2.37 TPY CO, and controlled emissions of 41.77 TPY of VOC and 1.17 TPY HAPs, the most significant being 0.83 TPY n-hexane. 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.

SECTION II. FACILITY DESCRIPTION

The facility is a wellhead used for the extraction of natural gas and hydrocarbon liquids. The total fluids/gas stream from the wellhead enters the site through separator(s), where the majority of the gas is liberated from the oil and water mix. Produced gas is routed to the sales gas pipeline. The fluids stream is sent to the heater treater, which promotes separation of water and oil/condensate via the thermal breakdown of the stable emulsion. The hydrocarbon phase is stored in the oil/condensate storage tanks and the produced water is stored in the produced water storage tanks. Hydrocarbon vapors from the tanks are routed to a combustor. Oil/condensate and produced water are transported off-site via tanker truck.

SECTION III. EQUIPMENT

The following is a list of current equipment.

ID#	Equipment Type	Size/Rating	Manufacture Date	Subject to NSPS or NESHP?	
				No	If Yes, specify Subpart
HT-1	Heater Treater	0.75-MMBTUH	-	X	-
OILTK-1	Oil/Condensate Tank	300-bbl	2010	X	-
OILTK-2	Oil/Condensate Tank	300-bbl	2012	-	NSPS OOOO
OILTK-3	Oil/Condensate Tank	300-bbl	2010	X	-
OILTK-4	Oil/Condensate Tank	300-bbl	2010	X	-
PWTK-1	Produced Water Tank	300-bbl	2008	X	-
PWTK-2	Produced Water Tank	300-bbl	2013	-	NSPS OOOO
PWTK-3	Produced Water Tank	300-bbl	1985	X	-
PWTK-4	Produced Water Tank	300-bbl	Installed 2021	-	NSPS OOOOa
LD-1	Oil/Condensate Loading	-	-	X	-
LD-2	Produced Water Loading	-	-	X	-
COMB	Combustor	1.74-MMBTUH ⁽¹⁾	-	X	-
FUG	Fugitive Emissions	-	-	-	NSPS OOOOa

⁽¹⁾ Based on the gas stream maximum net BTU value.

SECTION IV. FACILITY-SPECIFIC OR REPRESENTATIVE SAMPLE**TANKS**

No.	All Sample Considerations	Yes	No
1	Is sample more than three (3) calendar years old?		X
If the above answer is yes, a new sample is required, or the sample shall be evaluated on a case-by-case basis.			

No.	Calculated Emission Considerations	Yes	No
2	For true minor and synthetic minor facilities, are VOC emissions more than 80 TPY and then do storage tank and truck loading VOC emissions account for more than 50% of facility-wide VOC emissions?		X
3	Are individual storage tank emissions, not controlled by a combustion device, more than 4 TPY VOC?		X
4	Are facility-wide emissions of a single HAP greater than 8 TPY or are total HAP emissions greater than 20 TPY? (Excluding HAP emissions from engines)		X
If any of the above answers are yes, a facility-specific sample is required.			

No.	Throughput Considerations	Yes	No
5a	Is facility-wide throughput less than 10 bbl/day? ⁽¹⁾		X
5b	Is facility-wide throughput less than 1,200 bbl/day and controlled by more than 95% with a VRU and/or combustion device? ⁽²⁾	X	
If either of the above answers is yes, the representative sample does not have to meet the requirements of distance, sampling point and operating parameters.			

⁽¹⁾ – This applies to Well Sites and Natural Gas Compressor Station (Gathering and Transmissions).

⁽²⁾ – This applies to Well Sites and Natural Gas Compressor Stations (Gathering).

FUGITIVES

Well Site Fugitive Considerations	Yes	No
The facility submitted a facility-specific sample of the inlet gas or sales gas.	X	

Well Site Fugitive Considerations	Yes	No
The facility submitted a representative facility sample of the inlet gas or sales gas from a representative facility that is within 10 miles and producing from the same formation(s).		X
The facility did not submit a liquid sample and assumed 100% VOC content for the liquid service components.	X	
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.

HEATER

Emissions are based on AP-42 (7/98), Section 1.4, a gas heating value of 1,020 BTU/SCF, and the rating shown in the second table.

Heater Emission Factors

ID#	NO _x	CO	VOC
	lb/MMSCF	lb/MMSCF	lb/MMSCF
HT-1	100	84	5.5

Heater Emissions

ID#	Rating	NO _x		CO		VOC	
	MMBTUH	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
HT-1	0.75	0.07	0.32	0.06	0.27	<0.01	0.02

TANKS

Working and breathing (W/B) emissions were calculated using AP-42 (11/19), Section 7.1. Flashing emissions were calculated using a gas-oil ratio. Flashing emissions at the condensate and produced water tanks result as liquids under pressure enter the tanks at atmospheric pressure. Emissions from the storage tanks are routed to the tank flare (COMB) for control. To be conservative, flash emissions for the produced water tanks were calculated using 1% of the condensate properties.

Tank Emissions (per tank)

Parameter	OILTK1-OILTK4 Data	PWTK1-PWTK4 Data
Throughput, gal/yr	2,100,000	2,100,000
Liquid in Tank(s)	Condensate/Oil	Produced Water
Working/Breathing Method/Tool	AP-42 (11/19), Section 7.1	AP-42 (11/19), Section 7.1
Flash Calculation Method/Tool	Gas-Oil Ratio	Gas-Oil Ratio
Turnover Factor (K _N)	1.00	1.00
Working/Breathing Emissions, TPY	9.98	9.98
Flashing Emissions, TPY	61.42	0.615
Control Type	Flare	Flare
Capture Efficiency, %	98	98

Parameter	OILTK1-OILTK4 Data	PWTK1-PWTK4 Data
Control Efficiency, %	98	98
Tank VOC Emitted at Tank, TPY	1.43	0.21
Tank VOC Emitted at Flare, TPY	1.40	0.21
Total VOC Emissions, TPY	2.83	0.42

LOADING

Emissions from loading condensate and produced water into tank trucks were estimated using AP-42 (6/08), Section 5.2, Equation 1, and the parameters listed in the table below. The vapor pressure, molecular weight, and temperature listed are from AP-42 (11/19), Section 7.1 defaults for Oklahoma City, Oklahoma and Crude Oil (RVP 10).

Loading Parameters and Emissions

Parameter	LD-1	LD-2
Liquids Loaded	Condensate/Oil	Produced Water
Throughput, gal/yr	8,400,000	8,400,000
Saturation Factor	0.6	0.6
Temp., °F	62.87	62.87
TVP, psia	8.07	0.31
MW, lb/lbmol	50	18.75
VOC, wt. %	100	100
Emission Factor, lb/10 ³ gal ⁽¹⁾	5.77	0.08
VOC Emitted at Truck, TPY	24.24	0.35

⁽¹⁾ Final factor considering any VOC reduction stated for methane/ethane.

COMBUSTOR

Emission factors of NO_x and CO are taken from TCEQ publication RG-360A/11, Table A-6 (2/12), based on the heat input to the combustor. VOC emissions from the combustor (COMB) are based on the emissions from the storage tanks with a 98% destruction efficiency.

Combustor Combustion Emissions

ID#	Total Gas Combusted MMBTUH	Emission Factor lb/MMBTU		NO _x TPY	CO TPY
		NO _x	CO		
COMB	1.74	0.138	0.2755	1.05	2.10

Combustor Emissions

ID#	Process Point(s)	VOC Emissions, TPY
COMB	Storage Tanks	6.44

FUGITIVES

Emissions from fugitive equipment leaks (FUG) 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 (C₃₊) content of the materials handled.

Fugitive Emissions

ID#	VOC, TPY
FUG	5.68

FACILITY-WIDE EMISSIONS

For storage tank emissions released at the combustor, these emissions are represented at the storage tanks.

Facility-Wide Emissions

ID#	Description	NO_x	CO	VOC	HAPs
		TPY	TPY	TPY	TPY
HT-1	0.75-MMBTUH Heater Treater	0.32	0.27	0.02	<0.01
OILTK-1	300-bbl Oil/Condensate Tank	-	-	2.83	-(1)
OILTK-2	300-bbl Oil/Condensate Tank	-	-	2.83	-(1)
OILTK-3	300-bbl Oil/Condensate Tank	-	-	2.83	-(1)
OILTK-4	300-bbl Oil/Condensate Tank	-	-	2.83	-(1)
PWTK-1	300-bbl Produced Water Tank	-	-	0.42	-(1)
PWTK-2	300-bbl Produced Water Tank	-	-	0.42	-(1)
PWTK-3	300-bbl Produced Water Tank	-	-	0.42	-(1)
PWTK-4	300-bbl Produced Water Tank	-	-	0.42	-(1)
LD-1	Oil/Condensate Loading	-	-	24.24	0.61
LD-2	Produced Water Loading	-	-	0.35	0.01
COMB	1.74-MMBTUH Combustor	1.05	2.10	<0.01	0.14 ⁽¹⁾
FUG	Fugitive Emissions	-	-	5.68	0.41
Total Emissions		1.37	2.37	43.29	1.17

(1) Storage tank HAP emissions routed to and reported at combustor.

The total HAP emissions from the equipment at the facility are 1.17 TPY. Therefore, the individual and the total emissions of HAPs do not exceed the major source thresholds of 10/25 TPY.

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. This project meets the conditions for a minor facility construction permit because there is no emission of any regulated pollutant of 100 TPY or more and HAP emissions do not exceed the 10/25 TPY threshold. As such, major source BACT consideration and public review are not required.

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]

Section 19-4 regulates emissions of particulate matter from fuel-burning equipment. Particulate emission limits are based on maximum design heat input rating. This subchapter specifies a PM emissions limitation of 0.6 lb/MMBTU from fuel-burning units with a rated heat input of 10 MMBTUH or less and a limit of 0.10 lb/MMBTU for units with a rated heat input of 10,000 MMBTUH or greater. For fuel-burning equipment with a capacity between 10 and 10,000 MMBTUH, this subchapter specifies a PM emission limitation based upon the heat input of the equipment and is calculated according to the following equations:

$$E = 1.042808 X^{-0.238561}$$

For Units > 10 MMBTUH but < 1,000 MMBTUH

$$E = 1.6 X^{-0.30103}$$

For Units > 1,000 MMBTUH but < 10,000 MMBTUH

Where: E = allowable total particulate matter emissions in pounds per MMBTU
X = the maximum heat input in MMBTU per hour.

The combustion units located at the facility are subject to this subchapter and will be in compliance as indicated below.

Equipment	Maximum Heat Input, (MMBtu/h)	Appendix C Emission Limit, (lb/MMBtu)	Potential Emission Rate, (lb/MMBtu)
HT-1	0.75	0.60	0.006

Section 19-12 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, Section 31-7 limits the ambient air impact of H₂S emissions from any new or existing source to 0.2 ppm for a 24-hour average (equivalent to 283 µg/m³). An analysis of inlet liquid to this facility showed hydrogen sulfide content of 7 ppm. Inlet gas H₂S concentration is limited to not more than 4 ppmv. Air dispersion modeling using EPA's AERSCREEN modeling program resulted in a facility-wide maximum H₂S 24-hour impact of 2.39 µg/m³, which demonstrates compliance with the OAC 252:100-31-7(b) concentration limit.

Part 5, Section 31-25 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. The field gas has tested at 1 ppm H₂S.

Part 5, Section 31-26 also limits H₂S emissions from new petroleum or natural gas process equipment (constructed after July 1, 1972). Removal of H₂S in the exhaust stream, or oxidation to sulfur dioxide (SO₂), is required unless H₂S emissions do not exceed 0.3 lb/hr for a two-hour average. If this threshold is exceeded, H₂S emissions shall be reduced by a minimum of 95% of the H₂S in the exhaust gas.

Part 5, Section 31-26 requires removal or oxidation of H₂S from the exhaust gas of any new petroleum or natural gas process equipment. This part allows direct oxidation of H₂S to SO₂, without sulfur recovery, when the exhaust gas will contain no more than 100 lbs/hr SO₂ (2-hour average). Compliance with the 100 lb/hr can be demonstrated by establishing that the acid gas stream contains 0.54 long tons per day (LTD) of sulfur (S) or less. Oxidation of the H₂S must be conducted in a system that assures at least a 100% reduction of the H₂S in the exhaust gases and that is equipped with an alarm system to signal non-combustion of the exhaust gases. These

requirements do not apply if H₂S emissions do not exceed 0.3 lb/hr.

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 NO_x 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]

Part 3 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 storage tanks at this facility are located prior to custody transfer and are not subject to this requirement.

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. The VOC emission is less than 100 pound per day and so is exempt.

Part 7 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.

Part 7 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))

[Not 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 [Subparts OOOO and OOOOa Applicable]
Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units. This subpart affects each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989, and that has a maximum design heat input capacity of between 10 MMBTUH and 100 MMBTUH. HT-1 is rated less than 10 MMBTUH; therefore, it is not subject to this subpart.

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. The eight 300-bbl storage 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.

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 was constructed after August 23, 2011, and is not subject to this subpart.

Subpart LLL, Onshore Natural Gas Processing: SO₂ Emissions. This subpart affects sweetening units and sweetening units followed by sulfur recovery units. The facility was constructed after August 23, 2011, and is not subject to this subpart.

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

Subpart JJJJ, 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. There are no SI engines at this facility, therefore this subpart does not apply.

Subpart OOOO, 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. The following table outlines the applicability of the subpart.

NSPS Subpart OOOO Applicability

§60.5365 section	Applicable? Y/N	Affected Facility	Comment
(a)	N	Gas well	After 9/18/15
(b)	N	Centrifugal compressor using wet seals	At a well site, not applicable
(c)	N	Reciprocating compressor	At a well site, not applicable
(d)		Pneumatic controller:	
	N	(1) between wellhead and point of custody transfer or an oil pipeline, bleed rate > 6 SCFH	Devices are low bleed
	N	(2) between wellhead and point of custody transfer to the natural gas transmission or storage segment, bleed rate > 6 SCFH	Devices are low bleed
	N	(3) located at natural gas processing plant, continuous bleed	Not at a gas plant
(e)	Y	Storage vessel with the potential for VOC emissions ≥ 6 TPY	OILTK-2 and PWTK-2
(f)	N	Group of all equipment in a process unit located at a gas plant	Not at a gas plant
(g)	N	Sweetening units located at gas processing plants	Not at a gas plant
(h)	N	Well completion following hydraulic refracturing	After 9/18/15

Subpart OOOOa, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015, and on or Before December 6, 2022. The following table outlines the applicability of the subpart.

NSPS Subpart OOOOa Applicability

§60.5365a section	Applicable? Y/N	Affected Facility	Comment
(a)	Y	Well	Facility constructed 2021
(b)	N	Centrifugal compressor using wet seals	At a well site, not applicable
(c)	N	Reciprocating compressor	At a well site, not applicable
(d)		Pneumatic controller:	
	N	(1) not located at a plant, bleed rate > 6 SCFH	Devices are low bleed
	N	(2) located at a gas plant, continuous bleed	Not a gas plant
(e)	Y	Storage vessel with the potential for VOC emissions ≥ 6 TPY	PWTK-4
(f)	N	Group of all equipment in a process unit located at a gas plant	Not at a gas plant
(g)	N	Sweetening units located at gas processing plants	Not at a gas plant
(h)		Pneumatic pump:	
	N	(1) gas-driven diaphragm pump at a gas plant	Not at a gas plant
	N	(2) gas-driven diaphragm pump at a well site	None present
(i)	Y	Fugitive emissions components at a well site	Facility constructed 2021
(j)	N	Fugitive emissions components at a compressor station	Not at a compressor station

Subpart OOOOb, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After December 6, 2022. The following table outlines the applicability of the subpart.

NSPS Subpart OOOOb Applicability

§60.5365b section	Applicable? Y/N	Affected Facility	Comment
(a)	N	Well	Before 12/06/2022
(b)	N	Centrifugal compressor using wet seals	At a well site, not applicable
(c)	N	Reciprocating compressor	At a well site, not applicable
(d)		Pneumatic controller:	
	N	(1) not located at a plant, bleed rate > 6 SCFH	Devices are low bleed
	N	(2) located at a gas plant, continuous bleed	Not a gas plant
(e)	N	Tank batteries with the potential for VOC emissions \geq 6 TPY	Before 12/06/2022
(f)	N	Group of all equipment in a process unit located at a gas plant	Not at a gas plant
(g)	N	Sweetening units located at gas processing plants	Not at a gas plant
(h)		Pneumatic pump:	
	N	(1) gas-driven diaphragm pump at a gas plant	Not at a gas plant
	N	(2) gas-driven diaphragm pump at a well site	None present
(i)	N	Fugitive emissions components at a well site	Before 12/06/2022
(j)	N	Fugitive emissions components at a compressor station	Not at a compressor station

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

[Not 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 and has no affected sources. Therefore, this subpart does not apply.

Subpart HHH, affects Natural Gas Transmission and Storage Facilities that are major sources of HAP. Since this facility is a production facility and not a major source of HAP, this subpart does not apply.

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 \leq 500 brake HP;
 - ii) 4SLB stationary RICE with a site rating of $<$ 250 brake HP;
 - iii) Stationary RICE with a site rating of \leq 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 \leq 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 new if construction commenced after June 12, 2006. Based on emission calculations, this facility is an area source of HAP. There are no RICE at this facility, so this subpart does not apply.

Subpart DDDDD, 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 of HAPs, this subpart does not apply.

Subpart JJJJJ, 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. The heater at this facility meets the definition of a gas-fired boiler and is not subject to this subpart.

SECTION VIII. COMPLIANCE

TIER CLASSIFICATION AND PUBLIC REVIEW

This application has been determined to be **Tier I** based on the request for a new minor NSR construction permit for a minor facility. Information on all permit actions is available for review by the public in the Air Quality Section of the DEQ web page: www.deq.ok.gov.

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 owns the land used to accomplish the permitted purpose.

FEE PAID

A Minor Source Construction Permit application fee of \$2,000 was paid on July 11, 2023.

INSPECTION

An inspection is not needed for a construction permit.

SECTION IX. SUMMARY

The facility has demonstrated the ability to comply with all applicable air quality rules and regulations. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues concerning this facility. Issuance of the operating permit is recommended, contingent on public review.

**PERMIT TO CONSTRUCT
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS**

**BCE Mach, LLC
Brian 27-34 S1H**

Permit No. 2023-0577-C

The permittee is authorized to construct in conformity with the specifications submitted to Air Quality on July 11, 2023. The Evaluation Memorandum dated March 3, 2025, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Commencing construction and 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; unless otherwise stated, these limits are based on an averaging time of a 12-month rolling total for the annual limits:

ID#	Description	NO _x	CO	VOC
		TPY	TPY	TPY
HT-1	0.75-MMBTUH Heater Treater	0.32	0.27	0.02
OILTK-1	300-bbl Oil/Condensate Tank	-	-	11.32 ⁽¹⁾
OILTK-2	300-bbl Oil/Condensate Tank	-	-	
OILTK-3	300-bbl Oil/Condensate Tank	-	-	
OILTK-4	300-bbl Oil/Condensate Tank	-	-	
PWTK-1	300-bbl Produced Water Tank	-	-	1.68 ⁽¹⁾
PWTK-2	300-bbl Produced Water Tank	-	-	
PWTK-3	300-bbl Produced Water Tank	-	-	
PWTK-4	300-bbl Produced Water Tank	-	-	
LD-1	Oil/Condensate Loading	-	-	24.24
LD-2	Produced Water Loading	-	-	0.35
COMB	1.74-MMBTUH Combustor	1.05	2.10	0.01 ⁽²⁾

(1) Includes uncaptured and uncombusted emissions from the storage tanks.

(2) VOC emissions reflect pilot.

	OIL TK-1 through 4	PWTK-1 through 4
	TPY	TPY
Tank VOC Emitted at Tank, TPY	5.72	0.84
Tank VOC Emitted at COMB, TPY	5.60	0.84
Total Tank VOC Emissions	11.32	1.68

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. Throughput at the facility shall not exceed 8,400,000 gallons of condensate and 8,400,000 gallons of produced water (12-month rolling total). Emissions from the condensate and produced water tanks shall be routed to the combustor (COMB).
5. H₂S content of liquids stored at the facility shall not exceed 7.0 ppmw. The applicant shall conduct sampling to identify the H₂S concentration of the liquids stored. If the initial sample shows an H₂S concentration of 3.5 ppmw or less, then no more sampling is required for the liquids stored. Otherwise, the liquids stored must be sampled again, once each week for four weeks, and an average of the four samples calculated. If the average H₂S concentration is no more than 7.0 ppmw, compliance for the liquids stored has been demonstrated. Upon drilling a new well or fracturing an existing well, this sampling method must be repeated in the future for any liquids stored at the facility.
6. The permittee shall comply with NSPS, Subpart OOOO, 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:
 - a. § 60.5360 What is the purpose of this subpart?
 - b. § 60.5365 Am I subject to this subpart?
 - c. § 60.5370 When must I comply with this subpart?
 - d. § 60.5375 What standards apply to gas well affected facilities?
 - e. § 60.5380 What standards apply to centrifugal compressor affected facilities?
 - f. § 60.5385 What standards apply to reciprocating compressor affected facilities?
 - g. § 60.5390 What standards apply to pneumatic controller affected facilities?
 - h. § 60.5395 What standards apply to storage vessel affected facilities?
 - i. § 60.5400 What equipment leak standards apply to affected facilities at an onshore natural gas processing plant?
 - j. § 60.5401 What are the exceptions to the equipment leak standards for affected facilities at onshore natural gas processing plants?
 - k. § 60.5402 What are the alternative emission limitations for equipment leaks from onshore natural gas processing plants?
 - l. § 60.5405 What standards apply to sweetening units at onshore natural gas processing plants?
 - m. § 60.5406 What test methods and procedures must I use for my sweetening units affected facilities at onshore natural gas processing plants?
 - n. § 60.5407 What are the requirements for monitoring of emissions and operations from my sweetening unit affected facilities at onshore natural gas processing plants?
 - o. § 60.5408 What is an optional procedure for measuring hydrogen sulfide in acid gas-Tutwiler Procedure?
 - p. § 60.5410 How do I demonstrate initial compliance with the standards for my gas well affected facility, my centrifugal compressor affected facility, my reciprocating compressor affected facility, my pneumatic controller affected facility, my storage

- vessel affected facility, and my equipment leaks and sweetening unit affected facilities at onshore natural gas processing plants?
- q. § 60.5411 What additional requirements must I meet to determine initial compliance for my closed vent systems routing emissions from storage vessels or centrifugal compressor wet seal fluid degassing systems?
 - r. § 60.5412 What additional requirements must I meet for determining initial compliance with control devices used to comply with the emission standards for my storage vessel or centrifugal compressor affected facility?
 - s. § 60.5413 What are the performance testing procedures for control devices used to demonstrate compliance at my storage vessel or centrifugal compressor affected facility?
 - t. § 60.5415 How do I demonstrate continuous compliance with the standards for my gas well affected facility, my centrifugal compressor affected facility, my stationary reciprocating compressor affected facility, my pneumatic controller affected facility, my storage vessel affected facility, and my affected facilities at onshore natural gas processing plants?
 - u. § 60.5416 What are the initial and continuous cover and closed vent system inspection and monitoring requirements for my storage vessel or centrifugal compressor affected facility?
 - v. § 60.5417 What are the continuous control device monitoring requirements for my storage vessel or centrifugal compressor affected facility?
 - w. § 60.5420 What are my notification, reporting, and recordkeeping requirements?
 - x. § 60.5421 What are my additional recordkeeping requirements for my affected facility subject to VOC requirements for onshore natural gas processing plants?
 - y. § 60.5422 What are my additional reporting requirements for my affected facility subject to VOC requirements for onshore natural gas processing plants?
 - z. § 60.5423 What additional recordkeeping and reporting requirements apply to my sweetening unit affected facilities at onshore natural gas processing plants?
 - aa. § 60.5425 What parts of the General Provisions apply to me?
 - bb. § 60.5430 What definitions apply to this subpart?
7. The permittee shall comply with NSPS, Subpart OOOOa, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015, and on or Before December 6, 2022.
- a. § 60.5360a What is the purpose of this subpart?
 - b. § 60.5365a Am I subject to this subpart?
 - c. § 60.5370a When must I comply with this subpart?
 - d. § 60.5375a What GHG and VOC standards apply to well affected facilities?
 - e. § 60.5380a What GHG and VOC standards apply to centrifugal compressor affected facilities?
 - f. § 60.5385a What GHG and VOC standards apply to reciprocating compressor affected facilities?
 - g. § 60.5390a What GHG and VOC standards apply to pneumatic controller affected facilities?

- h. § 60.5393a What GHG and VOC standards apply to pneumatic pump affected facilities?
- i. § 60.5395a What VOC standards apply to storage vessel affected facilities?
- j. § 60.5397a What fugitive emissions GHG and VOC standards apply to the affected facility which is the collection of fugitive emissions components at a well site and the affected facility which is the collection of fugitive emissions components at a compressor station?
- k. § 60.5398a What are the alternative means of emission limitations for GHG and VOC from well completions, reciprocating compressors, the collection of fugitive emissions components at a well site and the collection of fugitive emissions components at a compressor station?
- l. § 60.5400a What equipment leak GHG and VOC standards apply to affected facilities at an onshore natural gas processing plant?
- m. § 60.5401a What are the exceptions to the equipment leak GHG and VOC standards for affected facilities at onshore natural gas processing plants?
- n. § 60.5402a What are the alternative means of emission limitations for GHG and VOC equipment leaks from onshore natural gas processing plants?
- o. § 60.5405a What standards apply to sweetening unit affected facilities at onshore natural gas processing plants?
- p. § 60.5406a What test methods and procedures must I use for my sweetening unit affected facilities at onshore natural gas processing plants?
- q. § 60.5407a What are the requirements for monitoring of emissions and operations from my sweetening unit affected facilities at onshore natural gas processing plants?
- r. § 60.5408a What is an optional procedure for measuring hydrogen sulfide in acid gas—Tutwiler Procedure?
- s. § 60.5410a How do I demonstrate initial compliance with the standards for my well, centrifugal compressor, reciprocating compressor, pneumatic controller, pneumatic pump, storage vessel, collection of fugitive emissions components at a well site, collection of fugitive emissions components at a compressor station, and equipment leaks and sweetening unit affected facilities at onshore natural gas processing plants?
- t. § 60.5411a What additional requirements must I meet to determine initial compliance for my covers and closed vent systems routing emissions from centrifugal compressor wet seal fluid degassing systems, reciprocating compressors, pneumatic pumps and storage vessels?
- u. § 60.5412a What additional requirements must I meet for determining initial compliance with control devices used to comply with the emission standards for my centrifugal compressor, and storage vessel affected facilities?
- v. § 60.5413a What are the performance testing procedures for control devices used to demonstrate compliance at my centrifugal compressor and storage vessel affected facilities?
- w. § 60.5415a How do I demonstrate continuous compliance with the standards for my well, centrifugal compressor, reciprocating compressor, pneumatic controller, pneumatic pump, storage vessel, collection of fugitive emissions components at a

well site, and collection of fugitive emissions components at a compressor station affected facilities, and affected facilities at onshore natural gas processing plants?

- x. § 60.5416a What are the initial and continuous cover and closed vent system inspection and monitoring requirements for my centrifugal compressor, reciprocating compressor, pneumatic pump and storage vessel affected facilities?
- y. § 60.5417a What are the continuous control device monitoring requirements for my centrifugal compressor and storage vessel affected facilities?
- z. § 60.5420a What are my notification, reporting, and recordkeeping requirements?
- aa. § 60.5421a What are my additional recordkeeping requirements for my affected facility subject to GHG and VOC requirements for onshore natural gas processing plants?
- bb. § 60.5422a What are my additional reporting requirements for my affected facility subject to GHG and VOC requirements for onshore natural gas processing plants?
- cc. § 60.5423a What additional recordkeeping and reporting requirements apply to my sweetening unit affected facilities at onshore natural gas processing plants?
- dd. § 60.5425a What parts of the General Provisions apply to me?
- ee. § 60.5430a What definitions apply to this subpart?
- ff. § 60.5432a How do I determine whether a well is a low pressure well using the low pressure well equation?

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 H₂S concentration for liquids stored, as required by Specific Condition 5.
- (c) Facility condensate throughput (monthly and 12-month rolling total).
- (d) Facility produced water throughput (monthly and 12-month rolling total).
- (e) Records required under NSPS 40 CFR Part 60, Subparts OOOO and OOOOa.

8. The permittee shall submit an application for an individual minor source operating permit within 180 days of commencement of operation of any emission source whose construction has been authorized by this permit.



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. 2023-0577-C

BCE Mach, LLC,

having complied with the requirements of the law, is hereby granted permission to construct the Brian 27-34 S1H wellhead located in Section 22, Township 1S, Range 4W, Stephens County, Oklahoma, and subject to the Standard Conditions dated February 13, 2020, and Specific Conditions, both attached.

In the absence of construction commencement, this permit shall expire 18 months from the date of issuance below, except as Authorized under Section B of the Standard Conditions.

DRAFT

Lee Warden, P.E.

Permits and Engineering Group Manager

Issuance Date

BCE Mach, LLC
Attn.: Mr. Justin Flanagan
14201 Wireless Way, Suite 300
Oklahoma City, OK 73134

Re: Construction Permit No. **2023-0577-C**
Brian 27-34 S1H
Facility ID No.: 23696
Section 22, Township 1S, Range 4W, Stephens County, Oklahoma

Dear Mr. Flanagan:

Enclosed is the permit authorizing construction 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 the permit writer at alex.johnson@deq.ok.gov, or at (405) 702-4201.

Sincerely,

DRAFT

Lee Warden, P.E.
Permits and Engineering Group Manager
AIR QUALITY DIVISION

Enclosures

March 3, 2025

Chickasaw Nation
Attn: Bill Anoatubby, Governor
P.O. Box 1548
Ada, OK 74821

Re: Permit Application No. 2023-0577-C
BCE Mach, LLC, Brian 27-34 S1H (FAC ID 23696)
Section 22, Township 1S, Range 4W, Stephens County, Oklahoma
Latitude: 34.44961°N and Longitude: 97.60086°W
Date Received: July 11, 2023

Dear Mr. Anoatubby:

The Oklahoma Department of Environmental Quality (ODEQ), Air Quality Division (AQD), has received the Tier I application referenced above. A Tier I application requires AQD to provide a 30-day public comment period on the draft Tier I permit on the ODEQ website. Since the proposed project falls within your Tribal jurisdiction, AQD is providing this direct notice. This letter notification is in addition to email notifications provided to tribal contacts on record.

Copies of draft permits and comment opportunities are provided to the public on the ODEQ website at the following location:

<https://www.deq.ok.gov/permits-for-public-review/>

If you prefer a copy of the draft permit, or direct notification by letter for any remaining public comment opportunities, if applicable, on the referenced permit action, please notify our Chief Engineer, Phillip Fielder, by e-mail at phillip.fielder@deq.ok.gov, or by letter at:

Department of Environmental Quality, Air Quality Division
Attn: Phillip Fielder, Chief Engineer
P.O. Box 1677
Oklahoma City, OK, 73101-1677

Thank you for your cooperation. If you have any questions, I can be contacted at (405) 702-4237, and Mr. Fielder may be reached at (405) 702-4185.

Sincerely,



Lee Warden, P.E.
Permits and Engineering Group Manager
AIR QUALITY DIVISION

**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
11-21-24

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	H₂CO	Formaldehyde
AVO	Audio, Visual, or Olfactory	H₂S	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
BTEX	Benzene, Toluene, Ethylbenzene, Xylene	HON	Hazardous Organic NESHAP
BTU	British thermal unit (Btu)	HP	Horsepower (hp)
		HR	Hour (hr)
C&E	Compliance and Enforcement	I&M	Inspection and Maintenance
CAA	Clean Air Act	IBR	Incorporation by Reference
CAM	Compliance Assurance Monitoring	ICE	Internal Combustion Engine
CAS	Chemical Abstract Service	LAER	Lowest Achievable Emission Rate
CAAA	Clean Air Act Amendments	LB	Pound(s) [Mass] (lb, lbs, lbm)
CC	Catalytic Converter	LB/HR	Pound(s) per Hour (lb/hr)
CCR	Continuous Catalyst Regeneration	LDAR	Leak Detection and Repair
CD	Consent Decree	LNG	Liquefied Natural Gas
CEM	Continuous Emission Monitor	LT	Long Ton(s) (metric)
CFC	Chlorofluorocarbon	LPE	Legally and Practicably Enforceable
CFR	Code of Federal Regulations		
CI	Compression Ignition	M	Thousand (Roman Numeral)
CNG	Compressed Natural Gas	MAAC	Maximum Acceptable Ambient Concentration
CO	Carbon Monoxide or Consent Order	MACT	Maximum Achievable Control Technology
COA	Capable of Accommodating	MM	Prefix used for Million (Thousand-Thousand)
COM	Continuous Opacity Monitor	MMBTU	Million British Thermal Units (MMBtu)
D	Day	MMBTUH	Million British Thermal Units per Hour (MMBtu/hr)
DEF	Diesel Exhaust Fluid	MMSCF	Million Standard Cubic Feet (MMscf)
DG	Demand Growth	MMSCFD	Million Standard Cubic Feet per Day
DSCF	Dry Standard (At Standard Conditions) Cubic Foot (Feet)	MSDS	Material Safety Data Sheet
EGU	Electric Generating Unit	MWC	Municipal Waste Combustor
EI	Emissions Inventory	MWe	Megawatt Electrical
EPA	Environmental Protection Agency	NA	Nonattainment
ESP	Electrostatic Precipitator	NAAQS	National Ambient Air Quality Standards
EUG	Emissions Unit Group	NAICS	North American Industry Classification System
EUSGU	Electric Utility Steam Generating Unit	NESHAP	National Emission Standards for Hazardous Air Pollutants
FCE	Full Compliance Evaluation	NH₃	Ammonia
FCCU	Fluid Catalytic Cracking Unit	NMHC	Non-methane Hydrocarbon
FEL	Federally Enforceable Limit(s)	NGL	Natural Gas Liquids
FIP	Federal Implementation Plan	NO₂	Nitrogen Dioxide
FR	Federal Register	NOx	Nitrogen Oxides
GACT	Generally Achievable Control Technology		
GAL	Gallon (gal)		

NOI	Notice of Intent	SI	Spark Ignition
NSCR	Non-Selective Catalytic Reduction	SIC	Standard Industrial Classification
NSPS	New Source Performance Standards	SIP	State Implementation Plan
NSR	New Source Review	SNCR	Selective Non-Catalytic Reduction
O₃	Ozone	SO₂	Sulfur Dioxide
O&G	Oil and Gas	SO_x	Sulfur Oxides
O&M	Operation and Maintenance	SOP	Standard Operating Procedure
O&NG	Oil and Natural Gas	SRU	Sulfur Recovery Unit
OAC	Oklahoma Administrative Code	T	Tons
OC	Oxidation Catalyst	TAC	Toxic Air Contaminant
OGI	Optical Gas Imaging	TEG	Triethylene Glycol
PAH	Polycyclic Aromatic Hydrocarbons	THC	Total Hydrocarbons
PAE	Projected Actual Emissions	TPY	Tons per Year
PAL	Plant-wide Applicability Limit	TRS	Total Reduced Sulfur
Pb	Lead	TSP	Total Suspended Particulates
PBR	Permit by Rule	TV	Title V of the Federal Clean Air 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	VFR	Vertical Fixed Roof
PFAS	Per- and Polyfluoroalkyl Substance	VMT	Vehicle Miles Traveled
PM	Particulate Matter	VOC	Volatile Organic Compound
PM_{2.5}	Particulate Matter with an Aerodynamic Diameter <= 2.5 Micrometers	VOL	Volatile Organic Liquid
PM₁₀	Particulate Matter with an Aerodynamic Diameter <= 10 Micrometers	VRT	Vapor Recovery Tower
POM	Particulate Organic Matter or Polycyclic Organic Matter	VRU	Vapor Recovery Unit
ppb	Parts per Billion	YR	Year
ppm	Parts per Million	2SLB	2-Stroke Lean Burn
ppmv	Parts per Million Volume	4SLB	4-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 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		