

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

**MEMORANDUM**

**September 16, 2024**

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

**THROUGH:** Rick Groshong, Sr. Environmental Manager, Compliance & Enforcement

**THROUGH:** Eric L. Milligan, P.E., Engineering Manager, Engineering Section

**THROUGH:** Alex Johnson, E.I., New Source Permits Section

**FROM:** Ryan Buntyn, P.E., New Source Permits Section

**SUBJECT:** Evaluation of Permit Application No. **2024-0368-TV4**  
OG&E Electric Services  
Horseshoe Lake Generating Station (Facility ID: 1208)  
Section 14, T12N, R1EIM, Oklahoma County, Oklahoma  
Latitude: 35.50696°, Longitude: -97.18474°  
NE 36<sup>th</sup> and Luther Road, Harrah, Oklahoma 73045

**SECTION I. INTRODUCTION**

OG&E has requested a TV renewal permit for Horseshoe Lake Generating Station in Harrah, Oklahoma (SIC Code 4911). This facility is currently operating under Permit No. 2018-1482-TV3 issued on November 25, 2019. The facility is a major source for PSD and an area source of HAPs.

The facility is an electricity generating station located in an attainment area. The electric generating units in the facility are also acid rain program affected units and Acid Rain Permit No. 2019-0778-ARR4, issued on December 3, 2019, will remain a valid permit for the facility.

**SECTION II. REQUESTED CHANGES**

OG&E submitted an engine replacement notification to DEQ on February 12, 2024.

On April 19, 2024, Enable Oklahoma Intrastate Transmission, LLC (EOIT) submitted an Air Quality Applicability Determination (AD) No. 2024-0255-AD for the Harrah Compressor Station. The emission sources at the Harrah Compressor Station were previously associated with the OG&E Horseshoe Lake Generating Station under Permits No. 2018-1482-TV3 and 2018-1482-C (M-1).

Previously, ODEQ determined that the Harrah Compressor Station and the Horseshoe Lake Generating Station were collocated sources and aggregation of all associated emission sources into a single Title V permit was appropriate. However, since issuance of the previous determination, material facts changed that affected the analysis. On August 7, 2024, ODEQ issued AD No. 2024-0255-AD determining that, due to these changes in material facts, these two facilities no longer meet the regulatory definition of a single stationary source and should no longer be collocated.

Equipment associated with the Harrah Compressor Station has been removed from this permit.

OG&E submitted another notification to DEQ on May 10, 2024. In this notification, OG&E informed DEQ that the two combustion turbines (Unit 9 and Unit 10) were in outage for repairs for the past several months. The turbines are identical in nature and emissions. When the turbines are returned to service, Unit 10 will be placed in Unit 9's cradle/package and then when Unit 9 is returned to service, it will be placed in Unit 10's cradle/package. The serial numbers listed in the Permit are the serial numbers for the packages and not the turbine engine serial numbers. Turbine engine serial # 191-205 (Unit 9) which was in package serial # 308771 (Unit 9's package) will get installed in package serial # 265046 (Unit 10's package) when it returns to service. Turbine engine serial # 191-154 (Unit 10) which was in package serial # 265046 (Unit 10's package) will be installed in package serial # 308771 (Unit 9's package) when it returns to service. To clear up confusion, turbine engine serial numbers have been added to the facility equipment tables. Finally, tanks 6-B-03 and 6-B-19 have been removed from the site.

### SECTION III. PERMIT HISTORY

The following table lists the permit history of this facility (from oldest to newest) of the permits issued since issuance of the last Title V renewal and Acid Rain permits.

Permits	Date Issued	Description
2018-1482-TVR3	11/25/2019	Third Title V Renewal Permit; removed out of service equipment from permit (2-B-02, 6-B-10 and 6-B-15).
2019-0778-AAR4	12/3/2019	Fourth Acid Rain Renewal.
2018-1482-C (M-1)	2/6/2024	Major construction permit to modernize the plant by retiring two (2) existing electric generating gas-fired boilers (Unit 6 and Unit 7) and constructing two (2) new gas-fired simple-cycle combustion turbines with dry low NOx burners, as replacement generating capacity. A new emergency diesel fire pump and a new emergency diesel generator will be installed to support the new turbines.
2024-0255-AD	8/7/2024	AD confirming that the two facilities (EOIT's Harrah Compressor Station and OG&E's Horseshoe Lake Generating Station) are separate, and each facility can be permitted as separate facilities

### SECTION IV. FACILITY DESCRIPTION

The facility currently consists of three (3) utility boiler units, two (2) simple-cycle combustion turbine generators (CTG), two (2) auxiliary boilers, two (2) emergency generators, one (1) fire pump, one (1) house heat boiler, one (1) natural gas-fired compressor engine, and various support operations such as varying sizes of tanks. The utility boilers were originally constructed in the 1950s and 1960s. These units have been designated Units 6, 7, and 8. Units 6 and 7 boilers use natural gas as a primary fuel and #2 or #6 fuel oil as a secondary fuel. The unit 8 boiler, two gas turbines, the house heat boiler, and the auxiliary boilers utilize natural gas as a primary fuel. The facility is also allowed to combust company-generated non-hazardous materials in Units 6 and 7

for energy recovery and waste reduction. These may include, but not limited to, used oil, used solvents, corrosion inhibitors, on-line cleaning solution, and antifreeze. Additionally, materials combusted shall not be classified RCRA “hazardous waste” according to 40 CFR Part 261 except as allowed by 40 CFR §266.108.

The primary pollutants from the Facility are NO<sub>x</sub>, CO, VOC, SO<sub>2</sub>, and PM. Units 9 and 10, gas turbines, use water injection for the control of NO<sub>x</sub>. The injected water acts as a heat sink which in turn lowers the combustion zone temperature, and therefore reduces thermal NO<sub>x</sub> formation. With water injection, there is an additional benefit of absorbing the latent heat of vaporization from the flame zone.

The primary purpose of the facility is the production of electricity through the combustion of natural gas. The facility has the equipment necessary to support the production of electricity, including auxiliary functions such as equipment maintenance, water production, and wastewater treatment. The turbines are capable of operating twenty-four (24) hours a day, seven (7) days a week, fifty-two (52) weeks a year.

## SECTION V. EQUIPMENT

Emission units (EUs) have been arranged into Emission Unit Groups (EUGs) in the following outline. The following lists contains EUs to be in place after the proposed project.

### EUG 1. Electric Generating Boilers

EU ID#	Make	Heat Capacity (MMBTUH)	Serial #	Installed Date
2-B-01, Unit 6	Babcock & Wilcox	1,740	RB-260	1958
2-B-02, Unit 7	Babcock & Wilcox Boiler	2,379	RB-381	1963
2-B-03, Unit 8	Combustion Engineering	4,150	20754	1968

### EUG 2. House Heat Boiler

EU ID#	Make/Model	Heat Capacity (MMBTUH)	Installed Date
2-B-05	Cleaver Brooks/4WI-700-500-150ST (460/3/60)	14.3	2015

### EUG 3. Electric Generating Gas Turbines and Boiler

EU ID#	Make/Model	Heat Capacity (MMBTUH)	Turbine Engine Serial #	Package Serial #	Installed Date
3-B-01, Unit 9	GE/LM6000PC Sprint	550	191-154	308771	2000
3-B-02, Unit 10	GE/LM6000PC Sprint	550	191-205	265046	2000

### EUG 4. Auxiliary Boilers

EU ID#	Make/Model	Heat Capacity (MMBTUH)	Serial #	Installed Date
4-B-01	Precision Boiler/ FPH62-100-P4200N	3.4	B000020B	2000
4-B-02	Precision Boiler/ FPH62-100-P4200N	3.4	B000020	2000

**EUG 5. Grandfathered Emergency Diesel Generator - Removed****EUG 6a. Storage Tanks**

Point and EU ID#	Capacity (gallons)	Material Stored	Installed Date
6-B-11	1,058	Gasoline	1992
6-B-12	1,058	Diesel Fuel	1992
6-B-13	300	Diesel Fuel	1992
6-B-20	3,600	Diesel Fuel	2008

**EUG 7. Emergency Equipment**

Point and EU ID#	Make/Model	HP	Installed Date
7-B-01	Cummins CFP59-F50	188	2008
7-B-02	Generac SG040	62	2010
7-B-03	Caterpillar C32 ATAAC	1,000 kW	2008

**SECTION VI. EMISSIONS****Emissions of Criteria Pollutants**

Emission estimates for electric generating units (Units 6, 7, and 8) reflect continuous operation based on two scenarios: fired on natural gas and fuel oil. Only Units 6 and 7 are capable of burning fuel oil. Fuel oil is burned in either Unit 6 or Unit 7 one unit at a time. Maximum potential emissions from Units 6 and 7 are estimated based on firing fuel oil and natural gas and using the worst case of the two fuels for the facility total emissions. Emissions from natural gas combustion are calculated based on AP-42 (7/98), Tables 1.4-1 and 1.4-2. Emissions, except for SO<sub>2</sub>, from fuel oil combustion are calculated based on AP-42 (9/98), Tables 1.3-1 and 1.3-3 and maximum fuel oil flow.

**Emissions from Electric Generating Boiler Units Fired with Natural Gas**

EU ID#	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		PM <sub>10</sub>	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Unit 6	487.2	2,134	146.2	640.2	9.57	41.92	1.04	4.57	13.22	57.92
Unit 7	666.12	2,917.61	199.84	875.28	13.08	57.31	1.13	6.25	18.08	79.19
<b>Subtotals</b>	<b>1,153.32</b>	<b>5,051.61</b>	<b>346.04</b>	<b>1,515.48</b>	<b>22.65</b>	<b>99.23</b>	<b>2.17</b>	<b>10.82</b>	<b>31.30</b>	<b>137.11</b>

**Emissions from Electric Generating Boiler Units Fired with Heavy Fuel Oil**

EU ID#	NO <sub>x</sub>		CO		VOC		PM <sub>10</sub>	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Unit 6	510.6	2,236.5	54.3	237.9	8.26	36.2	166.61	729.75
Unit 7	553.0	2,422.2	58.8	257.7	8.94	39.2	180.44	790.34
<b>Subtotals</b>	<b>1,063.60</b>	<b>4,658.70</b>	<b>113.10</b>	<b>495.60</b>	<b>17.20</b>	<b>75.40</b>	<b>347.05</b>	<b>1,520.09</b>

For SO<sub>2</sub> emissions, there are two scenarios. Scenario 1 is only Unit 6 fired on fuel oil; scenario 2 is only Unit 7 fired on fuel oil.

OG&E conducted ISCST3/PRIME modeling to back calculate SO<sub>2</sub> emissions for the 24-hr average standard (1971 primary NAAQS). The 24-hr average is no longer in effect. However, OG&E chose to keep the same emission levels for these units. OG&E will monitor fuel sulfur content as per 40 CFR Part 75 Appendix D and fuel oil flow to assure compliance with the emission limits.

EU ID#	SO <sub>2</sub>	
	lb/hr	TPY
<b>Scenario 1: Only Unit 6 Fired on Fuel Oil</b>		
The rest of the facility except for Unit 6	35.17	30.32
Unit 6	679.00	2,974.02
<b>Facility Totals</b>	<b>714.17</b>	<b>3,004.34</b>
<b>Scenario 2: Only Unit 7 Fired on Fuel Oil</b>		
The rest of the facility except for Unit 7	35.08	28.64
Unit 7	753.92	3427.18
<b>Facility Totals</b>	<b>789.00</b>	<b>3,455.82</b>

#### Units 6 & 7 Stack Parameters

Stack Parameters	Unit 6	Unit 7
Stack Height (M)	53.96	57.62
Stack Inside Diameter (M)	4.73	4.73
Stack Exit Velocity (M/S)	9.148	12.253
Stack Gas Exit Temp. (K)	421.9	419.7
Ambient Air Temp. (K)	293	293
Building Height (M)	39.6	39.6
Min Horiz. BLDG DIM (M)	12.2	12.2
Max Horiz. BLDG DIM (M)	12.2	12.2
Emission Rates (G/S)	185.33	238.8

Units 8, 9, and 10 are required to operate under an annual emission cap by Permit No. 97-137-C (M-3) PSD issued on November 23, 2004. For the gas turbines (Units 9 and 10), emission estimates of NO<sub>x</sub>, CO, and PM<sub>10</sub> are based on manufacturer's data and emission estimates of VOC and SO<sub>2</sub> based on AP-42 (4/00), Table 3.1-2a. The calculations are based on the total of 4,000 operating hours per year for turbines. The emissions from the natural gas-fired auxiliary boilers (4-B-01 and 4-B-02) are based on AP-42 (7/98), Tables 1.4-1 and 1.4-2, and on operation of 1,000 hours per year for each boiler.

#### Emissions from Electric Generating Gas Turbines and Unit 8 (These Three Units Operate Under An Annual Emission Cap)

EU ID#	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		PM <sub>10</sub>	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Unit 8	2,215	-	332.6	-	21.78	-	2.38	-	30.1	-
Unit 9	50.0		77.0		5.5		5.5		3.85	
Unit 10	50.0		77.0		5.5		5.5		3.85	
<b>Subtotals</b>	<b>2,315</b>	<b>1,032.86</b>	<b>486.6</b>	<b>292.52</b>	<b>32.78</b>	<b>29.24</b>	<b>13.38</b>	<b>2.45</b>	<b>37.8</b>	<b>28.67</b>

The emissions from the natural gas fired house heat boiler (2-B-05) are based on Manufacturer data. Emissions in tons per year are based on 100% load and 8,760 hours except for CO which is higher at 50% load, so that limit is shown. The auxiliary boilers emissions are estimated based on AP-42 (9/98), Table 1.3-1 and 1.3-3, and on operation of 1,000 hours per year each.

#### Emissions from House Heater Boiler

EU ID#	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		PM <sub>10</sub>	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
2-B-05	0.75	2.19	1.36	3.469	0.09	0.25	0.02	0.063	0.22	0.626

#### Emissions from Auxiliary Boilers (1,000 hours/year)

EU ID#	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		PM <sub>10</sub>	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
4-B-01	0.34	0.17	0.29	0.14	0.019	0.01	0.002	0.001	0.026	0.013
4-B-02	0.34	0.17	0.29	0.14	0.019	0.01	0.002	0.001	0.026	0.013
<b>Subtotals</b>	<b>0.68</b>	<b>0.34</b>	<b>0.58</b>	<b>0.28</b>	<b>0.038</b>	<b>0.02</b>	<b>0.004</b>	<b>0.002</b>	<b>0.052</b>	<b>0.026</b>

Annual breathing and working losses were determined using AP-42 (3/2020), Section 7.1.3.1. Flashing emissions from condensate tanks were calculated using the Vasquez-Beggs Equation method.

#### VOC Emissions from the Fuel Oil Tanks

EU ID#	Capacity (gallon)	Material Stored	lb/hr	TPY
<b>Subtotals</b>	---	---	<b>0.00</b>	<b>0.48</b>

Emissions from the diesel generators are estimated based on operating 500 hours per year and NSPS standards.

#### Emissions from Emergency Equipment (500 hrs/year)

EU ID#	NO <sub>x</sub> + VOC		CO		PM <sub>10</sub>		SO <sub>2</sub>	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
7-B-01 <sup>a</sup>	3.23	0.81	1.08	0.27	0.17	0.04	0.39	0.10
7-B-02 <sup>b</sup>	1.37	0.34	51.14	12.79	-	-	-	-
7-B-03 <sup>c</sup>	15.99	4.00	0.63	0.16	0.44	0.11	-	-
<b>Subtotals</b>	<b>20.59</b>	<b>5.15</b>	<b>52.85</b>	<b>13.22</b>	<b>0.50</b>	<b>0.13</b>	<b>0.39</b>	<b>0.10</b>

<sup>a</sup> Emissions are based on NSPS Subpart IIII standards listed in Table 4 of the rule: 7.8 g/hp-hr NMHC+NO<sub>x</sub>, 2.6 g/hp-hr CO, and 0.4 g/hp-hr PM. SO<sub>2</sub> emissions are based on emission factor of 2.05 E-03 lb/hp-hr from AP-42 (10/96), Table 3.3-1 which is conservative based on the NSPS Subpart IIII fuel sulfur limit of 15 ppmw.

<sup>b</sup> Emissions are based on NSPS Subpart JJJJ standards listed in Table 1 of the rule: 10 g/hp-hr NO<sub>x</sub>+HC and 387 g/hp-hr CO. SO<sub>2</sub> emissions are based on emission factor of 5.88 E-04 lb/MMBTU from AP-42 (10/96), Table 3.3-1.

<sup>c</sup> Emissions are based on NSPS Subpart IIII standards listed in Table 1 of the rule: 6.4 g/kW-hr NO<sub>x</sub>+HC, 3.5 g/kW-hr CO, and 0.15 g/hp-hr PM. SO<sub>2</sub> emissions are based on emission factor of 8.09E-03S<sub>1</sub> lb/hp-hr from AP-42 (10/96), Table 3.4-1, where S<sub>1</sub> equals 15 ppmw (0.0015%) as required by 40 CFR Part 1090 for nonroad diesel.

**Total Emissions**

Source	NO <sub>x</sub>		CO		VOC		PM <sub>10</sub>	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Electric Generating Boilers (Units 6&7)	1,153.32	5,051.61	346.04	1,515.48	22.65	99.23	347.05	1,520.09
Gas Turbines and Unit 8	2,315.00	1,032.86	486.60	292.52	32.78	29.24	37.80	28.67
House Heat Boiler	0.75	2.19	1.36	3.47	0.09	0.25	0.22	0.63
Auxiliary Boilers	0.68	0.34	0.58	0.28	0.04	0.02	0.05	0.03
Storage Tanks	-	-	-	-	0.01	0.48	-	-
Emergency Generators	20.59	5.15	52.85	13.22	-	-	0.25	0.06
<b>Total Emissions</b>	<b>3,490.34</b>	<b>6,092.15</b>	<b>887.43</b>	<b>1,824.97</b>	<b>55.56</b>	<b>129.22</b>	<b>385.37</b>	<b>1,549.47</b>
<b>Previous Emissions from 2018-1482-TV3</b>	<b>3,495.23</b>	<b>6,113.56</b>	<b>888.11</b>	<b>1,827.97</b>	<b>56.48</b>	<b>164.61</b>	<b>385.37</b>	<b>1,549.47</b>
<b>Changes</b>	<b>-4.89</b>	<b>-21.41</b>	<b>-0.68</b>	<b>-3.00</b>	<b>-0.92</b>	<b>-35.35</b>	<b>0.00</b>	<b>0.00</b>

**Emissions of Hazardous Air Pollutants (HAP)**

HAP emissions are from electric generating boiler (Unit 6, 7, and 8), gas turbines (Units 9 and 10). HAP emissions from other emission units are insignificant. HAP emissions from boiler are calculated based on the emission factors from AP-42 (7/98), Table 1.4-3. However, based on the EPRI (Electric Power Research Institute) Emission Factors Handbook (2002), OG&E has used a corrected emission factor of 0.42 lbs/TBTU (trillion BTU) for hexane emissions. HAP emissions for Units 9 and 10 are based on AP-42 (4/00), Table 3.1-3 assuming all operations are uncontrolled. For the gas turbines (Units 9 and 10) calculations are based on the total of 4,000 operating hours per year.

**HAP Emissions from the Electric Generating Boiler and Turbines**

Pollutant	Boiler (Unit 6, 7, & 8)			Gas Turbines (Unit 9 & 10)		
	Emission Factor lb/MMBTU	Emissions		Emission Factor lb/MMBTU	Emissions	
		lb/hr	TPY		lb/hr	TPY
Benzene	2.06E-06	0.0085	0.037	1.2E-05	0.0132	0.026
Hexane	0.42 lb/TBTU	0.0017	0.0076	-	-	-
Formaldehyde	7.35E-05	0.305	1.336	7.1E-04	0.781	1.562
Toluene	-	-	-	1.3E-04	0.143	0.286

Total formaldehyde emissions are 6.21 TPY and the other HAP emissions are insignificant. The facility is a minor source for HAPs.

**SECTION VII. INSIGNIFICANT ACTIVITIES**

The insignificant activities identified and justified in the application are duplicated below. Any activity to which a state or federal applicable requirement applies is not insignificant even if it is included on the ISA list. Appropriate recordkeeping of activities indicated below with a “\*” is specified in the Specific Conditions.

1. Space heaters, boilers, process heaters, and emergency flares less than or equal to 5 MMBTUH heat input (commercial natural gas).

2. \* Storage tanks with less than or equal to 10,000 gallons capacity that store volatile organic liquids with a true vapor pressure less than or equal to 1.0 psia at maximum storage temperature. There are three (3) diesel tanks located on-site.
3. Cold degreasing operations utilizing solvents that are denser than air. Cold degreasing occurs in the maintenance shop and the turbine floor.
4. Welding and soldering operations utilizing less than 100 pounds of solder and 53 tons per year of electrodes. Some operations are conducted at the facility. Welding and soldering are conducted as part of plant maintenance operations; since maintenance is a “Trivial Activity”, no recordkeeping will be required.
5. Hazardous waste and hazardous materials drum staging areas. The facility maintains a drum storage area.
6. Sanitary sewage collection and treatment facilities other than incinerators and Publicly Owned Treatment Works (POTW). Stacks or vents for sanitary sewer plumbing traps are also included. This facility contains a tile field and lift stations associated with sanitary sewage collection and treatment.
7. Exhaust systems for chemical, paint, and/or solvent storage rooms or cabinets, including hazardous waste satellite (accumulation) areas. There is a chemical laboratory at the site.
8. Hand wiping and spraying of solvents from containers with less than 1 liter capacity used for spot cleaning and/or degreasing in ozone attainment areas. The facility performs small amounts of hand wiping and spraying of solvents.
9. \* Activities that have the potential to emit no more than 5 TPY (actual) of any criteria pollutant. The one condensate truck loading facility and four fuel oil tanks on-site fall under this category.

## **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) [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 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
- 2 TPY of any one hazardous air pollutant (HAP) or 5 TPY of multiple HAPs or 20% of any threshold less than 10 TPY for a 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 permit application, the previous Title V operating permit, 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 (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 specifies maximum allowable emissions of particulate matter (PM). AP-42 (7/98), Table 1.4-2, lists the total PM emissions for natural gas fired boilers to be 7.6 lb/10<sup>6</sup> scf which is equivalent to 0.0076 lb/MMBTU. The fuel-burning equipment in this facility is rated from 3.4 to 4,150 MMBTU/hr. According to 252:100-19-4, the most stringent limit for fuel-burning equipment is 0.1 lb/MMBTU. The use of natural gas for fuel-burning equipment will be in compliance with Subchapter 19.

EU ID	Equipment	Heat Capacity MMBTUH	Appendix C Allowable lb/MMBTU	Estimated Emissions lb/MMBTU
2-B-01, Unit 6	Babcock & Wilcox	1,740	0.174	0.144
2-B-02, Unit 7	Babcock & Wilcox Boiler	2,379	0.159	0.144
2-B-03, Unit 8	Combustion Engineering	4,150	0.13	0.007

EU ID	Equipment	Heat Capacity MMBTUH	Appendix C Allowable lb/MMBTU	Estimated Emissions lb/MMBTU
2-B-05	Cleaver Brooks/4WI-700-500-150ST (460/3/60)	14.30	0.55	0.015
3-B-01, Unit 9	GE/LM6000PC Sprint	550	0.23	0.007
3-B-02, Unit 10	GE/LM6000PC Sprint	550	0.23	0.007
4-B-01	Precision Boiler/ FPH62-100-P4200N	3.40	0.60	0.0075
4-B-02	Precision Boiler/ FPH62-100-P4200N	3.40	0.60	0.0075
7-B-01	Cummins CFP59-F50	1.28	0.6	0.126
7-B-02	Generac SG040	0.584	0.6	0.019
7-B-03	Caterpillar C32 ATAAC	9.97	0.6	0.0063

## OAC 252:100-25 (Visible Emissions and Particulates)

[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 very little possibility of exceeding the opacity standards. When burning fuel oil and used oil, there may be visible emissions. The permit requires visible emission observations for the Unit 6 (2-B-01), and Unit 7 (2-B-02) when they are fired with fuel oil for more than 24 continuous hours.

Continuous monitoring of opacity (COM) is required for fluid bed catalytic cracking unit catalyst regenerators at petroleum refineries and fossil fuel-fired steam generators in accordance with 40 CFR Part 51, Appendix P and any fuel-burning equipment with a design heat input value of 250 MMBTUH or more, that does not burn gaseous fuel exclusively, and that was not in being on or before July 1, 1972, or that is modified after July 1, 1972. Since the boilers were installed before July 1, 1972, they are exempt from the opacity monitor requirements.

## 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 3, 252:100-31-16. Requirements for existing fossil fuel-fired steam generators. Any fossil fuel-fired steam generator unit that was in being on or before July 1, 1972, shall comply with the following requirements:

(1) Emission monitoring. The owner or operator shall install, calibrate, maintain, and operate a continuous SO<sub>2</sub> emissions monitoring system for any fossil fuel-fired steam generator that utilizes an air pollution abatement operation to reduce the emissions of sulfur oxides. Continuous monitoring of oxygen or carbon dioxide is required if it is necessary to convert SO<sub>2</sub> monitoring results.

(2) Installation, calibration, maintenance, and operation of emission monitoring systems. Required emission monitoring systems shall be installed, calibrated, maintained, and operated in accordance with 40 CFR Part 60, Appendix B, and 40 CFR Part 51, Appendix P.

These requirements apply to Units 6 and 7, which are equipped with CEMS in accordance with requirements of 40 CFR Part 75.

Part 5 limits sulfur dioxide emissions from new equipment (constructed after July 1, 1972). For gaseous fuels the limit is 0.2 lb/MMBTU heat input. For liquid fuels the limit is 0.8 lb/MMBTU. Units 6 and 7 use No. 2 or No. 6 fuel oil and commercial natural gas, but they were constructed before July 1, 1972, and are not subject to this part. For the diesel fueled fire pump engine, AP-42 (10/96), Table 3.3-1 lists SO<sub>2</sub> emission factor of 0.29 lb/MMBTU. For the 1,000 KW emergency generator, AP-42 (10/96), Table 3.4-1 lists SO<sub>2</sub> Emission factor of 1.01S<sub>1</sub> lb/MMBTU, where S<sub>1</sub> is 15 ppmw (0.0015%) for nonroad diesel fuel. Gas turbines 9 & 10 and auxiliary boilers were constructed after July 1, 1972, and therefore are subject to the limitations. For commercial natural gas combustion, AP-42 (7/98), Chapter 1.4, Table 1.4-2 gives an emission factor of 0.6 pound of SO<sub>2</sub> per million cubic feet which equates to approximately 0.0006 lb/MMBTU which is in compliance with this subchapter. The permit will require the use of commercial natural gas for the turbines and auxiliary boilers.

Any fuel-burning equipment with design heat input values of 250 MMBTU/hr or more shall install, calibrate, maintain, and operate a continuous SO<sub>2</sub> emissions monitoring system, except where: (I) gaseous fuel containing less than 0.1% by weight sulfur (0.29 gr/scf or approximately 500 ppmv at standard conditions on a dry basis) is the only fuel burned; or (II) a solid or liquid fuel sampling and analysis method is used to determine SO<sub>2</sub> emission compliance. The turbines have heat inputs greater than 250 MMBTUH but burn only gaseous fuel with a sulfur content less than 0.29 gr/scf.

#### OAC 252:100-33 (Nitrogen Oxides)

[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<sub>x</sub> per MMBTU. Units 6, 7, and 8 are existing unit that has not been altered, replaced, or rebuilt. This subchapter applies to the gas turbines in EUG 3. The manufacturers of the turbines guarantees a NO<sub>x</sub> emission rate of 0.1 lb/MMBTU, which is in compliance with this subchapter.

#### 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 to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. Most of the storage tanks at the facility are exempt from this part since they were constructed prior to the new source applicability date and store materials with a low vapor pressure. Gasoline tank (6-B-11) is subject to this requirement and is submerged filled.

Part 3 requires loading facilities with a throughput equal to or less than 40,000 gallons per day to be equipped with a system for submerged filling of tank trucks or trailers if the capacity of the vehicle is greater than 200 gallons. The facility has gasoline loading but it is only used to fill vehicles with tanks less than 200 gallons.

Part 5 limits the VOC content of coatings used in coating lines or operations. Any painting operation will involve maintenance coatings of buildings and equipment and emit less than 100 pounds per day of VOCs and so is exempt.

Part 7 requires fuel-burning and refuse-burning equipment to be cleaned, operated, and maintained so as to minimize VOC emissions. Based on manufacturer's data and good engineering practice, the equipment must not be overloaded and temperature and available air must be sufficient to

provide essentially complete combustion. The equipment at this location is subject to this requirement.

Part 7 requires effluent water separators which receive water containing more than 200 gallons per day of any VOC to be equipped vapor control devices. There is an oil/water effluent separator at this location but it does not receive more than 200 gallons per day of any VOC.

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

Each emission unit needs to be evaluated for periodic testing in accordance with the Periodic Testing Standardization guidance issued December 1, 2011, on a pollutant by pollutant basis. The frequency of the periodic testing requirement is based on the quantity of the pollutant permitted. Periodic testing requirements are not required for an emission unit that is subject to an applicable requirement that already requires periodic testing, continuous emission monitoring (CEM), or predictive emission monitoring (PEMS). For this facility, NO<sub>x</sub> and CO from Units 9 and 10 are the only pollutants which are potentially subject to the periodic testing requirements. All other pollutants emitted from this facility are less than 40 TPY per unit.

#### Periodic Testing Review

EU	Pollutant	TPY	Current Monitoring	Periodic Testing
Units 8, 9, & 10	NO <sub>x</sub>	1,032.86	Part 60 CEMS	NO
	CO	292.52*	None	Yes, test each unit at least every other year since each unit's potential to emit is over 250 TPY

\*Units 8, 9, and 10 are limited to combined annual limits. These emissions are potential emissions a single unit could produce if it operates 8,760 hours per year for each unit.

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

OAC 252:100-7	Permits for Minor Facilities	not in source category
OAC 252:100-11	Alternative Emissions Reduction	not requested
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 252:100-35	Carbon Monoxide	not in source category
OAC 252:100-39	Nonattainment Areas	not in area category
OAC 252:100-47	Landfills	not in source category

**SECTION IX.****FEDERAL REGULATIONS**

PSD, 40 CFR Part 52

[Not Applicable]

Potential emissions of NO<sub>x</sub>, CO, VOC, PM<sub>10</sub> and SO<sub>2</sub> are greater than the major source thresholds of 100 TPY for this source category. Any future emission increases must be evaluated for PSD if they exceed a significance level (40 TPY NO<sub>x</sub>, 100 TPY CO, 40 TPY VOC, 40 TPY SO<sub>2</sub>, and 15 TPY PM<sub>10</sub>).

NSPS, 40 CFR Part 60

[Subparts Dc, GG, IIII, and JJJJ Applicable]

Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced after August 17, 1971. This subpart regulates steam generating units with more than 250 MMBTU/hr heat input rate. The electric generating boilers at the facility were constructed before 1971, have not been modified or reconstructed, and therefore are exempt from the requirements of subpart D.

Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced after September 18, 1978. This subpart regulates electric generating units capable of combusting more than 250 MMBTU/hr heat input of fossil fuel. The electric generating boilers at the facility were constructed before 1978, have not been modified or reconstructed, and therefore are exempt from the requirements of Subpart Da.

Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. This subpart regulates steam generating unit that commenced construction, modification, or reconstruction after June 19, 1984, and that have a heat input capacity from fuels combusted in the steam generating unit of greater than 100 MMBTU/hr. The electric generating boilers at the facility were constructed before 1984, have not been modified or reconstructed, are rated greater than 250 MMBTUH, and therefore are exempt from the requirements of Subpart Db.

Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units regulates 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 100 MMBTU per hour or less, but greater than or equal to 10 MMBTU per hour. House heat boiler (2-B-05) is rated at 14.3 MMBTU/hr and was manufactured in 2015, therefore, is subject to Subpart Dc. It is required to keep records of fuel used per §60.48c(g).

Subpart K, Standards of Performance for Storage Vessels for Petroleum Liquid regulates petroleum liquids storage vessels constructed after June 11, 1973, and before May 19, 1978, with capacities above 40,000 gallons. All the tanks except one, fuel tank (6-B-02), were either installed before the effective date of the regulation or their capacities are less than 40,000 gallons. Since the No. 2 through No. 6 fuel oil is not considered a petroleum liquid by this subpart, fuel tank (6-B-02) is not subject to this subpart.

Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for which construction, reconstruction or modification commenced after May 18, 1978, and prior to July 23, 1984. All tanks at this site are exempt from Subpart Ka since they were installed before the effective date of the regulation and have not been modified or reconstructed.

Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (including petroleum liquid storage vessels). Kb regulates hydrocarbon tanks with capacities larger than 75 M<sup>3</sup> (19,813 gallons) and built after July 23, 1984. All tanks at this site are exempt from Subpart Kb since they were installed before the effective date of the regulation and have not been modified or reconstructed or their capacities are less than 19,813 gallons.

Subpart GG, Standards of Performance for Stationary Gas Turbines. This subpart affects combustion turbines which commenced construction, reconstruction, or modification after October 3, 1977, and which have a heat input rating of 10 MMBTUH or more. Gas turbines Units 9 and 10 have a heat input rating of 550 MMBTU/hr and are subject to this subpart.

The standard for nitrogen oxides shall be determined by the following equation:

$$STD = 0.0075 \times 14.4/Y + F$$

Where STD is allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen and on a dry basis, Y is manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility, and F is NO<sub>x</sub> emission allowance for fuel-bound nitrogen.

The heat rate of the turbines is 8,761 Btu/kwh or 9.2435 kjwh (from actual performance test performed on July 13, 2000, for Unit 9 and June 9, 2000, for Unit 10). OG&E's natural gas analysis contained in the original construction application shows a nitrogen mole % content of 1.667%. This translates into a percent weight content of 2.88. Based on the table found in 40 CFR §60.332(a)(3) the F factor is 0.005. STD is calculated to be 167 ppmv @ 15% O<sub>2</sub>.

Monitoring fuel for nitrogen content is not required if the owner or operator does not claim an allowance for fuel bound nitrogen per 60.334(h)(2). The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted if the gaseous fuel is demonstrated to meet the definition of "natural gas" using either the gas quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract, or using representative fuel sampling data. The maximum total sulfur content of "natural gas" is 20 grains/100 SCF (680 ppmw or 338 ppmv) or less.

Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 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. For owners and operators of fire pump engines, this subpart is applicable to those manufactured as a certified National Fire Protection Association after July 1, 2006. The Cummins CFP59-F50 fire pump engine and the Caterpillar C32 engines are subject to this subpart and shall comply with all applicable requirements and the emissions limits listed below. The engines must also comply with the fuel standards of §1090.305 for nonroad diesel fuel which limits the sulfur content to 15 ppmw.

**From Table 4 to Subpart IIII - Emission Standards for Stationary Fire Pump Engines**

<b>Fire Pump Engine Power</b>	<b>Model Year</b>	<b>NMHC+NO<sub>x</sub> g/hp-hr</b>	<b>CO g/hp-hr</b>	<b>PM g/hp-hr</b>
≥175-hp <300-hp	2008 & earlier	7.8	2.6	0.4

**From Table 3 to Appendix I – Tier 2 Emission Standards**

<b>Rated Power</b>	<b>Model Year</b>	<b>NMHC+NO<sub>x</sub> g/kW-hr</b>	<b>CO g/kW-hr</b>	<b>PM g/kW-hr</b>
>560-kW	2006 +	6.4	3.5	0.20

Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI-ICE). This subpart promulgates emission standards for all new SI engines ordered after June 12, 2006 and all SI engines modified or reconstructed after June 12, 2006, regardless of size. The specific emission standards (either in g/hp-hr or as a concentration limit) vary based on engine class, engine power rating, lean-burn or rich-burn, fuel type, duty (emergency or non-emergency), and 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). The emergency generator is subject to this subpart and shall comply with all applicable requirements. Per 60.4243(a)(1), if the operator operate and maintain the certified generator and control device according to the manufacturer's emission-related written instructions, the operator must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. The Generac SG040 generator is subject and certified to the emission standards listed below.

**From Table 1 to Subpart JJJJ - Emission Standards for Stationary Emergency Engines**

<b>Fire Pump Engine Power</b>	<b>Model Year</b>	<b>NO<sub>x</sub> g/hp-hr</b>	<b>CO g/hp-hr</b>	<b>VOC g/hp-hr</b>
>25-hp <130-hp	2009 +	10	387	N/A

Subpart KKKK, Standards of Performance for Stationary Combustion Turbines, establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines with a heat input at peak load equal to or greater than 10 MMBtu, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005. All turbines on-site were constructed before February 18, 2005, and have not been modified or reconstructed.

Subpart TTTT, Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units. This subpart establishes emission standards and compliance schedules for the control of greenhouse gas (GHG) emissions from a steam generating unit, IGCC, or a stationary combustion turbine that commences construction after January 8, 2014, or commences modification or reconstruction after June 18, 2014, but on or before May 23, 2023. The electric generating boilers at the facility were constructed before 1971, have not been modified or reconstructed, and therefore are not subject to the requirements of 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 affects 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

[Subparts ZZZZ & CCCCCC Applicable]

Subpart YYYY, Stationary Combustion Turbines. This subpart affects stationary combustion turbines that are located at major source of HAPs. However, there are no applicable emission/operating standards, reporting requirements, or recordkeeping requirements set for existing stationary turbines (constructed/reconstructed on or before March 5, 2004). Stationary turbines at this facility were constructed before March 5, 2004 and emission calculations have shown the facility to be a minor source of HAPs.

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 new or reconstructed RICE located at an area source 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). No further requirements apply for these engines. The Cummins CFP59-F50 fire pump engine, the Generac SG040 generator, and the Caterpillar C32 engine are subject to this subpart and shall comply with all applicable requirements of NSPS Subparts IIII and JJJJ respectively.

Subpart DDDDD, Industrial, Commercial and Institutional Boilers and Process Heaters. This facility is not subject to this subpart because it is not a major HAP source. In addition, electric utility steam generating units are exempt from this subpart per §63.7491(c).

Subpart UUUUU, Coal- and Oil-Fired Electric Utility Steam Generating Units (EGUs). EGUs combusting more than 25 MW of coal or oil but that did not fire coal or oil for more than 10.0 percent of the average annual heat input during any 3 calendar years or for more than 15.0 percent of the annual heat input during any calendar year are not subject to this subpart. Units 6 and 7 burn both natural gas and oil, but they have an oil capacity factor less than 10% and are not subject to this subpart.

Subpart CCCCCC, Gasoline Dispensing Facilities (GDF). The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank. The gasoline tank at this facility has a monthly throughput of less than 10,000 gallons of gasoline, and shall comply with the requirements in §63.11116.

Subpart JJJJJJ, Industrial, Commercial, and Institutional Boilers Area Sources. This subpart affects an industrial, commercial, or institutional boilers as defined in §63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in §63.2, except as specified in §63.11195. §63.11195 exempts gas fired boilers and electric utility steam generating unit (EGU) covered by Subpart UUUUU of this part. The house heat boiler is capable of burning natural gas only. The permit limits this emission unit to burning natural gas only. Therefore, no emission units at this facility are affected by this subpart.

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, which 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
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant greater than major source thresholds

None of the emission units use a control device to achieve compliance with an applicable emission limit except Units 9 and 10. Units 9 and 10 use water injection to control emissions of NO<sub>x</sub>. Since electric generating Units 9 and 10 are subject to the continuous emission monitoring requirements of the acid rain program for emissions of NO<sub>x</sub>, they are exempt from CAM requirements per §64.2(b)(1)(vi).

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable]

This facility will not process or store more than the threshold quantity of any regulated substance (Section 112r of the Clean Air Act 1990 Amendments). More information on this federal program is available on the web page: [www.epa.gov/rmp](http://www.epa.gov/rmp).

Acid Rain Program, 40 CFR Part 72 (Permit Requirements) [Applicable]

Acid Rain Permit No. 2019-0778-ARR4 was issued on December 3, 2019, and remains effective.

Acid Rain Program, 40 CFR Part 73 (SO<sub>2</sub> Requirements) [Applicable]

SO<sub>2</sub> initial allowances as published in 40 CFR §73.10 are listed in Acid Rain Permit No. 2004-184-ARR. However, all allowances can be traded, bought, and sold. Therefore, the actual allowances held by an affected unit may change which will not necessitate a revision to the permit.

Acid Rain program, 40 CFR Part 75 (Monitoring Requirements) [Applicable]

Certification testing was completed for the CEM systems required for Units 6, 7, 8, 9 and 10 following initial installation. Re-certifications are conducted as required by 40 CFR Part 75.

Acid Rain Program, 40 CFR Part 76 (NO<sub>x</sub> Emission Reduction Program) [Not Applicable]

40 CFR Part 76 establishes NO<sub>x</sub> emission limitations for coal-fired electric utility units. The boilers at the facility are not coal-fired and therefore are exempt from the requirements of this Part.

Stratospheric Ozone Protection, 40 CFR Part 82 [Subpart A and F 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 at §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.

Federal NO<sub>x</sub> and SO<sub>2</sub> Trading Programs, 40 CFR Part 97 [Subpart EEEEE Applicable]  
Subpart EEEEE, Cross-State Air Pollution Rule (CSAPR) NO<sub>x</sub> Ozone Season Group 2 Trading Program. This subpart establishes allowances and monitoring provisions for the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program, under Section 110 of the Clean Air Act and under the Federal Implementation Plan (FIP) codified under 40 CFR § 52.38. Under this subpart, the permittee is required to designate an official representative, monitor emissions, keep records, and make reports in accordance with §§ 97.830 through 97.835 and the monitoring program must comply with §§ 75.53, 75.62 and 75.73 or an alternative monitoring program must be requested and approved. CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances are periodically allocated to the facility and at the completion of the allowance transfer deadline for the control period in a given year the permittee is required to hold, in the source's compliance account administered by the EPA Clean Air Markets Division (CAMD), sufficient allowances available for deduction for such control period under § 97.824(a) in an amount not less than the tons of total NO<sub>x</sub> emissions for the control period from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at the facility. The control period starts on May 1 of a calendar year, except as provided in § 97.806(c)(3), and ends on September 30 of the same year. For the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program, the deadline for obtaining sufficient allowances is midnight of November 1 (if November 1 is a business day) or midnight of the first business day after November 1 (if November 1 is not a business day). Fines and future allowance deductions will be levied as described in § 97.806 if the permittee holds insufficient allowances at the completion of the allowance transfer deadline. The process of establishing an allowance account and requirements for administering an account are included in § 97.820. The recording of allowance allocations is described in § 97.821. Submission and recording of allowance transfers is described in §§ 97.822 and 97.823. Compliance with ozone season emissions limitations and assurance provisions are described in §§ 97.824 and 97.825. Extra allowances may be banked (see § 97.826) and these vintage allowances may be used in later years with certain restrictions. These allowances do not constitute a property right. No Title V permit revision is required for any allocation, holding, deduction, or transfer of allowances in accordance with this subpart. The units at this facility are subject to the requirements of this subpart. The permit includes the requirement to comply with all applicable requirements of this subpart.

Subpart GGGGG, Cross-State Air Pollution Rule (CSAPR) NO<sub>x</sub> Ozone Season Group 3 Trading Program. The Good Neighbor Plan does not establish a new emissions trading program, but

instead modifies the Group 3 trading program initially established at the Revised CSAPR Update and expands the program to apply to EGUs in the additional states included in the Good Neighbor Plan. The revised Group 3 NO<sub>x</sub> Ozone Season limits were supposed to take effect for the time period of August 4, 2023, through September 30, 2023, of the 2023 Ozone Season. However, some courts have issued preliminary orders temporarily staying the effectiveness of EPA's Good Neighbor SIP disapproval action (88 FR9336) with respect to several states, and EPA is taking measures to comply with those orders.

Mandatory Greenhouse Gas Reporting, 40 CFR Part 98 [Subparts C and D Applicable]  
Subpart C, General Stationary Fuel Combustion Sources. This subpart establishes mandatory greenhouse gas reporting requirements for stationary fuel combustion sources. For the purpose of this subpart, stationary fuel combustion sources are devices that combust solid, liquid, or gaseous fuel, generally for the purposes of producing electricity, generating steam, or providing useful heat or energy for industrial, commercial, or institutional use, or reducing the volume of waste by removing combustible matter. This subpart specifically excludes source subject to Subpart D of this Part; therefore, the turbines are exempt from the requirements of this subpart. The auxiliary boilers (4-B-01 and 4-B-02) are subject to reporting under this subpart.

Subpart D, Electric Generation. This subpart establishes mandatory greenhouse gas reporting requirements for electricity generation sources. For the purpose of this subpart, the electricity generation source category comprises electricity generating units that are subject to the requirements of the Acid Rain Program and any other electricity generating units that are required to monitor and report to EPA CO<sub>2</sub> mass emissions year-round according to 40 CFR part 75. The boilers (2-B-01 – 2-B-05) and Gas Turbines (3-B-01 Unit 9, 3-B-02 Unit 10,) are subject to reporting under this subpart.

## SECTION X. COMPLIANCE

### Inspection

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 Compliance Evaluation ("FCE")	3/15/2024	Three compliance issues and one area of concern were discovered
FCE	6/16/2022	In Compliance.
FCE	6/11/2020	One excess emission events reported to AQD; no further action was necessary.

## Enforcement Cases

The following enforcement cases were opened since issuance of the last Title V renewal permit.

Enforcement ID	Date Opened	Date Closed	Summary/Results
12767	4/26/2024	5/2/2024	Case to resolve concerns found in FCE conducted on 3/15/2024.
10664	10/26/2022	2/23/2023	Case to resolve concerns found in FCE conducted on 6/16/2022.

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

## Testing

The facility continues to monitor emissions as required by 40 CFR 75 (Acid Rain Program) and conducts annual testing of the equipment for verification. Air Quality observations have shown testing of the continuous emission monitors has been conducted properly. CEMS data is submitted to EPA Headquarters on a quarterly basis as required by the Acid Rain Program.

## Tier Classification and Public Review

This application has been determined to be **Tier II** based on the request for renewal of a Part 70 operating permit.

The applicant published the “Notice of Filing a Tier II Application” in *The Oklahoman*, a daily newspaper in Oklahoma County, on August 2, 2024. The notice stated that the application can be reviewed at the Harrah Public Library located at 1930 N Church, Harrah, Oklahoma 73045, or at the Air Quality Division’s main office. The applicant will publish a “Notice of Tier II Draft Permit” in a local newspaper for a 30-day public review. In addition, a copy of the draft permit will be available at the AQD office in Oklahoma City, and on the Air Quality section of the DEQ web page at [www.deq.ok.gov](http://www.deq.ok.gov).

This facility is not located within 50 miles of the Oklahoma border with another state.

Tribal Nations will be notified of the draft permit.

The applicant requested and was granted concurrent public and EPA review periods. The draft/proposed permit will be sent to EPA for a 45-day review period.

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(j) 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(j), 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(j), 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.

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 property.

Information on all permit actions is available for review by the public in the Air Quality section of the DEQ Web page: <http://www.deq.ok.gov/>

### **Fees Paid**

Title V operating permit renewal fee of \$7,500 has been received.

## **SECTION XI. SUMMARY**

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

**DRAFT/PROPOSED****PERMIT TO OPERATE  
AIR POLLUTION CONTROL FACILITY  
SPECIFIC CONDITIONS****OG&E Electric Services  
Horseshoe Lake Generation Station****Permit No. 2024-0368-TV4**

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on May 16, 2024. The Evaluation Memorandum, dated September 16, 2024, 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)]

**Emission Caps for Emission Units 8 (EUG 1), 9 (EUG 3), and 10 (EUG 3)**

	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>
	<b>TPY<sup>1,2</sup></b>	<b>TPY<sup>1,3</sup></b>	<b>TPY<sup>1,3</sup></b>	<b>TPY<sup>1,3</sup></b>	<b>TPY<sup>1,3</sup></b>
<b>EU 8, 9, &amp; 10</b>	<b>1,032.86</b>	<b>292.52</b>	<b>29.24</b>	<b>2.45</b>	<b>28.67</b>

1 – Compliance with the TPY values shall be determined monthly and be based on 12-month rolling totals.

2 – Compliance with the NO<sub>x</sub> emissions shall be based on continuous emissions monitoring (CEM) data.

3 – Compliance with the CO, VOC, SO<sub>2</sub>, and PM<sub>10</sub> emissions shall be based on amount of fuel combusted and the applicable emissions factors for each unit.

**EUG 1. Electric Generating Boilers**

This group contains “grandfathered” units and are limited to the existing equipment as they are.

<b>EU ID#</b>	<b>Make</b>	<b>Heat Capacity (MMBTUH)</b>	<b>Serial #</b>	<b>Installed Date</b>
2-B-01, Unit 6	Babcock & Wilcox	1,740	RB-260	1958
2-B-02, Unit 7	Babcock & Wilcox Boiler	2,379	RB-381	1963
2-B-03, Unit 8	Combustion Engineering	4,150	20754	1968

**EUG 2. House Heat Boiler**

<b>EU ID#</b>	<b>Make/Model</b>	<b>Heat Capacity (MMBTUH)</b>
2-B-05	Cleaver Brooks/4WI-700-500-150ST (460/3/60)	14.3

<b>EU ID#</b>	<b>NO<sub>x</sub></b>		<b>CO</b>		<b>VOC</b>		<b>SO<sub>2</sub></b>		<b>PM<sub>10</sub></b>	
	<b>lb/hr</b>	<b>TPY</b>	<b>lb/hr</b>	<b>TPY</b>	<b>lb/hr</b>	<b>TPY</b>	<b>lb/hr</b>	<b>TPY</b>	<b>lb/hr</b>	<b>TPY</b>
2-B-05	0.75	2.19	1.36	3.469	0.09	0.25	0.02	0.063	0.22	0.626

a. The owner/operator shall comply with all applicable requirements of the NSPS: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, Subpart Dc, including but not limited to: [40 CFR Part 60, Subpart Dc]

- i. §60.40c Applicability and delegation of authority.
- ii. §60.41c Definitions.
- iii. §60.42c Standard for sulfur dioxide (SO<sub>2</sub>).
- iv. §60.43c Standard for particulate matter (PM).
- v. §60.44c Compliance and performance test methods and procedures for sulfur dioxide.
- vi. §60.45c Compliance and performance test methods and procedures for particulate matter.
- vii. §60.46c Emission monitoring for sulfur dioxide.
- viii. §60.47c Emission monitoring for particulate matter.
- ix. §60.48c Reporting and recordkeeping requirements.

### EUG 3. Electric Generating Gas Turbines

EU ID#	Make/Model	Heat Capacity (MMBTUH)	Serial #	Installed Date
3-B-01, Unit 9	GE/LM6000 PC Sprint	550	308771	2000
3-B-02, Unit 10	GE/LM6000 PC Sprint	550	265046	2000

### Emission Limits for Unit 8 (EUG 1) and Electric Generating Gas Turbines (EUG 3)

EU ID#	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		PM <sub>10</sub>	
	lb/hr <sup>1</sup>		lb/hr <sup>2</sup>		lb/hr <sup>2</sup>		lb/hr <sup>1</sup>		lb/hr <sup>3</sup>	
2-B-03, Unit 8	--		--		--		--		--	
3-B-01, Unit 9	50.0		77.0		5.5		5.5		3.85	
3-B-02, Unit 10	50.0		77.0		5.5		5.5		3.85	

1 - NO<sub>x</sub> and SO<sub>2</sub> emission limits on a lb/hr basis are 3-hour rolling averages.

2 - CO and VOC emission limits on a lb/hr basis are 8-hour averages.

3 - PM<sub>10</sub> emission limits on a lb/hr basis are 24-hour averages.

### EUG 4. Auxiliary Boilers

EU ID#	Make/Model	Heat Capacity (MMBTUH)	Serial #	Installed Date
4-B-01	Precision Boiler/ FPH62-100-P4200N	3.4	B000020B	2000
4-B-02	Precision Boiler/ FPH62-100-P4200N	3.4	B000020	2000

EU ID#	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		PM <sub>10</sub>	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
4-B-01	0.34	0.17	0.29	0.14	0.019	0.01	0.002	0.001	0.026	0.013
4-B-02	0.34	0.17	0.29	0.14	0.019	0.01	0.002	0.001	0.026	0.013

### EUG 5. Emergency Diesel Generator - Removed

**EUG 6a. Storage Tanks**

Emissions from the following storage tanks are considered insignificant based on existing equipment items and do not have a specific limitation.

Point and EU ID#	Capacity (gallon)	Material Stored	Installed Date
6-B-12	1,058	Diesel Fuel	1992
6-B-13	300	Diesel Fuel	1992
6-B-20	3,600	Diesel Fuel	2008

Point and EU ID#	Capacity (gallon)	Material Stored	Installed Date
6-B-11	1,058	Gasoline	1992

- a. The gasoline tank shall be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. The pump associated with the tank shall be equipped with mechanical seals.
- b. The permittee shall comply with all applicable requirements of the NESHAP (40 CFR Part 63) for Gasoline Dispensing Facilities (GDF), Subpart CCCCCC, including but not limited to:
  - i. Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline. [40 CFR §63.11116]

**EUG 7. Emergency Equipment****Fire Pump Engine**

Point and EU ID#	Make/Model
7-B-01	188-hp Cummins CFP59-F50

- a. This emission unit is subject to NSPS Subpart IIII and shall comply with all applicable requirements, including but not limited to: [§§60.4200 – 60.4219]
  - i. Emission Standards for Fire Pump Engines [40 CFR §60.4205(c)]
 

Maximum Engine Power	Model Year	NO <sub>x</sub> + VOC g/hp-hr	CO g/hp-hr	PM <sub>10</sub> g/hp-hr
175 ≤ HP ≤ 300	2008 and earlier	7.8	2.6	0.4
  - ii. Fuel Requirements [40 CFR §60.4207(b)]
    - A. Beginning June 1, 2012, diesel fuel must meet the requirements of 40 CFR §1090.305 for nonroad diesel fuel.
  - iii. Monitoring Requirements [40 CFR §60.4209]
    - A. Owner or operator of an emergency stationary CI internal combustion engine must install a non-resettable hour meter prior to startup of the engine. [§60.4209(a)]
  - iv. Compliance Requirements [40 CFR §60.4211]
    - A. For fire pump engines that must comply with standards in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in Table 4, as applicable, for the same model year and maximum (or in the case of fire pumps,



NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. [§60.4211(c)]

- B. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing. Maintenance checks and readiness testing of such units is limited to 100 hours per calendar year. There is no time limit on the use of emergency stationary ICE in emergency situations. [§60.4211(f)(1) & (2)(i)]

#### Emergency Generator

Point and EU ID#	Make/Model
7-B-02	62-hp Generac SG040

- b. This emission unit is subject to NSPS Subpart JJJJ and shall comply with all applicable requirements, including but not limited to: [§§60.4230 – 60.4248]

- i. Emission Standards [40 CFR §60.4233, Table 1 to Subpart JJJJ of Part 60]

Maximum Engine Power	Model Year	NO <sub>x</sub> + VOC g/hp-hr	CO g/hp-hr
25 ≤ HP ≤ 130	2009 and later	10	387

- ii. Monitoring Requirements [40 CFR §60.4237]

- A. Owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, must install a non-resettable hour meter upon startup of the emergency engine.

- iii. Compliance Requirements [40 CFR §60.4243]

- A. Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph §60.4243(a). [§60.4243(b)(1)]

- B. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing. Maintenance checks and readiness testing of such units is limited to 100 hours per calendar year. There is no time limit on the use of emergency stationary ICE in emergency situations. [§60.4243(d)(1) & (2)]

#### Black Start Emergency Generator

Point and EU ID#	Make/Model
7-B-03	1000 kW Caterpillar C32 ATAAC

- c. This emission unit is subject to NSPS Subpart IIII and shall comply with all applicable requirements, including but not limited to: [§§60.4200 – 60.4219]

- i. Emission Standards [40 CFR §60.4205(b), §60.4202(a), & 1039 Appendix I]

Maximum Engine Power	Model Year	NO <sub>x</sub> + VOC g/kW-hr	CO g/kW-hr	PM <sub>10</sub> g/kW-hr
kW > 560	2006 and later	6.4	3.5	0.20

- ii. Fuel Requirements [40 CFR §60.4207(b)]

- A. Beginning June 1, 2012, diesel fuel must meet the requirements of 40 CFR §1090.305 for nonroad diesel fuel.

- iii. Monitoring Requirements [40 CFR §60.4209]
    - A. Owner or operator of an emergency stationary CI internal combustion engine must install a non-resettable hour meter prior to startup of the engine. [§60.4209(a)]
  - iv. Compliance Requirements [40 CFR §60.4211]
    - A. For 2007 model year and later CI ICE subject to emission standards of §60.4205(b), you must comply by purchasing an engine certified to the emission standards, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. [§60.4211(c)]
    - B. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing. Maintenance checks and readiness testing of such units is limited to 100 hours per calendar year. There is no time limit on the use of emergency stationary ICE in emergency situations. [§60.4211(f)(1) & (2)(i)]
  - v. Notification, Reporting, and Recordkeeping Requirements [§60.4214]
    - A. Emergency stationary ICE more than 100-hp that operate for the purposes specified in §60.4211(f)(3)(i) submit annual reporting as required no later than March 31<sup>st</sup> each year, starting March 31<sup>st</sup>, 2016. [§60.4214(d)]
2. NOx emissions shall be determined as follows: [OAC 252:100-8-6(a)]
- a. NOx emissions from Units 8 (2-B-03), 9 (3-B-01), and 10 (3-B-02) shall be determined from CEM data.
  - b. NOx emissions from Unit 8 (2-B-03) can be determined by a correlation curve as specified in 40 CFR Part 75, Appendix E, for peaking unit status. When Unit 8 (2-B-03) no longer qualifies for peaking unit status, NOx emissions shall be determined from CEM data.
  - c. NOx emissions from emission unit 2-B-05 shall be determined by calculations using most recent AP-42 emissions factors and gas meter measurements.
  - d. NOx emissions from emission unit 4-B-01 and 4-B-02 shall be determined by calculations using accepted emissions factors and hour meter measurements.
  - e. Compliance with the NOx emission limits in tons per year in Specific Condition No. 1 shall be determined by the sum of the emissions from Unit 8 and the gas turbines (Units 9 and 10).
  - f. Tons per year emissions shall be determined monthly with compliance based on a 12-month rolling total for Units 8, 9 and 10.
3. Each gas turbine, engine, and boiler at the facility shall have a permanent identification plate attached. [OAC 252:100-8-6(a)]
4. Unit 8, gas turbines, auxiliary boilers, EUG 2, and EUG8 shall combust pipeline natural gas only. For pipeline natural gas, compliance can be shown by a current gas company bill or testing (as per 40 CFR Part 75 Appendix D). Compliance shall be shown once per calendar year.
5. Units capable of burning fuel oil shall comply with the following:
- a. Units 6 and 7 shall use commercial natural gas as their primary fuel and either #2 fuel oil or # 6 fuel oil as secondary fuel.

- b. Units 6 and 7 shall not fire oil for more than 10.0 percent of the average annual heat input during any 3 calendar years or for more than 15.0 percent of the annual heat input during any calendar year.
  - c. Units 6 and 7 shall only burn fuel oil one unit at a time.
  - d. The house heat boiler shall be authorized to utilize commercial natural gas only.
  - e. For commercial gas, compliance can be shown by a current gas company bill or testing (as per 40 CFR Part 75 Appendix D).
  - f. The sulfur content of fuel oil shall be no greater than 0.5 weight percent for No. 2 fuel oil and 2.0 weight percent for No. 6 fuel oil.
  - g. OG&E shall assure compliance through analyzing fuel oil sulfur content as per 40 CFR Part 75, Appendix D and monitoring fuel oil flow on a continuous basis while oil is burned. OG&E shall also comply with the following applicable requirements for fuel flow meter:
    - i. Most recent initial certification or recertification requirement for fuel flow meter. [40 CFR Part 75, Appendix D, 2.1.5]
    - ii. Quality Assurance requirement [40 CFR Part 75, Appendix D, 2.1.5]
6. The permittee shall be allowed to incinerate company-generated non-hazardous materials. The permittee shall also be allowed to incinerate used oil that is company employee generated or company retiree generated. Materials allowed to be incinerated may include, but are not limited to, used oil, used solvent, corrosion inhibitors, on-line cleaning solution, and antifreeze. The Unit 6 and 7 boilers may incinerate corrosion inhibitors used in Units 9 and 10. Additionally, materials incinerated shall not be classified RCRA “hazardous waste” according to 40 CFR 261 except as allowed by 40 CFR §266.108. [OAC 252:100-8-6(a)]
7. Combustion turbines (Unit 9 and Unit 10) shall be operated with water injection for NO<sub>x</sub> control sufficient to meet the limits of Specific Condition No. 1. [OAC 252:100-8-6(a)]
8. The turbines (Units 9 and 10) are subject to 40 CFR Part 60 Subpart GG and shall comply with all applicable requirements. [40 CFR §60.330 to §60.335]
- a. Each turbine shall comply with the standard for nitrogen oxides of §60.332(a)(1).
  - b. Each turbine shall either comply with the sulfur dioxide emission limitation of 0.015% by dry volume at 15% O<sub>2</sub> or the fuel sulfur content limitation of 0.8% by weight. [§60.333]
  - c. The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted if the gaseous fuel is demonstrated to meet the definition of “natural gas” using either the gas quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract, or using representative fuel sampling data as per 40 CFR Part 75 Appendix D. The maximum total sulfur content of “natural gas” is 20 grains/100 SCF (680 ppmw or 338 ppmv) or less.
  - d. Excess emissions shall be reported pursuant to §60.334(j).
  - e. Like-kind replacement of turbines within temporary periods of approximately 6 months or less for maintenance purposes are authorized. The permittee shall notify AQD in writing not later than 7 days in advance of the start-up of the replacement turbine(s). Said notice shall identify the equipment removed and shall include the new turbine make, model, and horsepower; date of the change, and any change in emissions.
  - f. The permittee shall comply with the test methods and procedures of §60.335 except as stated above.

9. Replacement of any equipment with emissions specified in this permit allowed under OAC 252:100-8-6 (f)(2), provided the owner or operator notifies the DEQ in writing at least seven (7) days in advance of the proposed change. Installation of an "affected facility," "affected source," or "new source" as those terms are defined in 40 CFR Section 60.2, 40 CFR Section 63.2, and 40 CFR Section 61.02, respectively, that is subject to an emission standard, equipment standard, work practice standard or recordkeeping requirement in a federal NSPS (40 CFR Part 60) or a federal NESHAP (40 CFR Parts 61 and 63) shall comply with all applicable requirements.
10. The electric generating boilers (Units 6, 7, and 8) and gas turbines (Units 9 and 10) are subject to the Acid Rain Program and shall comply with all applicable requirements including the following: [40 CFR Part 72, 73, and 75]
  - a. SO<sub>2</sub> allowances
  - b. Monitoring as required by 40 CFR Part 75
  - c. Report quarterly emissions to EPA
  - d. Conduct RATA tests
  - e. QA/QC plan for maintenance of the CEMS
11. Units 6, 7, 8, 9, and 10 are subject to the Cross-State Air Pollution Rule (CSAPR) NO<sub>x</sub> Ozone Season Group 2 Trading Program. The permittee shall comply with all applicable requirements including but not limited to: [40 CFR §97.801 to §97.835]
  - a. § 97.801 Purpose.
  - b. § 97.802 Definitions.
  - c. § 97.803 Measurements, abbreviations, and acronyms.
  - d. § 97.804 Applicability.
  - e. § 97.805 Retired unit exemption.
  - f. § 97.806 Standard requirements.
  - g. § 97.807 Computation of time.
  - h. § 97.808 Administrative appeal procedures.
  - i. § 97.810 State NO<sub>x</sub> Ozone Season Group 2 trading budgets, new unit set-asides, Indian country new unit set-aside, and variability limits.
  - j. § 97.811 Timing requirements for CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance allocations.
  - k. § 97.812 CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance allocations to new units.
  - l. § 97.813 Authorization of designated representative and alternate designated representative.
  - m. § 97.814 Responsibilities of designated representative and alternate designated representative.
  - n. § 97.815 Changing designated representative and alternate designated representative; changes in owners and operators; changes in units at the source.
  - o. § 97.816 Certificate of representation.
  - p. § 97.817 Objections concerning designated representative and alternate designated representative.
  - q. § 97.818 Delegation by designated representative and alternate designated representative.

- r. § 97.820 Establishment of compliance accounts, assurance accounts, and general accounts.
  - s. § 97.821 Recordation of CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance allocations and auction results.
  - t. § 97.822 Submission of CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance transfers.
  - u. § 97.823 Recordation of CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance transfers.
  - v. § 97.824 Compliance with CSAPR NO<sub>x</sub> Ozone Season Group 2 emissions limitation.
  - w. § 97.825 Compliance with CSAPR NO<sub>x</sub> Ozone Season Group 2 assurance provisions.
  - x. § 97.826 Banking.
  - y. § 97.827 Account error.
  - z. § 97.828 Administrator's action on submissions.
  - aa. § 97.830 General monitoring, recordkeeping, and reporting requirements.
  - bb. § 97.831 Initial monitoring system certification and recertification procedures.
  - cc. § 97.832 Monitoring system out-of-control periods.
  - dd. § 97.833 Notifications concerning monitoring.
  - ee. § 97.834 Recordkeeping and reporting.
  - ff. § 97.835 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.
12. If Continuous Opacity Monitoring is not utilized, the permittee shall conduct daily visual observations using EPA Reference Method 22, of the opacity from the boiler exhausts while burning fuel oil (Units 6 & 7) for more than 24 continuous hours and keep a record of these observations. If visible emissions are detected, then the permittee shall conduct a 30-minute opacity reading in accordance with EPA Reference Method No. 9 (EPA Method 9). If the EPA Method 9 indicates an opacity greater than 20%, hourly EPA Method 9's will be conducted until compliance is determined. Once compliance is determined, the facility will revert back to daily visual observations as required by this paragraph. [OAC 252:100-25]
13. The following records shall be maintained on-site or at a local field office to verify insignificant activities. [OAC 252:100-43]
- a. For storage tanks containing volatile organic liquids with vapor pressures less than 1.0 psia and having capacities less than 10,000 gallons: capacity of the tanks, contents, and typical vapor pressure.
  - b. For activities that have the potential to emit less than 5 TPY (actual) of any criteria pollutant: type of activity and the amount of emissions from that activity (cumulative annual).
14. When monitoring shows excess emissions, the owner or operator shall comply with the provisions of OAC 252:100-9. [OAC 252:100-9]
15. The permittee shall maintain the following records of operations. These records shall be maintained on-site or at a local field office at least five years after the date of recording and shall be provided to regulatory personnel upon request. [OAC 252: 100-43]
- a. Operation and maintenance records for grandfathered emission units (Units 6 & 7).
  - b. Operating hours for each auxiliary boiler (4-B-01 and 4-B-02), and Units 9 and 10.
  - c. Hours of operation of the house heat boiler (2-B-05).
  - d. Fuel consumption for house heat boiler and Units 8, 9 and 10 (monthly and 12-month rolling total).

- e. NO<sub>x</sub> and SO<sub>2</sub> emissions determined monthly with compliance based on a 12-month rolling total in tons per year for Units 8, 9, and 10, as required to determine compliance with the tons per year limitation in Specific Condition 1.
  - f. Sulfur content of natural gas (using either the gas quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract, or using representative fuel sampling data as per 40 CFR Part 75 Appendix D).
  - g. Monitoring data of water-fuel ratio (during periods of NO<sub>x</sub> CEMS downtime) and fuel usage (continuous).
  - h. Materials incinerated in Units 6 & 7 (type, and volume by calendar year).
  - i. Emission data as required by the Acid Rain Program.
  - j. RATA test results from periodic CEMS certification tests.
  - k. Visible emissions observations taken in accordance with Specific Condition 11 while burning fuel oil (Units 6 and 7) for more than 24 continuous hours.
  - l. To demonstrate compliance with OAC 252:100-31, Part 3, maintain records of fuel oil sulfur content as per 40 CFR Part 75 Appendix D and fuel oil flow (on continuous basis) while burning #2 or #6 fuel oil in Units 6 & 7.
  - m. Keep records of the type(s) and amount(s) of fuel used by Units 6 & 7 quarterly to document that the capacity factor limitation for non-oil-fired electric utility steam generating unit is met.
  - n. Records required by 40 CFR Part 60 Subpart Dc.
  - o. Records required by 40 CFR Part 60 Subpart IIII.
  - p. Records required by 40 CFR Part 60 Subpart JJJJ.
  - q. Records required by 40 CFR Part 63 Subpart ZZZZ.
  - r. Records required by 40 CFR Part 63 Subpart UUUUU.
  - s. Records required by 40 CFR Part 63 Subpart CCCCCC.
  - t. Records required by 40 CFR Part 97 Subpart EEEEE.
16. The permittee shall have the discretion of determining which records will be maintained in digital format.
17. No later than 30 days after each anniversary date of the issuance of the original Part 70 operating permit (6/22/2001), the permittee shall submit to 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)]
18. The permittee shall conduct stack test on Units 8, 9, and 10 for CO emissions at least once every two years and submit a written report of the results to the AQD. Performance testing shall be conducted under representative conditions. Testing shall be conducted using approved reference methods listed below. [OAC 252:100-8-6(a)(3)(A)]
- a. Any of the following reference methods, or equivalent, may be used (including applicable methods):
    - Method 1: Sample and Velocity Traverses for Stationary Sources.
    - Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate.
    - Method 3: Gas Analysis for Carbon Dioxide, Excess Air, and Dry Molecular Weight.

Method 3A: Determination of O<sub>2</sub> and CO<sub>2</sub>.

Method 4: Determination of Moisture in Stack Gases.

Method 7E: Initial 12-Point Stratification Traverse.

Method 10: Determination of CO Emissions from Stationary Sources.

Method 19: Exhaust Flow Rate Calculation using Fuel Flow Rates as an alternative to measuring exhaust flow rates via formula and procedures in Methods 1, 2, and 4.

- b. Performance testing shall be conducted while the unit is operating under representative conditions.
  - c. A protocol describing the testing plan shall be submitted to the Air Quality Division at least 30 days prior to the testing.
  - d. A written report documenting the results of emissions testing shall be submitted within 60 days of completion of on-site testing.
19. No later than 30 days after each six (6) month period, after the date of the issuance of the original Part 70 operating permit (6/22/2001), 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.  
[OAC 252:100-8-6 (a)(3)(C)(i) and (ii)]
20. This facility is considered a Prevention of Significant Deterioration (PSD) facility. As such, the facility is subject to the provisions of OAC 252:100-8-36.2(c) for any project as defined therein.  
[OAC 252:100-8-36.2(c)]
21. This permit supersedes all previous Air Quality operating permits for this facility, except Acid Rain Permit No. 2019-0778-ARR4, which are now cancelled.



# PART 70 PERMIT

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

Permit No. 2024-0368-TVR4

OG&E Electric Services

having complied with the requirements of the law, is hereby granted permission to operate the Horseshoe Lake Generation Station at Section 14, T12N, R1EIM, Harrah, Oklahoma County, Oklahoma, Subject to standard conditions dated June 21, 2016 and specific conditions, both attached.

This permit shall expire five (5) years from the date below, except as authorized under Section VIII of the Standard Conditions.

DRAFT/PROPOSED

\_\_\_\_\_  
Division Director, Air Quality Division

\_\_\_\_\_  
Date



Mr. Brian McKibben  
Oklahoma Gas & Electric Co.  
321 N. Harvey, MC610  
Oklahoma City, OK 73102-0321

SUBJECT: Oklahoma Gas and Electric Company  
Horseshoe Lake Generating Station  
Facility ID No. 1208  
Section 17, Township 14N, Range 1E, Oklahoma County, Oklahoma

Dear Mr. McKibben:

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 on approved AQD forms and submitted electronically by April 1<sup>st</sup> of every year. Any questions concerning the form or submittal process should be referred to the Emissions Inventory Staff at 405-702-4100.

Thank you for your cooperation in this matter. If we may be of further service, please contact our office at (405) 702-4100

Sincerely,

**DRAFT/PROPOSED**

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

**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<sub>10</sub>). 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]

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

<b>ACFM</b>	Actual Cubic Feet per Minute	<b>GAL</b>	Gallon (gal)
<b>AD</b>	Applicability Determination	<b>GDF</b>	Gasoline Dispensing Facility
<b>AFRC</b>	Air-to-Fuel Ratio Controller	<b>GEP</b>	Good Engineering Practice
<b>API</b>	American Petroleum Institute	<b>GHG</b>	Greenhouse Gases
<b>ASTM</b>	American Society for Testing and Materials	<b>GR</b>	Grain(s) (gr)
<b>BACT</b>	Best Available Control Technology	<b>H<sub>2</sub>CO</b>	Formaldehyde
<b>BAE</b>	Baseline Actual Emissions	<b>H<sub>2</sub>S</b>	Hydrogen Sulfide
<b>BBL</b>	Barrel(s)	<b>HAP</b>	Hazardous Air Pollutants
<b>BHP</b>	Brake Horsepower (bhp)	<b>HC</b>	Hydrocarbon
<b>BTU</b>	British thermal unit (BTU)	<b>HCFC</b>	Hydrochlorofluorocarbon
<b>C&amp;E</b>	Compliance and Enforcement	<b>HFR</b>	Horizontal Fixed Roof
<b>CAA</b>	Clean Air Act	<b>HON</b>	Hazardous Organic NESHAP
<b>CAM</b>	Compliance Assurance Monitoring	<b>HP</b>	Horsepower (hp)
<b>CAS</b>	Chemical Abstract Service	<b>HR</b>	Hour (hr)
<b>CAAA</b>	Clean Air Act Amendments	<b>I&amp;M</b>	Inspection and Maintenance
<b>CC</b>	Catalytic Converter	<b>IBR</b>	Incorporation by Reference
<b>CCR</b>	Continuous Catalyst Regeneration	<b>ICE</b>	Internal Combustion Engine
<b>CD</b>	Consent Decree	<b>LAER</b>	Lowest Achievable Emission Rate
<b>CEM</b>	Continuous Emission Monitor	<b>LB</b>	Pound(s) [Mass] (lb, lbs, lbm)
<b>CFC</b>	Chlorofluorocarbon	<b>LB/HR</b>	Pound(s) per Hour (lb/hr)
<b>CFR</b>	Code of Federal Regulations	<b>LDAR</b>	Leak Detection and Repair
<b>CI</b>	Compression Ignition	<b>LNG</b>	Liquefied Natural Gas
<b>CNG</b>	Compressed Natural Gas	<b>LT</b>	Long Ton(s) (metric)
<b>CO</b>	Carbon Monoxide or Consent Order	<b>M</b>	Thousand (Roman Numeral)
<b>COA</b>	Capable of Accommodating	<b>MAAC</b>	Maximum Acceptable Ambient Concentration
<b>COM</b>	Continuous Opacity Monitor	<b>MACT</b>	Maximum Achievable Control Technology
<b>D</b>	Day	<b>MM</b>	Prefix used for Million (Thousand-Thousand)
<b>DEF</b>	Diesel Exhaust Fluid	<b>MMBTU</b>	Million British Thermal Units (MMBTU)
<b>DG</b>	Demand Growth	<b>MMBTUH</b>	Million British Thermal Units per Hour (MMBTUH)
<b>DSCF</b>	Dry Standard (At Standard Conditions) Cubic Foot (Feet)	<b>MMSCF</b>	Million Standard Cubic Feet (MMscf)
<b>EGU</b>	Electric Generating Unit	<b>MMSCFD</b>	Million Standard Cubic Feet per Day
<b>EI</b>	Emissions Inventory	<b>MSDS</b>	Material Safety Data Sheet
<b>EPA</b>	Environmental Protection Agency	<b>MWC</b>	Municipal Waste Combustor
<b>ESP</b>	Electrostatic Precipitator	<b>MWe</b>	Megawatt Electrical
<b>EUG</b>	Emissions Unit Group	<b>NA</b>	Nonattainment
<b>EUSGU</b>	Electric Utility Steam Generating Unit	<b>NAAQS</b>	National Ambient Air Quality Standards
<b>FCE</b>	Full Compliance Evaluation	<b>NAICS</b>	North American Industry Classification System
<b>FCCU</b>	Fluid Catalytic Cracking Unit	<b>NESHAP</b>	National Emission Standards for Hazardous Air Pollutants
<b>FESOP</b>	Federally Enforceable State Operating Permit	<b>NH<sub>3</sub></b>	Ammonia
<b>FIP</b>	Federal Implementation Plan	<b>NMHC</b>	Non-methane Hydrocarbon
<b>FR</b>	Federal Register	<b>NGL</b>	Natural Gas Liquids
<b>GACT</b>	Generally Achievable Control Technology		

<b>NO<sub>2</sub></b>	Nitrogen Dioxide	<b>SER</b>	Significant Emission Rate
<b>NO<sub>x</sub></b>	Nitrogen Oxides	<b>SI</b>	Spark Ignition
<b>NOI</b>	Notice of Intent	<b>SIC</b>	Standard Industrial Classification
<b>NSCR</b>	Non-Selective Catalytic Reduction	<b>SIP</b>	State Implementation Plan
<b>NSPS</b>	New Source Performance Standards	<b>SNCR</b>	Selective Non-Catalytic Reduction
<b>NSR</b>	New Source Review	<b>SO<sub>2</sub></b>	Sulfur Dioxide
		<b>SO<sub>x</sub></b>	Sulfur Oxides
<b>O<sub>3</sub></b>	Ozone	<b>SOP</b>	Standard Operating Procedure
<b>O&amp;G</b>	Oil and Gas	<b>SRU</b>	Sulfur Recovery Unit
<b>O&amp;M</b>	Operation and Maintenance		
<b>O&amp;NG</b>	Oil and Natural Gas	<b>T</b>	Tons
<b>OAC</b>	Oklahoma Administrative Code	<b>TAC</b>	Toxic Air Contaminant
<b>OC</b>	Oxidation Catalyst	<b>TEG</b>	Triethylene Glycol
		<b>THC</b>	Total Hydrocarbons
<b>PAH</b>	Polycyclic Aromatic Hydrocarbons	<b>TPY</b>	Tons per Year
<b>PAE</b>	Projected Actual Emissions	<b>TRS</b>	Total Reduced Sulfur
<b>PAL</b>	Plant-wide Applicability Limit	<b>TSP</b>	Total Suspended Particulates
<b>Pb</b>	Lead	<b>TV</b>	Title V of the Federal Clean Air Act
<b>PBR</b>	Permit by Rule		
<b>PCB</b>	Polychlorinated Biphenyls	<b>µg/m<sup>3</sup></b>	Micrograms per Cubic Meter
<b>PCE</b>	Partial Compliance Evaluation	<b>US EPA</b>	U. S. Environmental Protection Agency
<b>PEA</b>	Portable Emissions Analyzer		
<b>PFAS</b>	Per- and Polyfluoroalkyl Substance	<b>VFR</b>	Vertical Fixed Roof
<b>PM</b>	Particulate Matter	<b>VMT</b>	Vehicle Miles Traveled
<b>PM<sub>2.5</sub></b>	Particulate Matter with an Aerodynamic Diameter <= 2.5 Micrometers	<b>VOC</b>	Volatile Organic Compound
<b>PM<sub>10</sub></b>	Particulate Matter with an Aerodynamic Diameter <= 10 Micrometers	<b>VOL</b>	Volatile Organic Liquid
<b>POM</b>	Particulate Organic Matter or Polycyclic Organic Matter	<b>VRT</b>	Vapor Recovery Tower
		<b>VRU</b>	Vapor Recovery Unit
<b>ppb</b>	Parts per Billion	<b>YR</b>	Year
<b>ppm</b>	Parts per Million		
<b>ppmv</b>	Parts per Million Volume	<b>2SLB</b>	2-Stroke Lean Burn
<b>ppmvd</b>	Parts per Million Dry Volume	<b>4SLB</b>	4-Stroke Lean Burn
<b>PSD</b>	Prevention of Significant Deterioration	<b>4SRB</b>	4-Stroke Rich Burn
<b>psi</b>	Pounds per Square Inch		
<b>psia</b>	Pounds per Square Inch Absolute		
<b>psig</b>	Pounds per Square Inch Gage		
<b>RACT</b>	Reasonably Available Control Technology		
<b>RATA</b>	Relative Accuracy Test Audit		
<b>RAP</b>	Regulated Air Pollutant or Reclaimed Asphalt Pavement		
<b>RFG</b>	Refinery Fuel Gas		
<b>RICE</b>	Reciprocating Internal Combustion Engine		
<b>RO</b>	Responsible Official		
<b>ROAT</b>	Regional Office at Tulsa		
<b>RVP</b>	Reid Vapor Pressure		
<b>SCC</b>	Source Classification Code		
<b>SCF</b>	Standard Cubic Foot		
<b>SCFD</b>	Standard Cubic Feet per Day		
<b>SCFM</b>	Standard Cubic Feet per Minute		
<b>SCR</b>	Selective Catalytic Reduction		

Mr. Brian McKibben  
Oklahoma Gas & Electric Co.  
321 N. Harvey, MC610  
Oklahoma City, OK 73102-0321

Permit Writer: Ryan Buntyn  
Permit No. 2024-0368-TVR4

SUBJECT: Oklahoma Gas and Electric Company  
Horseshoe Lake Generating Station  
Facility ID No. 1208  
Section 17, Township 14N, Range 1E, Oklahoma County, Oklahoma

Dear Mr. McKibben:

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. Submit sample notice and provide date of publication to **AQD 5 days prior to notice publishing;**
3. 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;
4. 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 in this matter. If we may be of further service, please contact Ryan Buntyn at [Ryan.Buntyn@deq.ok.gov](mailto:Ryan.Buntyn@deq.ok.gov) or (405) 702-4213.

Sincerely,



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



## **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. Note that if either the applicant or the public requests a public meeting, this must be arranged by the DEQ.

1. Complete the public notice using the samples provided by AQD below. Please use the version applicable to the requested permit action;  
Version 1 – Traditional NSR process for a construction permit  
Version 2 – Enhanced NSR process for a construction permit  
Version 3 – initial Title V (Part 70 Source) operating permit, Title V operating permit renewal, Significant Modification to a Title V operating permit, and any Title V operating permit modification incorporating a construction permit that followed Traditional NSR process
2. Determine appropriate newspaper local to facility for publishing;
3. Submit sample notice and provide date of publication to AQD 5 days prior to notice publishing;
4. Upon publication, a signed affidavit of publication must be obtained from the newspaper and sent to AQD within 20 days of publication.

### **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:**

**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 new major facility or construction permit for a modification at an existing 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 construction permit [modification] (Permit Number: ...xxx-xxxx-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 under Permits for Public Review on the DEQ 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)). [For facility modifications only, either add the phrase: , which represents (identify the emissions change involved in the modification)., or add the sentence: The modification will not result in a change in emissions.] [For PSD permits only, add: The project will consume the following increment levels: (list the amount of increment consumption for each pollutant in ug/m<sup>3</sup>).]**

**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 or as directed through the corresponding online notice. [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 staff.**

**Information on all permit actions including draft permits, proposed permits, final issued permits and applicable review timelines are 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, Air Quality Division, 707 N. Robinson, Suite 4100, P.O. Box 1677, Oklahoma City, OK, 73101-1677. Phone No. (405) 702-4100.**