

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

**MEMORANDUM**

**June 11, 2021**

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

**THROUGH:** Rick Groshong, Compliance and Enforcement Group Manager

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

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

**FROM:** Morgan McGrath, P.E., Engineering Section, ROAT

**SUBJECT:** Evaluation of Permit Application No. **2019-1277-TVR4**  
American Electric Power (AEP)  
Public Service Company of Oklahoma (PSO)  
PSO Tulsa Power Station (SIC 4911/NAICS 221112)  
AQD Facility ID: 215  
Section 24, Township 19N, Range 12E, Tulsa County, Oklahoma  
Latitude 36.11184° and Longitude -95.99185°  
Physical Address: 3600 S Elwood Ave, Tulsa, OK 74101

**SECTION I. INTRODUCTION**

American Electric Power (AEP) - Public Service Company of Oklahoma (PSO) has submitted an application for renewal of the Part 70 operating permit for the PSO Tulsa Power Station. The facility is currently operating under Permit No. 2019-0784-TVR3, issued on June 8, 2015, and Acid Rain Permit No. 2019-0784-ARR4, issued on January 13, 2020.

The facility is an electric utility plant and is located in an attainment area. The facility is a major source for Prevention of Significant Deterioration (PSD) and an area source of Hazardous Air Pollutants (HAPs).

**SECTION II. FACILITY DESCRIPTION**

The PSO Tulsa Power Station consists of two (2) natural gas-fired Babcock and Wilcox type boilers capable of producing steam. The thermodynamic energy in the steam is converted to mechanical energy and then to electrical energy by the steam turbine/generator unit capable of producing electricity. Unit 2 and Unit 4 use natural gas as their primary fuel. All units are grandfathered sources commencing construction before May 31, 1972. Unit 1 commenced operation in 1956 and was retired in place in August 1979. Unit 2 commenced operation in October 1956, was placed in dry storage in September 1986, and was returned to service May 18, 1998. Unit 3 commenced operations in December 1957, was placed in dry storage in September 1986, was returned to service in July 1999, and was permanently retired in place in February 2012.

Unit 4 commenced operations in March 1958, was placed in dry storage in September 1986, and was returned to service late in 1993.

**SECTION III. PERMIT HISTORY**

<b>Permits</b>	<b>Date Issued</b>	<b>Description</b>
2019-1277-ARR4	1/13/2020	4 <sup>th</sup> Acid Rain Renewal Permit
2014-0874-TVR3	6/8/2015	3 <sup>rd</sup> Title V Renewal Permit
2014-1751-ARR3	5/6/2015	3 <sup>rd</sup> Acid Rain Renewal Permit
2009-472-ARR2	6/30/2010	2 <sup>nd</sup> Acid Rain Renewal Permit
2008-390-TVR2	11/17/2009	2 <sup>nd</sup> Title V Renewal Permit
2004-193-ARR	12/14/2004	Acid Rain Renewal Permit
2003-359-TVR	9/2/2004	Title V Renewal Permit
97-088-TV	5/20/1999	Initial Title V Permit
97-088-AR	11/26/1997	Initial Acid Rain Permit

**SECTION IV. REQUESTED CHANGES**

The renewal application indicates the following permit changes/new applicable requirements:

1. The incorporation of 40 CFR Part 63 Subpart ZZZZ as a high level citation for the three (3) existing emergency generators on-site;
2. The three (3) emergency generators on-site have historically been considered grandfathered units and are currently listed as an insignificant activities. Per OAC 252:100, Appendix I, any activity to which a state or federal applicable requirement applies is not insignificant even if it is included on the insignificant activity list. As such, those units are now incorporated into a new designated EUG (EUG 4).
3. The facility has indicated that 40 CFR Part 63 Subpart DDDDD is not an applicable regulation for any equipment located at this facility on the basis of §63.7491(a). The high level citation is currently listed as a specific condition in the permit. Since the applicant has indicated that this citation is not and has never been applicable, it has been removed.
4. The facility has requested an updated emission factors for hexane and formaldehyde to replace the current AP-42 emission factor(s) used for purposes of estimating emissions from the EUG 1 boilers. The basis for this request is that better information is now available. Specifically the California’s Bay Area AQMD (BAAQMD) (08/2020) has reported more accurate – emission factors for those two (2) HAPs. Since these are grandfathered boilers, no changes will occur in the specific conditions. However, this change will affect the historical HAP status from major to area source—mainly due to the hexane potential emissions analysis (and subsequent emission estimates) decreasing. The emergency generator engines are currently subject to ZZZZ and the change in HAP status will not change the work practice standards applicable to the emergency generators engines on-site.

AQD has taken the opportunity in the renewal to update all federal and state regulations that apply to the facility. In addition, the specific conditions of the permit were reviewed and the following additions were made:

1. Incorporation of the requirements contained in OAC 252:100-37-36 as Specific Condition No. 6;
2. Incorporation of the requirements contained in 40 CFR § 97.801 to § 97.835 as Specific Condition No. 8.

**SECTION V. EQUIPMENT**

Emission units are organized into emission unit groups (EUGs) as shown below.

**EUG 1: Grandfathered Steam Generating Boiler(s)**

EU ID	Point ID	Make/Model	MW	MMBTUH	Commenced Construction
Unit #2	Unit #2	Babcock & Wilcox RB-240	175	1,818	1956
Unit #4	Unit #4	Babcock & Wilcox RB-241	175	1,818	1958

**EUG 3: Facility-Wide Requirements**

EU	Point
None	None

**EUG 4: Emergency Generators**

EU	Point	Description	Hp	Commenced Construction	Serial #
ENG-1	ENG-1	Emergency Generator 1	3,600	Prior to 1972	63448
ENG-2	ENG-2	Emergency Generator 2	3,600	Prior to 1972	63446
ENG-3	ENG-3	Emergency Generator 3	3,600	Prior to 1972	63447

**Stack Parameters**

Source	Height	Diameter	Temperature	Flow rate
	(feet)	(feet)	(°F)	(ACFM)
Unit #2	184	9	168,770	340
Unit #4	184	9	168,770	340

**SECTION VI. EMISSIONS**

The emission estimates in this section are for informational purposes only. Some of the estimates may be included in the permit as limits based on historical permitting requirements.

**EUG 1: Grandfathered Steam Generating Boiler(s)**

Estimates of regulated pollutant emissions are based on continuous operations for the two (2) 1,818 MMBTUH boilers and AP-42 emission factors (07/98), Section 1.4 "Natural Gas Combustion", Table 1.4-1, Table 1.4-2, and Table 1.4-3, for natural gas. For estimation purposes, natural gas fuel is assumed to have an average heating value of 1,017 BTU/SCF.

**Table 1 - Emission Factors for Gas Boilers (lb/MMSCF)**

Fuel	NOx	CO	SO <sub>2</sub>	VOC	PM <sub>10</sub>
Natural Gas	280	84	0.6	5.5	7.6

**Table 2 - Estimated Boiler Emissions (Natural Gas Firing)**

EU ID	NOx		CO		SO <sub>2</sub>		VOC		PM <sub>10</sub>	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Unit #2	497.0	2,176.0	149.0	653.0	1.1	4.7	9.8	42.7	13.5	59.1
Unit #4	497.0	2,176.0	149.0	653.0	1.1	4.7	9.8	42.7	13.5	59.1

Several AP-42 (07/98) tables list emission factors for various substances from natural gas combustion, including lead in Table 1.4-2, speciated organic compounds in Table 1.4-3, and metals in Table 1.4-4., except formaldehyde and hexane which are based on the BAAQMD TAC Emission Factor Guidelines entitled "Appendix A Default TAC Emission Factors for Specific Source Categories", August 2020.

The emission factors presented in the Table A-1.1 of the BAAQMD publication apply to all boiler sizes and combustion design types. These factors are based on boilers with no add-on emission controls. Default emission factors for boilers fired on natural gas were developed based on CARB's California Air Toxic Emission Factors (CATEF) database. If a TAC emission factor was available for both Ventura County APCD and AP-42 Chapter 1.4, the Air District typically chose the VCAPCD emission factor as the Air District default factor, because the VCAPCD factors were similar to but higher than the AP-42 Chapter 1.4 factors. One exception was hexane. Since the AP-42 Chapter 1.4 hexane emission factor seemed inordinately high (33% of the total VOC factor), the Air District chose the maximum hexane emission factor from the VCAPCD data (6.18E-06 lb/MMBTU) instead of the AP-42 Chapter 1.4 hexane factor (1.76E-03 lb/MM BTU).

**Table 3 - Estimated HAPs Emissions (Natural Gas Firing)**

Pollutant	CAS #	Emission Factor (lb/MMSCF)	Emissions	
			lb/hr	TPY
Arsenic	7440-38-2	$2.0 \times 10^{-4}$	0.001	0.003
Barium	7440-39-3	$4.4 \times 10^{-3}$	0.016	0.069
Benzene	71-43-2	$2.1 \times 10^{-3}$	0.008	0.033
Beryllium	7440-41-7	$1.2 \times 10^{-5}$	$4.3 \times 10^{-5}$	$1.9 \times 10^{-4}$

Pollutant	CAS #	Emission Factor (lb/MMSCF)	Emissions	
			lb/hr	TPY
Cadmium	7440-43-9	$1.1 \times 10^{-3}$	0.004	0.017
Chromium	7440-47-3	$1.4 \times 10^{-3}$	0.005	0.022
Cobalt	7440-48-4	$8.4 \times 10^{-5}$	$3.0 \times 10^{-4}$	0.001
Formaldehyde	50-00-0	$2.17 \times 10^{-4}$ <sup>(1)</sup>	0.79	3.45
Hexane	110-54-3	$6.18 \times 10^{-6}$ <sup>(1)</sup>	0.02	0.01
Lead	N/A	$5.0 \times 10^{-4}$	0.002	0.008
Manganese	7439-96-5	$3.8 \times 10^{-4}$	0.001	0.006
Mercury	7439-97-6	$2.6 \times 10^{-4}$	0.001	0.004
Naphthalene	91-20-3	$6.1 \times 10^{-4}$	0.002	0.010
Nickel	7440-02-0	$2.1 \times 10^{-3}$	0.008	0.033
Selenium	7782-49-2	$2.1 \times 10^{-5}$	$7.5 \times 10^{-5}$	$3.3 \times 10^{-4}$
Toluene	108-88-3	$3.4 \times 10^{-3}$	0.012	0.053
<b>Total HAP(s)</b>			<b>0.87</b>	<b>3.72</b>

<sup>(1)</sup> Units are in terms of lb/MMBTU

**EUG 3 Facility-Wide Requirements – Empty**

**EUG 4 Emergency Generators**

Emergency generator potential emissions are based on AP-42 (10/96), Section 3.4, "Large Stationary Diesel And All Stationary Dual-fuel Engines", Table 3.4-1, Table 3.4-2, Table 3.4-3, and Table 3.4-4 and with each unit operating 500 hours/year.

**Table 4 - Emission Factors for Emergency Generators (lb/hp-hr)**

Fuel	NOx	CO	SO <sub>2</sub>	VOC	PM
Diesel	0.024	0.0055	0.0000121 <sup>1</sup>	0.000642	0.0007

<sup>1</sup>Based on a diesel fuel sulfur content of 15 ppmv (0.0015%)

**Table 5 – Emissions from Emergency Generators**

EU ID	NOx		CO		SO <sub>2</sub>		VOC		PM	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
ENG-1	86.40	21.60	19.80	4.95	0.04	0.01	2.31	0.58	2.52	0.63
ENG-2	86.40	21.60	19.80	4.95	0.04	0.01	2.31	0.58	2.52	0.63
ENG-3	86.40	21.60	19.80	4.95	0.04	0.01	2.31	0.58	2.52	0.63

**Table 6 - Estimated HAPs Emissions (Diesel)**

Pollutant	CAS #	Emission Factor (lb/MMBTU)	Emissions	
			lb/hr	TPY
Benzene	71-43-2	7.76 E-04	0.021	0.00525
Formaldehyde	50-00-0	7.89 E-05	0.00217	0.000543
Xylene	1330207	1.93 E-04	0.0053	0.001325
Toluene	108-88-3	2.81 E-04	0.0077	0.001925
Acetaldehyde	75070	2.52 E-05	0.00069	0.000173
Acrolein	107028	7.88 E-06	0.00022	0.000055
Total PAH	--	2.12 E-04	0.0058	0.00145
<b>Total HAP(s)</b>			<b>0.04</b>	<b>0.01</b>

**Table 7 - Facility-Wide Criteria Pollutant Emission Summary**

EU ID	NOx		CO		SO <sub>2</sub>		VOC		PM <sub>10</sub>	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Unit #2	497.0	2,176.0	149.0	653.0	1.1	4.7	9.8	42.7	13.5	59.1
Unit #4	497.0	2,176.0	149.0	653.0	1.1	4.7	9.8	42.7	13.5	59.1
ENG-1	86.4	21.6	19.8	4.9	< 0.1	< 0.1	2.3	0.58	2.5	0.63
ENG-2	86.4	21.6	19.8	4.9	< 0.1	< 0.1	2.3	0.58	2.5	0.63
ENG-3	86.4	21.6	19.8	4.9	< 0.1	< 0.1	2.3	0.58	2.5	0.63
IA*	--	--	--	--	--	--	--	< 5.0	--	--
<b>Total</b>	<b>1,253.2</b>	<b>4,416.8</b>	<b>357.4</b>	<b>1,320.8</b>	<b>2.2</b>	<b>9.3</b>	<b>26.4</b>	<b>92.14</b>	<b>34.6</b>	<b>120.09</b>

\*IA – Insignificant Activities

Since no individual HAP exceeds 10 TPY and combined HAP is less than 25 TPY, the facility is considered an area source of HAP emissions.

**SECTION V. INSIGNIFICANT ACTIVITIES**

The insignificant activities identified and justified on Part 1b of the forms in the application and duplicated below. Appropriate recordkeeping on activities indicated below with “\*”, is required. Any Activity to which a state or federal applicable requirement applies is not insignificant even if it is included on this list.

1. \*Emissions from storage tanks constructed with a capacity less than 39,894 gallons which store VOC with a vapor pressure less than 1.5 psia at maximum storage temperature.

PSO has two lube oil storage tanks, #3 and #4, with 7,580 gallons capacity each. Neither of these tanks is subject to NSPS or to State permitting rules, and both store liquids with vapor pressure below the 1.5 psia threshold.

2. \*Activities that have the potential to emit no more than 5.0 TPY (actual) of any criteria pollutant.
  - a) Cold degreasing operations.
  - b) Hazardous waste and hazardous materials drum staging areas.
  - c) Exhaust systems for chemical, paint, and/or solvent storage rooms or cabinets.
  - d) Hand wiping and spraying of solvents from containers with less than one liter capacity used for spot cleaning and/or degreasing in ozone attainment areas. Tulsa County is an ozone attainment area.
  - e) A 16,800-gallon gas yard “drip” (natural gas condensate) tank is the property of the gas supplier. It has been empty for more than a decade. A 4,200-gallon “drip” tank occasionally collects a barrel or two of condensate from the pipeline, but most of the 200 to 300 gallons collected each year is water.

**SECTION VI. OKLAHOMA AIR POLLUTION CONTROL RULES**

OAC 252:100-1 (General Provisions) [Applicable]

Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-2 (Incorporation by Reference) [Applicable]

This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations listed in OAC 252:100, Appendix Q. These requirements are addressed in the “Federal Regulations” section.

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

Subchapter 3 enumerates the primary and secondary ambient air quality standards and the significant deterioration increments. At this time, all of Oklahoma is in “attainment” of these standards.

OAC 252:100-5 (Registration, Emissions Inventory and Annual Operating Fees) [Applicable]

Subchapter 5 requires sources of air contaminants to register with Air Quality, file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. Emission inventories were submitted and fees paid for previous years as required.

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 that result in emissions not authorized in the permit and that exceed the “Insignificant Activities” or “Trivial Activities” thresholds require prior notification to AQD and may require a permit modification. Insignificant activities refer to those individual emission units either listed in Appendix I 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 at the facility are based on the previous Title V permit and information in the Title V permit renewal application, or are developed from the applicable requirement.

OAC 252:100-9 (Excess Emissions 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 (PM)) [Applicable]  
 Section 19-4 regulates emissions of PM from new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. This subchapter specifies a PM emissions limitation of 0.6 lb/MMBTU from fuel-burning units with a rated heat input of 10 MMBTUH or less and a limit of 0.10 lb/MMBTU for units with a rated heat input of 10,000 MMBTUH or greater. For fuel-burning equipment with a capacity between 10 and 10,000 MMBTUH, this subchapter specifies a PM emission limitation based upon the heat input of the equipment and is calculated according to the following equations presented in OAC 252:100, Appendix C:

$$E = 1.042808 X^{-0.238561} \quad \text{For Units } > 10 \text{ MMBTUH but } < 1,000 \text{ MMBTUH}$$

$$E = 1.60 X^{-0.30103} \quad \text{For Units } \geq 1,000 \text{ MMBTUH but } < 10,000 \text{ MMBTUH}$$

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

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

Equipment	Maximum Heat Input, (MMBTUH)	Appendix C Emission Limit, (lb/MMBTU)	Potential Emission Rate, (lb/MMBTU)
Gas Boilers (each)	1,818	0.17	0.007
Emergency Generators (each)	9.16	0.60	0.27

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

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]  
 Section 25-3 specifies no discharge of greater than 20% opacity is allowed except for short-term occurrences that 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 these standards. This permit includes requirements to take opacity readings when diesel fuel is used for extended periods of time.

Section 25-5 requires continuous opacity monitoring (COM) 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. 40 CFR Part 51, Appendix P exempts fossil fuel-fired steam generators from the COM requirements when gaseous fuel is the only fuel burned. Since the fossil-fired steam generating boilers will only burn natural gas they are exempt from the opacity monitor requirements.

The diesel emergency generators have a design heat input value of 9.16 MMBTUH (each) which is below the applicable threshold for this requirement.

OAC 252:100-29 (Fugitive Dust)

[Applicable]

No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originated 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 to interfere with the maintenance of air quality standards. Under normal operating conditions, this facility has negligible potential to violate this requirement; therefore it is not necessary to require specific precautions to be taken.

OAC 252:100-31 (Sulfur Compounds)

[Applicable]

Part 2 limits the allowable hydrogen sulfide (H<sub>2</sub>S) ambient air concentrations for new and existing sources. Emissions of H<sub>2</sub>S shall not cause an ambient air concentration of H<sub>2</sub>S greater than 0.2 ppm, on a 24 hour average, at standard conditions. Fuel-burning equipment fired with pipeline natural gas or No. 2 diesel with a sulfur content of 15 ppm will not have the potential to exceed the H<sub>2</sub>S ambient air concentration limit.

Part 3 contains existing equipment standards for existing fossil fuel steam generators (Section 31-16). 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.

Each of the boilers (Units #2 and #4) is considered a fossil fuel-fired steam generator unit that was in being before July 1, 1972. However, neither unit utilizes an air pollution abatement operation to reduce the emissions of sulfur oxides and is therefore not subject to the requirements of OAC 252:100-31-16.

Part 5 contains new equipment standards for sulfur dioxide (Section 31-25) Section 31-25 applies to any fuel-burning equipment that was not in being on or before July 1, 1972 or that is modified after July 1, 1972 shall comply with the limits on sulfur dioxide emissions.

The fossil-fired steam generating boilers at this facility are not considered new fuel burning units and not considered subject to this requirement at this time. The emergency generators at this

facility are not considered new fuel burning units and not considered subject to this requirement at this time.

OAC 252:100-33 (Nitrogen Oxides)

[Not Applicable]

This subchapter limits new fuel-burning equipment with rated heat input greater than or equal to 50 MMBTUH to specific emissions of 0.2 lbs of NO<sub>x</sub> per MMBTU, three-hour average.

The fossil-fired steam generating boilers at this facility are not considered new fuel burning units and not considered subject to this requirement at this time. The emergency generators at this facility are not considered new fuel burning units and not considered subject to this requirement at this time.

OAC 252:100-35 (Carbon Monoxide)

[Not Applicable]

This subchapter affects gray iron cupolas, blast furnaces, basic oxygen furnaces, petroleum catalytic cracking units, and petroleum catalytic reforming units. There are no affected sources.

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. 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.

Part 5 limits the VOC content of coating used in coating lines or operations. This facility will not normally conduct coating or painting operations except for routine maintenance of the facility and equipment, which is not an affected operation. In addition, owners or operators of sources that emit less than 100 pounds of VOC per 24-hour day are exempt from the requirements of this section.

Part 7 requires fuel-burning equipment to be operated and maintained so as to minimize VOC emissions. Temperature and available air must be sufficient to provide essentially complete combustion. The boilers and emergency generators are designed to provide essentially complete combustion of organic materials.

OAC 252:100-39 (VOC in Nonattainment and Former Nonattainment Areas) [Not Applicable]

This subchapter imposes additional conditions beyond those of Subchapter 37 on emissions of organic materials from new and existing facilities in Tulsa and Oklahoma Counties. This facility is located within Tulsa County.

Part 3 affects petroleum refinery operations, none of which occur at this facility.

Part 5 affects petroleum liquid storage in external floating roof tanks, none of which occurs at this facility.

Part 7 affects specific operations within Tulsa and Oklahoma counties including: cutback asphalt (Section 39-40), storage, loading, and transport/delivery of VOCs (Section 39-41), Gasoline vapor leak detection (Section 39-41.1), metal cleaning (Section 39-42), graphic arts (Section 39-43), manufacturing of pneumatic rubber tires (Section 39-44), petroleum (solvent) dry cleaning (Section 39-45), coating of parts and products (Section 39-46), control of VOC emissions from aerospace industries coatings operations (Section 39-47). The only section potentially applicable to this facility is Section 39-41. However, VOCs with vapor pressures less than 1.5 pounds per

square inch absolute (psia) under actual storage conditions are exempt from 252:100-39-16 through 252:100-39-18, 252:100-39-30, and 252:100-39-41. All liquids stored at this facility have vapor pressure below the 1.5-psia threshold.

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 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 emissions unit must 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 emissions an emission unit is permitted to emit. 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). The units at the facility are considered grandfathered sources which do not have permitted emission limits. Therefore, periodic testing requirements have not been evaluated.

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

OAC 252:100-7	Minor sources	not in source category
OAC 252:100-11	Alternative Reduction	not requested
OAC 252:100-15	Mobile Sources	not in source category
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Feed & Grain Facility	not in source category

OAC 252:100-47	MSW Landfills	not in source category
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**SECTION VII. FEDERAL REGULATIONS**

PSD, 40 CFR Part 52

[Not Applicable At This Time]

This facility is a fossil fuel-fired steam electric plant with more than 250 MMBTUH heat input and is one of the listed sources where the total potential emissions for NO<sub>x</sub>, CO, and PM are greater than the major source threshold level of 100 TPY. PSD affects new major stationary sources and major modifications to existing stationary sources. Any future increases of emissions must be evaluated for PSD if they exceed a significance level (100 TPY CO, 40 TPY NO<sub>x</sub>, 40 TPY SO<sub>2</sub>, 40 TPY VOC, 25 TPY PM, 15 TPY PM<sub>10</sub>, 0.6 TPY Lead).

NSPS, 40 CFR Part 60

[Not Applicable]

Subparts D, Fossil-FuelFired Steam Generators. Each fossil-fuel-fired steam generating unit of more than 73 megawatts (MW) heat input rate (250 million British thermal units per hour (MMBtu/hr)) that commenced construction or modification after August 17, 1971, is subject to the requirements of this subpart. Unit #2 and Unit #4 commenced construction before this date (1956 and 1958, respectively), have not been considered to be modified or reconstructed, and are not an affected source.

Subpart Da, Electric Utility Steam Generating Units. This subpart affects electric steam generating units with a design capacity greater than 250 MMBTUH that commenced construction after September 18, 1978. The key pollutants EPA regulates from these sources includes particulate matter (PM), nitrogen oxides (NO<sub>x</sub>), and sulfur dioxide (SO<sub>2</sub>). Unit #2 and Unit #4 commenced construction before this date and are not an affected source.

Subpart Db, Industrial-Commercial-Institutional Steam Generating Units. The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)). Unit #2 and Unit #4 commenced construction before this date and are not an affected source.

Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units. This subpart affects steam generating units with a design capacity greater than or equal to 10 MMBTUH and less than or equal to 100 MMBTUH, for which construction, modification, or reconstruction is commenced after June 9, 1989. Unit #2 and Unit #4 commenced construction before this date and are not an affected source.

Subparts K, Ka, Kb, Volatile Organic Liquid (VOL) Storage Vessels. The earliest effective date of any of these Subparts is June 11, 1973. All of the hydrocarbon storage tanks were constructed before that date, and are not affected sources.

Subpart GG, Stationary Gas Turbines. This subpart affects stationary gas turbines with a heat input at peak load of greater than or equal to 10.7 gigajoules per hour (10 MMBTUH) based on the lower heating value (LHV) of the fuel and that commenced construction, reconstruction, or modification after October 3, 1977. There are no stationary gas turbines located at this facility.

Subpart IIII, Stationary Compression Ignition Internal Combustion Engines. This subpart affects stationary compression ignition (CI) internal combustion engines (ICE) based on power and displacement ratings, depending on date of construction, beginning with those constructed after July 11, 2005. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator. The emergency generators were constructed prior to the effective date of this subpart. This subpart is not applicable.

Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines (SI-ICE), promulgates emission standards for all new SI engines ordered after June 12, 2006, and all SI engines modified or reconstructed after June 12, 2006, regardless of size. There are no affected SI engines at the facility. This subpart is not applicable.

Subpart KKKK, Stationary Combustion Turbines. This subpart affects combustion turbines with a power output at peak load of 10 MW that commence construction, modification, or reconstruction after February 18, 2005. There are no combustion turbines located at this facility.

Subpart TTTT, Greenhouse Gas Emissions for Electric Generating Units. This subpart establishes GHG standards to any steam generating unit, IGCC, or stationary combustion turbine that commenced construction after January 8, 2014 or commenced reconstruction after June 18, 2014 that meets the relevant applicability conditions in paragraphs (a)(1) and (2) of §60.5509. The GHG standards included in this subpart also apply to any steam generating unit or IGCC that commenced modification after June 18, 2014, that meets the relevant applicability conditions in paragraphs (a)(1) and (2) of §60.5509. The units at this facility pre-date the Subpart TTTT applicability dates.

Subpart UUUUa, Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units. This subpart requires the state governor to submit a plan for limiting GHG emissions by July 8, 2022.

NESHAP, 40 CFR Part 61

[Not Applicable]

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

NESHAP, 40 CFR Part 63

[Subpart ZZZZ Applicable]

Subpart Q, Industrial Process Cooling Towers. This subpart applies to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals, and are either major sources or are integral parts of facilities that are major sources as defined in § 63.401. This facility does not have or use industrial process cooling towers that are operated with chromium-based water treatment chemicals.

Subpart YYYY, Stationary Combustion Turbines. This subpart, affects existing, new, or reconstructed stationary combustion turbines located at a major source of HAP emissions. There are no combustion turbines at this facility.

Subpart ZZZZ, Reciprocating Internal Combustion Engines. This subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. Owners and operators of new engines and reconstructed engines at major sources 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).

EUG 4 units are existing sources located at an area source of HAP and subject to the requirements in Table 2(d) of this subpart which is summarized in the table below. In addition, the facility is required to operate the engine according to the requirements in paragraphs (f)(1) through (4) of

§63.6640. The permit incorporates the requirement to comply with all applicable requirements of NESHAP, Subpart ZZZZ.

**Table 2(d) of Subpart ZZZZ of Part 63**

<b>RICE Category</b>	<b>You must meet the following requirement, except during periods of startup...</b>	<b>During periods of startup you must...</b>
Emergency Stationary CI RICE and Black Start Stationary CI RICE <sup>2</sup>	Change oil and filter every 500 hours of operation or annually, whichever comes first <sup>1</sup> ;	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
	Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and	
	Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

<sup>1</sup> Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of Subpart ZZZZ.

<sup>2</sup> If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

Subpart DDDDD, Industrial, Commercial and Institutional Boilers and Process Heaters. This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from major sources of HAP. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards. A boiler or process heater is new if construction (or reconstruction) commenced after June 4, 2010, and you meet the applicability criteria at the time you commence construction. Pursuant to §63.7491, the types of boilers and process heaters listed in paragraphs (a) through (n) are not subject to this subpart. Electric utility steam generating units are exempt from this subpart per 63.7491(a). This subpart is not applicable.

Subpart UUUUU, Coal-and Oil-Fired Electric Utility Steam Generating Units. This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from coal- and oil-fired electric utility steam generating units (EGUs) as defined in §63.10042 of this subpart. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations. Units #2 and #4 burn natural gas and are not subject to this subpart per §63.9983(b).



Compliance Assurance Monitoring (CAM), 40 CFR Part 64 [Not Applicable]  
This part applies to any pollutant-specific emission unit at a major source that is required to obtain an operating permit, for any application for renewal of an operating 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 levels.

No emission unit utilizes a control device to meet an applicable standard; therefore, CAM is not applicable.

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable]  
There will be no regulated substances used, stored or processed at the facility above threshold levels as a result of this project except possibly hydrazine and hydrogen. If a hydrazine and hydrogen will be stored above the applicable threshold, the facility will need to comply with the requirements of this part by the date on which the regulated substance (ammonia) is present above the threshold quantity. More information on this federal program is available on the web page: [www.epa.gov/rmp](http://www.epa.gov/rmp).

Acid Rain, 40 CFR Part 72 (Permit Requirements) [Applicable]  
Unit #2 and Unit #4 are subject to acid rain permitting and are currently authorized under Permit No. 2019-0784-ARR4, issued on January 13, 2020.

Acid Rain, 40 CFR Part 73 (SO<sub>2</sub> Requirements) [Applicable]  
This part provides for allocation, tracking, holding, and transferring of SO<sub>2</sub> allowances.

Acid Rain, 40 CFR Part 75 (Monitoring Requirements) [Applicable]  
Unit #2 and Unit #4 are affected units and must meet the monitoring requirements of the Acid Rain Program whenever these units are operated.

Acid Rain, 40 CFR Part 76 (NO<sub>x</sub> Requirements) [Not Applicable]  
This part provides for NO<sub>x</sub> limitations and reductions for coal-fired utility units only. 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 [Subparts A and F are Applicable]  
These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and banning use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to Class I and Class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds

under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H).

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

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

The standard conditions of the permit address the requirements specified 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 is Applicable]  
Subpart EEEEE, Cross-State Air Pollution Rule (CSAPR) NO<sub>x</sub> Ozone Season Group 2 Trading Program. This subpart establishes various 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. The monitoring program must comply with 40 CFR Part 75 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 administrating 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. Unit #2 (CSAPR Unit ID 1402) and Unit #4 (CSAPR Unit ID 1404) are CSAPR NO<sub>x</sub> Ozone Season Group 2 units subject to the requirements of this subpart. The permit includes the requirement to comply with all applicable requirements of this subpart.

**SECTION VIII. COMPLIANCE**

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

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

<b>Inspection Type</b>	<b>Date</b>	<b>Summary/Results</b>
Full Inspection	06/26/2020	In compliance
Full Inspection	05/31/2018	In compliance
Full Inspection	08/20/2015	In compliance

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

**Testing**

The facility continues to monitor emissions as required by 40 CFR Part 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.

This facility shall comply with the emission monitoring and reporting requirements of Appendix D of 40 CFR Part 75 which requires annual RATA for Units 1402 and 1404. The following table lists the most recent tests conducted.

<b>Unit</b>	<b>Test Type</b>	<b>Test Dates</b>
1402	RATA	09/03/2020
1404	RATA	09/04/2020

**SECTION IX. TIER CLASSIFICATION, PUBLIC AND EPA REVIEW**

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

The applicant will published the “Notice of Filing a Tier II Application” in a newspaper of general circulation in Tulsa County. The notice will state that the application is available for public review at a location accessible to the public in the same county as the facility and also at the Air Quality Division’s main office in Oklahoma City. The “Notice of Tier II Draft Permit” will state that the draft permit is available for public review at a location accessible to the public in the same county as the facility, at the AQD main office, and on the Air Quality section of the DEQ web page. The information on all permit actions is available for review by the public in the Air Quality section of the DEQ web page at <https://www.deq.ok.gov>.

The applicant has requested concurrent public and EPA review periods. The draft permit will be available for public review on the Air Quality section of the DEQ web page at <https://www.deq.ok.gov>. The proposed permit will be sent to EPA for a 45-day review period.

This facility is not located within 50 miles of the border of Oklahoma so no notice to other states is required.

If the Administrator does not object in writing during the 45-day EPA review period, any person that meets the requirements of this subsection 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 this subsection, 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 this subsection, the DEQ will modify, terminate, or revoke such permit, and shall do so consistent with the procedures in 40 CFR §§ 70.7(g)(4) or (5)(i) and (ii) except in unusual circumstances. If the DEQ revokes the permit, it may thereafter issue only a revised permit that satisfies EPA's objection. In any case, the source will not be in violation of the requirement to have submitted a timely and complete application.

## **SECTION X. SUMMARY**

The facility is operating as described in the permit application and supplemental materials. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues concerning this facility. Issuance of the permit is recommended, contingent on public and EPA review.

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

**Public Service Company of Oklahoma  
PSO Tulsa Power Station**

**Permit No. 2019-1277-TVR4  
Facility ID: 215**

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on December 12, 2019. The Evaluation Memorandum dated June 11, 2021, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein.

1. Points of emissions and emissions limitations for each point: [OAC 252:100-8-6(a)]  
For the purposes of lb/hr and TPY limits, where these limitations conflict with those of Acid Rain Permit No. 2019-0784-ARR4, the more stringent limitation applies.

**EUG 1 Grandfathered Steam Generating Boilers**

There are no emission limits applied to these units under Title V, but they are limited to the existing equipment as they are.

<b>EU ID</b>	<b>Point ID</b>	<b>Make/Model</b>	<b>MW</b>	<b>MMBTUH</b>	<b>Construction Date</b>
Unit #2	Unit #2	Babcock & Wilcox RB-240	175	1,818	1956
Unit #4	Unit #4	Babcock & Wilcox RB-241	175	1,818	1958

**EUG 2 Empty**

**EUG 3 Plant-Wide**

This EUG is established to cover all rules or regulations that apply to the facility as a whole.

**EUG 4: Grandfathered Emergency Generators**

There are no emission limits applied to these units under Title V, but they are limited to the existing equipment as they are.

<b>EU</b>	<b>Point</b>	<b>Description</b>	<b>Hp</b>	<b>Commenced Construction</b>
ENG-1	ENG-1	Emergency Generator 1	3,600	Prior to 1972
ENG-2	ENG-2	Emergency Generator 2	3,600	Prior to 1972
ENG-3	ENG-3	Emergency Generator 3	3,600	Prior to 1972

2. Unit #2 and Unit #4 shall be fired with pipeline natural gas defined in 40 CFR Part 72 as having a sulfur content no greater than 0.5 grains/100 SCF. Compliance can be shown for gaseous fuel by a gas company bill. Compliance shall be demonstrated at least once every calendar year. [OAC 252:100-31]

3. The permittee shall be authorized to operate all equipment continuously (24 hours per day, every day of the year). [OAC 252:100-8-6(a)]
4. The electric generating boilers (Unit #2 and Unit #4) are subject to the Acid Rain Program and shall comply with all applicable requirements including the following:  
[40 CFR Parts 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
5. No person shall allow the discharge of any fumes, aerosol, mist, gas, smoke, vapor, particulate matter, or any combination thereof exhibiting greater than 20% opacity except for the provisions in 252:100-25-3 (b)(1) through (4). When diesel fuel is burned in an emergency generator for more than a 24-hour period, the permittee shall conduct visual observations of the opacity from exhaust stacks for each subsequent 24-hour period. If any visible emissions are detected, then the permittee shall conduct a 6-minute opacity reading by a certified observer in accordance with EPA Reference Method #9 (RM 9). The permittee shall maintain records of the date and time of each observation, stack or emission point identification, operational status of the emission unit, observed results and conclusions, and RM 9 results. [OAC 252:100-43 & OAC 252:100-25-3]
6. All fuel-burning or refuse-burning equipment shall be operated to minimize emissions of VOC. Among other things, such operation shall assure that the equipment is not overloaded; that it is properly cleaned, operated, and maintained; and that temperature and available air are sufficient to provide essentially complete combustion. [OAC 252:100-37-36]
7. Unit #2 and Unit #4 are large enough to require permitting if they were modified sources. The permittee shall maintain Operating and Maintenance records sufficient to demonstrate that these sources have not been modified or reconstructed to an extent requiring permitting. [OAC 252:100-43]
8. The electric generating boilers in EUG 1 (Unit #2 (CSAPR ID 1402) and Unit #4 (CSAPR ID 1404)) 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.
9. EUG 4 units are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP ZZZZ) for Stationary Reciprocating Internal Combustion Engines. On or after the compliance date(s) specified in §63.6595, the permittee shall comply with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ, including but not limited to, the following.
- [40 CFR §63.658 to §63.6675]
- a. §63.6580 What is the purpose of subpart ZZZZ?
  - b. §63.6585 Am I subject to this subpart?
  - c. §63.6590 What parts of my plant does this subpart cover?
  - d. §63.6595 When do I have to comply with this subpart?
  - e. §63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?



- f. §63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?
  - g. §63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?
  - h. §63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
  - i. §63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?
  - j. §63.6605 What are my general requirements for complying with this subpart?
  - k. §63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?
  - l. §63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?
  - m. §63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?
  - n. §63.6615 When must I conduct subsequent performance tests?
  - o. §63.6620 What performance tests and other procedures must I use?
  - p. §63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?
  - q. §63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?
  - r. §63.6635 How do I monitor and collect data to demonstrate continuous compliance?
  - s. §63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?
  - t. §63.6645 What notifications must I submit and when?
  - u. §63.6650 What reports must I submit and when?
  - v. §63.6655 What records must I keep?
  - w. §63.6660 In what form and how long must I keep my records?
  - x. §63.6665 What parts of the General Provisions apply to me?
  - y. §63.6670 Who implements and enforces this subpart?
  - z. §63.6675 What definitions apply to this subpart?
10. The following records shall be maintained on-site. All such records shall be made available to regulatory personnel upon request. These records shall be maintained for a period of at least five years after the time they are made. [OAC 252:100-43]
- a) Emissions data as required by the Acid Rain Program.
  - b) RATA test results from periodic CEMS certification tests required under Specific Condition 4.

- c) Operations and maintenance log for all Units sufficient to demonstrate compliance with Specific Condition #7.
  - d) Reference Method 9 opacity observations as required by Specific Condition #5.
  - e) Data necessary to demonstrate compliance with Specific Condition #2. Compliance can be shown for gaseous fuel by a current gas bill, current lab analysis, gas contract, tariff sheet, or other approved methods. Compliance shall be demonstrated at least once per calendar year.
  - f) Records required by NESHAP, Subpart ZZZZ.
11. 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, and contents.
  - 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).
12. No later than 30 days after each anniversary date of the issuance of the original Part 70 permit (May 20, 1999), 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)]
13. This facility is considered an existing 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)]
14. This permit supersedes and replaces all previous Air Quality operating permits for this facility except Acid Rain Permit No. 2019-0784-ARR4, which are now canceled.

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

**SECTION I. DUTY TO COMPLY**

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

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

C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed.

[40 C.F.R. §70.6(b), OAC 252:100-8-1.3 and OAC 252:100-8-6(a)(7)(A) and (b)(1)]

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

**SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS**

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

B. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements. [OAC 252:100-8-6(a)(3)(C)(iv)]

C. Every written report submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.

[OAC 252:100-8-6(a)(3)(C)(iv)]

**SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING**

A. The permittee shall keep records as specified in this permit. These records, including monitoring data and necessary support information, shall be retained on-site or at a nearby field office for a period of at least five years from the date of the monitoring sample, measurement,

report, or application, and shall be made available for inspection by regulatory personnel upon request. Support information includes all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Where appropriate, the permit may specify that records may be maintained in computerized form.

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

B. Records of required monitoring shall include:

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

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

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

[OAC 252:100-8-6(a)(3)(C)(i) and (ii)]

D. If any testing shows emissions in excess of limitations specified in this permit, the owner or operator shall comply with the provisions of Section II (Reporting Of Deviations From Permit Terms) of these standard conditions.

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

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

[OAC 252:100-43]

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

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

G. Any owner or operator subject to the provisions of New Source Performance Standards ("NSPS") under 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants ("NESHAPs") under 40 CFR Parts 61 and 63 shall maintain a file of all measurements and other information required by the applicable general provisions and subpart(s). These records shall be maintained in a permanent file suitable for inspection, shall be retained for a period of at least five years as required by Paragraph A of this Section, and shall include records of the occurrence and

duration of any start-up, shutdown, or malfunction in the operation of an affected facility, any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

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

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

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

[OAC 252:100-8-6(a)(3)(A)(iv), and OAC 252:100-43]

J. The reporting of total particulate matter emissions as required in Part 7 of OAC 252:100-8 (Permits for Part 70 Sources), OAC 252:100-19 (Control of Emission of Particulate Matter), and OAC 252:100-5 (Emission Inventory), shall be conducted in accordance with applicable testing or calculation procedures, modified to include back-half condensables, for the concentration of particulate matter less than 10 microns in diameter (PM<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]



# PART 70 PERMIT

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

Permit No. 2019-1277-TVR4

AEP – Public Service Company of Oklahoma,

having complied with the requirements of the law, is hereby granted permission to operate the PSO Tulsa Power Station, located in Section 24, Township 19N, Range 12E, in Tulsa County, Oklahoma, subject to the Standard Conditions dated June 21, 2016, and Specific Conditions, both of which are attached.

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

DRAFT/PROPOSED

\_\_\_\_\_  
Division Director

\_\_\_\_\_  
Date



SCOTT A. THOMPSON  
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT  
Governor

AEP-Public Service Company of Oklahoma  
Attn: Mr. Ken Ruffin  
1201 Elm Street, Suite 4100  
Dallas, TX 75270

SUBJECT: Permit Application No. **2019-1277-TV4**  
PSO Tulsa Power Station (SIC 4911/NAICS 221112)  
AQD Facility ID: 215  
Physical Address: 3600 S Elwood Ave, Tulsa, OK 74101

Dear Mr. Ruffin:

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

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

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact me or the permit writer at (405) 702-4100.

Sincerely,

A handwritten signature in black ink that reads 'Phillip Fielder'.

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

Enclosures





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

## **APPLICANT RESPONSIBILITIES**

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

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

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

**SAMPLE NOTICE continued on next page.**

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

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

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

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

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

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

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

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

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

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

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

<b>NSPS</b>	New Source Performance Standards	<b>SIP</b>	State Implementation Plan
<b>NSR</b>	New Source Review	<b>SNCR</b>	Selective Non-Catalytic Reduction
		<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>THC</b>	Total Hydrocarbons
		<b>TPY</b>	Tons per Year
<b>PAH</b>	Polycyclic Aromatic Hydrocarbons	<b>TRS</b>	Total Reduced Sulfur
<b>PAE</b>	Projected Actual Emissions	<b>TSP</b>	Total Suspended Particulates
<b>PAL</b>	Plant-wide Applicability Limit	<b>TV</b>	Title V of the Federal Clean Air Act
<b>Pb</b>	Lead		
<b>PBR</b>	Permit by Rule	<b>µg/m<sup>3</sup></b>	Micrograms per Cubic Meter
<b>PCB</b>	Polychlorinated Biphenyls	<b>US EPA</b>	U. S. Environmental Protection Agency
<b>PCE</b>	Partial Compliance Evaluation		
<b>PEA</b>	Portable Emissions Analyzer	<b>VFR</b>	Vertical Fixed Roof
<b>PFAS</b>	Per- and Polyfluoroalkyl Substance	<b>VMT</b>	Vehicle Miles Traveled
<b>PM</b>	Particulate Matter	<b>VOC</b>	Volatile Organic Compound
<b>PM<sub>2.5</sub></b>	Particulate Matter with an Aerodynamic Diameter <= 2.5 Micrometers	<b>VOL</b>	Volatile Organic Liquid
<b>PM<sub>10</sub></b>	Particulate Matter with an Aerodynamic Diameter <= 10 Micrometers	<b>VRT</b>	Vapor Recovery Tower
<b>POM</b>	Particulate Organic Matter or Polycyclic Organic Matter	<b>VRU</b>	Vapor Recovery Unit
<b>ppb</b>	Parts per Billion	<b>YR</b>	Year
<b>ppm</b>	Parts per Million	<b>2SLB</b>	2-Stroke Lean Burn
<b>ppmv</b>	Parts per Million Volume	<b>4SLB</b>	4-Stroke Lean Burn
<b>ppmvd</b>	Parts per Million Dry Volume	<b>4SRB</b>	4-Stroke Rich Burn
<b>PSD</b>	Prevention of Significant Deterioration		
<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		
<b>SER</b>	Significant Emission Rate		
<b>SI</b>	Spark Ignition		
<b>SIC</b>	Standard Industrial Classification		

