#### DRAFT/PROPOSED

# OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

MEMORANDUM August 4, 2020

**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:** David Schutz, P.E., New Source Permit Section

**FROM:** Junru Wang, E.I., Existing Source Permit Section

**SUBJECT:** Evaluation of Permit Application No. **2019-0563-TVR3** 

American Electric Power (AEP)

Public Service Company of Oklahoma (PSO)

PSO – Weleetka Power Station

AQD Facility ID: 216

Section 22, Township 10N, Range 11E, Okfuskee County, Oklahoma

Latitude 35.32403° N and Longitude 96.13556° W

Directions: Take US Highway 75 south from I-40 for 7 miles into Weleetka. Proceed past the junction with State Highway 84 to the intersection with Seminole Avenue. Go two blocks south on Seminole Avenue to 10<sup>th</sup> Street. Go east on 10<sup>th</sup> Street, which becomes PSO Road, and continue curving to the south and then to the southeast for a distance of approximately 0.6 miles. Turn right and follow the road for approximately 0.4 miles south-southwest

into the facility complex.

#### 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 Weleetka Power Station. The facility is currently operating under Permit No. 2011-1000-TVR2, issued on November 6, 2014. The facility is an electric utility plant (SIC 4911/NAICS 221112) and is located in an attainment area. The facility is a major source for Prevention of Significant Deterioration (PSD) and a minor source of Hazardous Air Pollutants (HAPs).

#### SECTION II. FACILITY DESCRIPTION

The facility produces power using two (2) Turbodyne Corporation skid-mounted, simple-cycle combustion turbines. Each turbine is rated at 60.8 MW. The turbines are primarily run on natural gas with No. 2 fuel oil as an alternate fuel. In addition, the facility includes two (2) 2,700-hp diesel-fired emergency generators and two (2) storage tanks: one containing No. 2 fuel oil and another containing diesel fuel. The storage tanks are listed as insignificant activities. It should be noted that the No. 2 fuel oil tanks have been empty and No. 2 fuel oil has not been used in several

years. At the request of the permittee, the specific conditions authorizing the use of No. 2 fuel oil have been retained to allow for operational flexibility.

#### **SECTION III. PERMIT HISTORY**

Permits	Date Issued	Description					
74-106-C	5/15/1974	Initial construction for turbine					
74-206-C	3/20/1975	Construction to add turbine					
74-106-O	9/16/1076	Initial operating permit					
74-206-O	11/1/1976	Operating permit for added turbine					
96-287-TV	12/2/1998	Initial Title V operating permit					
96-287-TV M-1	5/20/1999	Minor modification to address opacity monitoring requirements					
2003-191-TVR	5/21/2007	First Title V operating renewal					
2003-191-TVR M-1	10/8/2009	Administrative amendment to correct turbine model and serial number					
2011-1000-TVR2	11/6/2014	Second Title V renewal					

# SECTION IV. REQUESTED CHANGES

The applicant has requested to remove the Turbodyne 11D4 turbine (Unit #6) from the Title V operating permit since it was retired-in-place on March 1, 2019.

The maximum heat ratings for the turbines have been readjusted to 721-MMBTUH. The rating was changed from 721-MMBTUH to 995-MMBTUH in the first Title V operating renewal permit (Permit No. 2003-191-TVR) as requested by the company. However, the change was not completed, and the maximum heat input for each turbine has always been 721-MMBTUH. In order to maintain the historic emission limits for the turbines, additional safety factors have been added to the emission factors.

Additional testing requirements for turbines have been added to the permit in order to demonstrate on-going compliance with emission limits under OAC 252:100-43 and Part 70 gap filing criteria.

The following Specific Condition has been removed from the permit since the requirement is already incorporated in Standard Conditions XIX (A)(7).

• The permittee shall at all times properly operate and maintain all turbines in a manner that will minimize emissions of hydrocarbons or other organic materials.

Since the turbines have the ability to burn both natural gas and fuel oil, additional continuous monitoring of opacity (COM) requirements have been incorporated into the permit in order to demonstrate compliance with OAC 252:100-25-5.

Federal NO<sub>X</sub> and SO<sub>2</sub> Trading Programs (40 CFR Part 97) have been incorporated into the permit.

# SECTION V. EQUIPMENT

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

**EUG 1: Facility Wide Requirements** 

EU	Point
None	None

#### **EUG 4: Combustion Turbines**

EU	Point	Point Make/Model		Serial #	<b>Construction Date</b>	
Unit #4	Unit #4	Turbodyne 11D2	60.8	31088	1974	
Unit #5	Unit #5	Turbodyne 11D4	60.8	31230	1975	

**EUG 7: Storage Tanks** 

EU	Point	Name/Equipment	Size (Gallons)	<b>Construction Date</b>
T1	T1	Fuel Oil	4,000,000	1974
T2	T2	Diesel Fuel	10,000	1987

**EUG 8: Emergency Generators** 

	EU	Point	Make/Model	hp	Serial #	Const. Date **
	D1	D1	General Motors/567D4	2,700	63-G-23	1963
ſ	D2	D2	General Motors/567D4	2,700	63-G-37	1963

<sup>\*\*</sup>Emergency generators moved to Weleetka Power Station in 1987.

#### **Stack Parameters**

Course	Height	Height Diameter		Flow rate
Source	(feet)	(feet)	(° <b>F</b> )	(ACFM)
Unit #4	54	10.2	900	457,619
Unit #5	54	10.2	900	457,619

# 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 4** Combustion Turbines

Estimates of regulated pollutant emissions from the turbines are based on continuous operations for the two (2) 81,501-hp turbines and AP-42 emission factors (4/00), Section 3.1 "Stationary Gas Turbines", Table 3.1-1 (plus a 38% safety factor) and Table 3.1-2a (plus a 18.59% safety factor) for natural gas and fuel oil, respectively.

The turbines also emit HAPs. The most significant HAPs are listed below. Emission factors for those pollutants are obtained from EPA's AP-42 (04/00), Tables 3.1-3, 3.1-4, and 3.1-5, except formaldehyde and toluene (gas-firing) which are based on the Electric Power Research Institute (EPRI) publication EPRI TR-105646 (3177-21) entitled "Gas-Fired Boiler and Turbine Air Toxics Summary Report", December 1996.

For estimation purposes, natural gas fuel is assumed to have an average heating value of 1,000 Btu/scf, and No. 2 fuel oil is assumed to have a sulfur content of 0.4% (by weight) and an average heating value of 137,000 Btu/gallon.

This permit limits the combined annual No. 2 fuel oil consumption (throughput) for the two (2) gas turbines to 12,631,920 MMBtu/year. This fuel oil throughput is equivalent to about 92,203,796 gallons (2,195,329 bbls) of No. 2 fuel oil at an average heating value of 137,000 Btu/gallon.

This permit also limit the combined turbine hourly fuel oil consumption rate to not exceed 1,442 MMBtu/hour to ensure that the potential hourly NOx emission rate will remain within the permit limits.

Table 1 - Emission Factors for Gas Turbines (lb/MMBtu)

Fuel	NOx	CO	SO <sub>2</sub>	VOC	PM <sub>10</sub>
Natural Gas <sup>(1)</sup>	0.4416	0.1132	0.0008	0.0029	0.0091
No. 2 Fuel Oil <sup>(2)</sup>	1.0436	0.0039	0.4791	0.0005	0.0142

<sup>(1)</sup> Include a 38% safety factor (1+38%).

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

EU	NOx		CO		SO <sub>2</sub>		VOC		PM <sub>10</sub>	
ID#	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Unit #4	318.4	1,394.59	81.59	357.36	0.60	2.61	2.09	9.15	6.57	28.76
Unit #5	318.4	1,394.59	81.59	357.36	0.60	2.61	2.09	9.15	6.57	28.76

**Table 3 – Estimated Turbine Emissions (No. 2 Fuel Oil)** 

EU	NOx			CO	S	$O_2$	V	OC	PN	$M_{10}$
ID#	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Unit #4	752.40	3,295.51	2.82	12.36	345.42	1,512.94	0.35	1.54	10.26	44.94
Unit #5	752.40	3,295.51	2.82	12.36	345.42	1,512.94	0.35	1.54	10.26	44.94

Table 4 - Estimated Turbine Emissions
(Natural Gas or Fuel Oil Firing)

	(2 1000000 01 2 000 01 2 11 11 18)										
EU	NOx		(	CO	S	$O_2$	V	OC	PN	<b>I</b> 10	
ID#	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	
Unit #4	752.40	3,295.51	81.59	357.36	345.42	1,512.94	2.09	9.15	10.26	44.94	
Unit #5	752.40	3,295.51	81.59	357.36	345.42	1,512.94	2.09	9.15	10.26	44.94	

**Table 5 - Estimated HAPs Emissions (Natural Gas Firing)** 

Pollutant	Emission Factor	Max. per Tu		Max. PTE of 2-Turbines		
	lb/MMBtu	lb/hour	TPY	lb/hour	TPY	
Acetaldehyde	4.00E-05	0.0288	0.13	0.0577	0.25	
Acrolein	6.40E-06	0.0046	0.02	0.0092	0.04	
Benzene	1.20E-05	0.0087	0.04	0.0173	0.08	
Ethyl benzene	3.20E-05	0.0231	0.10	0.0461	0.20	
Formaldehyde	9.00E-05	0.0649	0.28	0.1298	0.57	

<sup>(2)</sup> Include an 18.59% safety factor (1+18.59%).

	Emission	Max.	PTE	Max. PTE		
Pollutant	Factor	per Tu	rbine	of 2-Turbines		
	lb/MMBtu	lb/hour	TPY	lb/hour	TPY	
Propylene Oxide	2.90E-05	0.0209	0.09	0.0418	0.18	
Toluene	6.20E-05	0.0447	0.20	0.0894	0.39	
Xylenes	6.40E-05	0.0461	0.20	0.0923	0.40	
	Tota	l Emissions			2.12	
l	Previous Emissi	ons (2011-100	0-TVR2)		4.39	
	Change	e in Emissions			-2.27	

**Table 6 - Estimated HAPs Emissions (Fuel Oil Firing)** 

Max. PTE Max. PTE Max. PTE										
	<b>Emission Factor</b>			Max.						
Pollutant			<u>'urbine</u>	of 2-Tu	rbines					
	lb/MMBtu	lb/hour	TPY	lb/hour	TPY					
Inorganics										
Arsenic	1.10E-05	0.0079	0.03	0.0159	0.07					
Beryllium	3.10E-07	0.0002	0.00	0.0004	0.00					
Cadmium	4.80E-06	0.0035	0.02	0.0069	0.03					
Chromium	1.10E-05	0.0079	0.03	0.0159	0.07					
Lead	1.40E-05	0.0101	0.04	0.0202	0.09					
Manganese	7.90E-04	0.5696	2.49	1.1392	4.99					
Mercury	1.20E-06	0.0009	0.00	0.0017	0.01					
Nickel	4.60E-06	0.0033	0.01	0.0066	0.03					
Selenium	2.50E-05	0.0180	0.08	0.0361	0.16					
	Or	ganics								
1,3-Butadiene	1.60E-05	0.0115	0.05	0.0231	0.10					
Acetaldehyde	N/A	N/A	N/A	N/A	N/A					
Acrolein	N/A	N/A	N/A	N/A	N/A					
Benzene	5.50E-05	0.0397	0.17	0.0793	0.35					
Ethyl benzene	N/A	N/A	N/A	N/A	N/A					
Formaldehyde	2.80E-04	0.2019	0.88	0.4038	1.77					
Naphthalene	3.50E-05	0.0252	0.11	0.0505	0.22					
PAH	4.00E-05	0.0288	0.13	0.0577	0.25					
Propylene Oxide	N/A	N/A	N/A	N/A	N/A					
Toluene	N/A	N/A	N/A	N/A	N/A					
Xylenes	N/A	N/A	N/A	N/A	N/A					
	Total Emis	sions			8.13					
Pro	evious Emissions (20	11-1000-T	VR2)		14.46					
	Change in Em	issions			-6.33					

# **EUG 8 Emergency Generators**

Emergency generator 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. HAP emissions are negligible.

**Table 7 - Emission Factors for Emergency Generators (lb/hp•hr)** 

Fuel	NOx	CO	SO <sub>2</sub>	VOC	PM <sub>10</sub>
Diesel	0.024	0.0055	0.00027	0.000705	0.0007

EU	N	Ox	(	CO	S	$O_2$	V(	OC	PN	$I_{10}$
ID#	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
D1	64.80	16.20	14.85	3.71	0.73	0.18	1.90	0.48	1.89	0.47
D2	64.80	16.20	14.85	3.71	0.73	0.18	1.90	0.48	1.89	0.47

Table 8 - Estimated Worst Case Facility-Wide Emissions (Natural Gas or Fuel Oil Firing)

EU	NOx CO		CO	$SO_2$		VOC		$PM_{10}$		
ID#	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Unit #4	752.40	3,295.51	81.59	357.36	345.42	1,512.94	2.09	9.15	10.26	44.94
Unit #5	752.40	3,295.51	81.59	357.36	345.42	1,512.94	2.09	9.15	10.26	44.94
D1	64.80	16.20	14.85	3.71	0.73	0.18	1.90	0.48	1.89	0.47
D2	64.80	16.20	14.85	3.71	0.73	0.18	1.90	0.48	1.89	0.47
Total	1634.40	6,623.42	192.88	722.14	692.30	3,026.24	7.98	19.26	24.30	90.82
2011-1000- TVR2	2,386.80	9,918.94	274.47	1,079.51	1,037.72	4,539.18	10.07	28.42	34.56	135.76
Change	-752.40	-3,295.51	-81.59	-357.37	-345.42	-1,512.94	-2.09	-9.16	-10.26	-44.94

Table 9 – Estimated Worst Case Facility-Wide HAP Emissions (Natural Gas or Fuel Oil Firing)

(Natural Gas or Fuel Oil Firing)										
Emission Factor	Max	. PTE	Max.	PTE						
Ellission Factor	per T	<b>urbine</b>	of 2-Turbines							
lb/MMBtu	lb/hour	TPY	lb/hour	TPY						
Inorganics										
1.10E-05	0.0079	0.03	0.0159	0.07						
3.10E-07	0.0002	0.00	0.0004	0.00						
4.80E-06	0.0035	0.02	0.0069	0.03						
1.10E-05	0.0079	0.03	0.0159	0.07						
1.40E-05	0.0101	0.04	0.0202	0.09						
7.90E-04	0.5696	2.49	1.1392	4.99						
1.20E-06	0.0009	0.00	0.0017	0.01						
4.60E-06	0.0033	0.01	0.0066	0.03						
2.50E-05	0.0180	0.08	0.0361	0.16						
Or	ganics									
1.60E-05	0.0115	0.05	0.0231	0.10						
4.00E-05	0.0288	0.13	0.0577	0.25						
6.40E-06	0.0046	0.02	0.0092	0.04						
5.50E-05	0.0397	0.17	0.0793	0.35						
3.20E-05	0.0231	0.10	0.0461	0.20						
2.80E-04	0.2019	0.88	0.4038	1.77						
3.50E-05	0.0252	0.11	0.0505	0.22						
4.00E-05	0.0288	0.13	0.0577	0.25						
	Emission Factor   Ib/MMBtu   Ino	Emission Factor         Max per T           Ib/MMBtu         Ib/hour           Inorganics         1.10E-05         0.0079           3.10E-07         0.0002         4.80E-06         0.0035           1.10E-05         0.0079         1.40E-05         0.0101           7.90E-04         0.5696         1.20E-06         0.0009           4.60E-06         0.0033         2.50E-05         0.0180           Organics           1.60E-05         0.0115         4.00E-05         0.0288           6.40E-06         0.0046         5.50E-05         0.0397           3.20E-05         0.0231         2.80E-04         0.2019           3.50E-05         0.0252         0.0252	Emission Factor         Max. PTE per Turbine           Ib/MMBtu         Ib/hour         TPY           Inorganics           1.10E-05         0.0079         0.03           3.10E-07         0.0002         0.00           4.80E-06         0.0035         0.02           1.10E-05         0.0079         0.03           1.40E-05         0.0101         0.04           7.90E-04         0.5696         2.49           1.20E-06         0.0009         0.00           4.60E-06         0.0033         0.01           2.50E-05         0.0180         0.08           Organics           1.60E-05         0.0115         0.05           4.00E-05         0.0288         0.13           6.40E-06         0.0046         0.02           5.50E-05         0.0397         0.17           3.20E-05         0.0231         0.10           2.80E-04         0.2019         0.88           3.50E-05         0.0252         0.11	Emission Factor         Max. PTE per Turbine         Max. of 2-Turbine           Ib/MMBtu         Ib/hour         TPY         Ib/hour           Inorganics           1.10E-05         0.0079         0.03         0.0159           3.10E-07         0.0002         0.00         0.0004           4.80E-06         0.0035         0.02         0.0069           1.10E-05         0.0079         0.03         0.0159           1.40E-05         0.0101         0.04         0.0202           7.90E-04         0.5696         2.49         1.1392           1.20E-06         0.0009         0.00         0.0017           4.60E-06         0.0033         0.01         0.0066           2.50E-05         0.0180         0.08         0.0361           Organics           1.60E-05         0.0115         0.05         0.0231           4.00E-05         0.0288         0.13         0.0577           6.40E-06         0.0046         0.02         0.0092           5.50E-05         0.0397         0.17         0.0793           3.20E-05         0.0231         0.10         0.0461           2.80E-04         0.2019         0.88 </td						

Pollutant	<b>Emission Factor</b>	Max. PTE per Turbine		Max. of 2-Tu		
	lb/MMBtu	lb/hour	TPY	lb/hour	TPY	
Propylene Oxide	2.90E-05	0.0209	0.09	0.0418	0.18	
Toluene	6.20E-05	0.0447	0.20	0.0894	0.39	
Xylenes	6.40E-05	0.0461	0.20	0.0923	0.40	
	<b>Total Emiss</b>	sions			9.61	
Previous Emissions (2011-1000-TVR2)						
	Change in Em	issions			-4.85	

#### 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.

- 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. Tank T2 has a capacity less than 39,894 gallons and stores a product having a vapor pressure less than 1.5 psia.
- 2. \* Activities that have the potential to emit no more than 5.0 TPY (actual) of any criteria pollutant. Tank T1 has emissions below 5 TPY.

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

OAC 252:100-1 (General Provisions)

[Applicable]

Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-2 (Incorporation by Reference)

[Applicable]

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

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

[Applicable]

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

OAC 252:100-5 (Registration, Emission Inventory, and Annual Operating Fees) [Applicable] The owner or operator of any facility that is a source of air emissions shall submit a complete emission inventory annually on forms obtained from the Air Quality Division. An emission inventory was submitted and fees paid for previous years as required.

OAC 252:100-8 (Permits for Part 70 Sources)

[Applicable]

<u>Part 5</u> includes the general administrative requirements for Part 70 permits. Any planned changes in the operation of the facility which result in emissions not authorized in the permit and which exceed the "Insignificant Activities" or "Trivial Activities" thresholds require prior notification to AQD and may require a permit modification. Insignificant activities mean individual emission

units that either are on the list in Appendix I (OAC 252:100) or whose actual calendar year emissions do not exceed the following limits:

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

Emission limitations for the facility are based on the previous Title V permit [Permit No. 2011-1000-TVR2] and information in the Title V permit renewal application.

#### OAC 252:100-9 (Excess Emission Reporting Requirements)

[Applicable]

Except as provided in OAC 252:100-9-7(a)(1), the owner or operator of a source of excess emissions shall notify the Director as soon as possible but no later than 4:30 p.m. the following working day of the first occurrence of excess emissions in each excess emission event. No later than thirty (30) calendar days after the start of any excess emission event, the owner or operator of an air contaminant source from which excess emissions have occurred shall submit a report for each excess emission event describing the extent of the event and the actions taken by the owner or operator of the facility in response to this event. Request for mitigation, as described in OAC 252:100-9-8, shall be included in the excess emission event report. Additional reporting may be required in the case of ongoing emission events and in the case of excess emissions reporting required by 40 CFR Parts 60, 61, or 63.

# OAC 252:100-13 (Open Burning)

[Applicable]

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

### OAC 252:100-19 (Particulate Matter)

[Applicable]

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

 $E = 1.042808 \ X^{\text{-}0.238561}$ For Units > 10 MMBTUH but < 1,000 MMBTUH  $E = 1.6 X^{-0.30103}$ 

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

E = allowable total particulate matter emissions in pounds per MMBTU and Where:

X = the maximum heat input in MMBTU per hour.

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

Equipment	Maximum Heat Input, (MMBtu/h)	Appendix C Emission Limit, (lb/MMBtu)	Potential Emission Rate, (lb/MMBtu)
Gas Turbines	721	0.22	0.016*
<b>Emergency Generators</b>	17	0.53	0.11

<sup>\*</sup> Worst-case scenario to burn No. 2 fuel oil

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

[Applicable]

No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case, shall the average of any six-minute period exceed 60% opacity. When burning natural gas there is little possibility of exceeding the opacity standards. The permit includes requirements to take opacity readings when diesel fuel is used for extended periods of time.

COM is required for fluid bed catalytic cracking unit catalyst regenerators at petroleum refineries and fossil fuel-fired steam generators in accordance with 40 CFR Part 51, Appendix P and any fuel-burning equipment with a design heat input value of 250 MMBTUH or more, that does not burn gaseous fuel exclusively, and that was not in being on or before July 1, 1972, or that is modified after July 1, 1972. Since the combustion turbines (Unit #4 and Unit #5) have the ability to burn both natural gas and No. 2 fuel oil, the permit includes requirements for COM when fuel oil is used.

# OAC 252:100-29 (Fugitive Dust)

[Applicable]

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

#### OAC 252:100-31 (Sulfur Compounds)

[Applicable]

<u>Part 2</u> limits the ambient air concentration of hydrogen sulfide (H<sub>2</sub>S) emissions from any facility to 0.2 ppmv (24-hour average) at standard conditions which is equivalent to 283  $\mu$ g/m<sup>3</sup>. Fuel-burning equipment fired with natural gas with a sulfur content of less than 4 ppmv will not have the potential to exceed the H<sub>2</sub>S ambient air concentration limit.

<u>Part 5</u> limits sulfur dioxide emissions from new equipment (constructed after July 1, 1972). For gaseous fuels, the limit is 0.2 lb/MMBtu heat input. For liquid fuels, the limit is 0.8 lb/MMBtu heat input. The permit requires the use of pipeline-grade natural gas or distillate fuel oil with a maximum fuel sulfur content of 0.4% (by weight) to ensure compliance with Subchapter 31. The permit requires the permittee to keep records of the fuel sulfur content for each delivery of fuel oil to ensure compliance with this subchapter.

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

[Not Applicable]

This subchapter limits  $NO_X$  emissions to 0.2 lb of  $NO_X$  per MMBtu from new fuel-burning equipment with a rated heat input greater than or equal to 50 MMBtu/hr. The existing turbines and emergency diesel generators were all "in being" prior to the effective date of this subchapter.

### OAC 252:100-35 (Carbon Monoxide)

[Not Applicable]

None of the following affected processes are located at this facility: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit.

### OAC 252:100-37 (Volatile Organic Compounds)

[Part 7 Applicable]

<u>Part 3</u> requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent

submerged fill pipe or with an organic vapor recovery system. The diesel and fuel oil tanks are exempt based on vapor pressures below the 1.5 psia level.

<u>Part 3</u> requires VOC loading facilities with a throughput equal to or less than 40,000 gallons per day to be equipped with a system for submerged filling of tank trucks or trailers if the capacity of the vehicle is greater than 200 gallons. This facility does not have the physical equipment (loading arm and pump) to conduct this type of loading and is not subject to this requirement.

<u>Part 5</u> limits the VOC content of coatings from any coating line or other coating operation. This facility does not normally conduct coating or painting operations except for routine maintenance of the facility and equipment, which is exempt.

<u>Part 7</u> requires fuel-burning and refuse-burning equipment to be operated to minimize emissions of VOC. Temperature and available air must be sufficient to provide essentially complete combustion.

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

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

[Applicable]

This subchapter regulates TAC that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained, unless a modification is approved by the Director. Since no AOC has been designated 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). There are currently no CEM or

PEMS at the facility. ODEQ agrees the quarterly portable emission analyzer (PEA) testing that's currently in the permit will satisfy and comply with the Periodic Testing Standardization guidance. However, since these units historically never operate more than 220 hours in a calendar quarter and consequently do not require PEA testing, additional yearly (four successive calendar quarter) PEA testing requirements have been added to the Specific Conditions.

**Periodic Testing Review** 

EUG/EU	Pollutant	TPY	<b>Current Monitoring</b>	Periodic Testing
	$NO_X$	3295.51	None	YES – Every Year
EUG 4/Unit 4	CO	357.36	None	YES - Every Year
	$SO_2$	1512.94	None	No – Mass Balance
	$NO_X$	3295.51	None	YES – Every Year
EUG 5/Unit 5	CO	357.36	None	YES - Every Year
	$SO_2$	1512.94	None	No – Mass Balance

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

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 252:100-27	Process Particulates	not in source category
OAC 252:100-35	Carbon Monoxide	not type of emission unit
OAC 252:100-39	Nonattainment Areas	not in a subject area

### SECTION VII. FEDERAL REGULATIONS

PSD, 40 CFR Part 52

[Not Applicable At This Time]

Total potential emissions for NOx, CO, and SO<sub>2</sub> are greater than the major source threshold level of 250 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 NOx, 40 TPY SO<sub>2</sub>, 40 TPY VOC, 25 TPY PM, 15 TPY PM<sub>10</sub>, 0.6 TPY Lead).

New Source Performance Standards (NSPS), 40 CFR Part 60 [Not Applicable] <u>Subpart K, VOL Storage Vessels</u>. The tanks are not subject because they store No. 2 fuel oil and diesel fuel which have vapor pressures less than 1.5 psia.

Subpart Ca, Municipal Waste Combustors. Not this type of source.

<u>Subpart GG</u>, Stationary Gas Turbines. The gas turbines are not subject because they were constructed prior to the effective date (October 3, 1977) and have not been modified.

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

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

<u>Subpart LLL</u>, Onshore Natural Gas Processing: SO<sub>2</sub> Emissions. There is no natural gas sweetening operation at this site.

<u>Subpart IIII</u>, Stationary Compression Ignition (CI) Internal Combustion Engines (ICE). This subpart affects CI ICE, that are not fire pump engines, which commenced construction after July 1, 2005, and were manufactured after April 1, 2006. The two (2) 2,700-hp diesel emergency generator engines were manufactured in 1963 and are therefore not subject to this subpart.

<u>Subpart KKKK</u>, Stationary Combustion Turbines. This subpart was proposed on February 18, 2005, and was promulgated on July 6, 2006. It affects combustion turbines with a power output at peak load of 1 MW that commence construction, modification, or reconstruction after February 18, 2005. The turbines at this facility were not constructed, modified, or reconstructed after that date and are not subject to this subpart.

<u>Subpart TTTT</u> (Greenhouse Gas Emissions for Electric Generating Units) promulgated 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 this section. 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 this section. The units at this facility pre-date Subpart TTTT.

<u>Subpart UUUUa</u> (Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units) requires the state governor to submit a plan for limiting GHG emissions by July 8, 2022.

National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61

[Not Applicable]

There are no emissions of any of the regulated pollutants: arsenic, asbestos, beryllium, benzene, coke oven emissions, mercury, radionuclides or vinyl chloride except for trace amounts of benzene. Subpart J, Equipment Leaks of Benzene, only affects process streams that contain more than 10% benzene by weight. All process streams at this facility are below this threshold.

NESHAP, 40 CFR Part 63

[Subpart ZZZZ Applicable]

<u>Subpart HH</u>, Oil and Natural Gas Production Facilities. This subpart applies to affected sources that are located at facilities which are major and area sources of HAP. This facility is an area source of HAP emissions, and there are no glycol units located at this facility.

<u>Subpart YYYY</u>, Combustion Turbines. This subpart was promulgated on March 5, 2004, and would affect turbines that are a major source for HAP emissions such as formaldehyde, toluene, benzene, and acetaldehyde. The stationary combustion turbine category is divided into eight subcategories, including lean premix gas-fired turbines, diffusion flame gas-fired turbines, diffusion flame oil-fired turbines, emergency turbines, turbines with a rated peak power output of less than 1.0 megawatt (MW), turbines burning landfill or digester gas, and turbines located on the North Slope of Alaska. This facility is not a major source of HAP emissions.

<u>Subpart ZZZZ</u>, Reciprocating Internal Combustion Engines (RICE). This subpart affects RICE that are located at area and major sources of HAP emissions. Subpart ZZZZ establishes national

emission limitations and operating limitations for HAPs emitted from stationary RICE, and it also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and/or operating limitations. The 2,700-hp emergency generator engines are compression ignition engines, and they were manufactured in 1963. As indicated in §63.6590(a)(1)(iii), these engines are considered to be existing stationary RICE, because they are located at an area source of HAPs and the engines were constructed prior to June 12, 2006. To be considered to be a an emergency stationary RICE under this subpart, the permittee must operate the engine according to the requirements of § 63.6640(f)(1) through (4). There is no time limit on the use of the engine in emergency situations. Operation during non-emergency situations (e.g., for maintenance checks, readiness testing, and up to 50 hours of non-emergency power generation) is limited to a total of 100 hours per calendar year. In addition, the permittee will be required to comply with work practice standards applicable to the operation of the engine. A summary of those requirements (from Table 2d of this subpart) is in the following table.

<b>Engine Category</b>	Requirements Applicable During Normal
	Operation <sup>1</sup>
Emergency stationary CI RICE and black start stationary CI RICE <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>3</sup>
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

- During Startup Minimize the engine's time spent at idle and minimize the engine's 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.
- <sup>2</sup> If the engine is operating during an emergency, these management practices may be delayed until the emergency is over.
- Or use an oil analysis program as described in § 63.6625(i) or (j) to extend oil life.

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

<u>Subpart UUUUU</u> (Coal- and Oil-Fired Electric Utility Steam Generating Units). Subpart UUUUU affects coal-fired and oil-fired electric utility steam generating units. The new/existing date is May 3, 2011. Subpart UUUUU affects oil-fired steam generating units, but the generators here are driven by combustion turbines.

Compliance Assurance Monitoring (CAM), 40 CFR Part 64 [Not Applicable] CAM applies to any pollutant specific emission unit at a major source, that is required to obtain a Part 70 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] This facility does not process or store more than the threshold quantity of any regulated substance (Section 112r of the Clean Air Act 1990 Amendments). Three (3) 250-gal propane tanks are onsite, with a maximum total capacity of 3,200 lb, well under the 10,000 lb threshold. More information on this federal program is available on the web page: <a href="https://www.epa.gov/rmp">www.epa.gov/rmp</a>.

Acid Rain, 40 CFR Part 72 (Permit Requirements) [Not Applicable] Combustion turbine Unit #4 and Unit #5 commenced commercial operation before November 15, 1990, and are therefore exempt from this subpart.

Acid Rain, 40 CFR Part 75 (Monitoring Requirements) [Not Applicable] Combustion turbine Unit #4 and Unit #5 commenced commercial operation before November 15, 1990, and are therefore exempt from this subpart.

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

<u>Subpart A</u> 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.

<u>Subpart F</u> 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.

This facility does not produce, consume, recycle, import, or export any controlled substances or controlled products as defined in this part, nor does this facility perform service on motor (fleet) vehicles which involves ozone-depleting substances. Therefore, as currently operated, this facility

is not subject to these requirements. To the extent that the facility has air-conditioning units that apply, the permit requires compliance with Part 82.

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 #4 and Unit #5 in EUG 4 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.

Inspection Type	Date	Summary/Results
Full Inspection	spection 9/28/2018 In compliance	
Full Inspection	8/11/2016	One violation for failing to conduct and submit records of maintenance for emergency engine. Case closed 2/28/2017
Full Inspection	2/20/2015	In compliance

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

### 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 published the "Notice of Filing a Tier II Application" in the Okemah News Leader newspaper, a local newspaper in Okfuskee County on December 26, 2019. The notice stated that the application was available for review at the Okemah Public Library in Okfuskee County, and also at the Air Quality Division's main office in Oklahoma City. The information on all permit actions is available for review by the public in the Air Quality section of the DEQ web page at <a href="http://www.deq.ok.gov">http://www.deq.ok.gov</a>.

The applicant requested and was granted 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 <a href="http://www.deq.ok.gov">http://www.deq.ok.gov</a>. 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 was constructed and is operated 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

#### DRAFT/PROPOSED

# PERMIT TO OPERATE AIR POLLUTION CONTROL FACILITY SPECIFIC CONDITIONS

American Electric Power (AEP) PSO – Weleetka Power Station Permit Number 2019-0563-TVR3

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on May 10, 2019, as well as supplemental information submitted after that date. The Evaluation Memorandum, dated August 4, 2020, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein:

1. Points of emissions and emissions limitations for each point: [OAC 252:100-8-6(a)]

**EUG 4**: Combustion Turbines

EU	N	NOx CO		CO	SO <sub>2</sub>		VOC		$PM_{10}$	
ID#	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Unit #4	752.40	3,295.51	81.59	357.36	345.42	1,512.94	2.09	9.15	10.26	44.94
Unit #5	752.40	3,295.51	81.59	357.36	345.42	1,512.94	2.09	9.15	10.26	44.94

**EUG 7:** Tank VOC emissions are insignificant based on existing equipment and do not have a specific limitation.

EU	Point	Name/Equipment	Size (Gallons)	<b>Construction Date</b>
T1	T1	Fuel Oil	4,000,000	1974
T2	T2	Diesel Fuel	10,000	1987

**EUG 8:** Emergency generators that operate less than 500 hours per year. They have no emission limitations, but they are subject to work practice standards under NESHAP, Subpart ZZZZ.

EU	Point	Make/Model	hp	Serial #	Const. Date
D1	D1	General Motors/567D4	2,700	63-G-23	1987
D2	D2	General Motors/567D4	2,700	63-G-37	1987

The permittee shall record operating hours for each emergency engine (monthly and 12-month rolling totals).

- 2. 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)]
- 3. Each turbine at the facility shall have a permanent identification plate attached which shows the make, model number, and serial number. [OAC 252:100-43]

- 4. All VOC tanks constructed after December 28, 1974, with a capacity of 400 gallons or more and storing a liquid which has a vapor pressure of 1.5 psia or greater shall be equipped with a permanent submerged fill pipe or an organic vapor recovery system. [OAC 252:100-37-15]
- 5. The turbines shall burn pipeline-quality natural gas or No. 2 fuel oil with a maximum sulfur content of 0.4% (by weight). The emergency generators shall burn diesel fuel with a maximum sulfur content of 0.4% (by weight). Compliance can be shown by the following methods: for pipeline grade natural gas, a current gas company bill; for fuel oil, supplier's latest delivery ticket(s). Compliance shall be demonstrated once per calendar year. [OAC 252:100-31-25]
- 6. The facility shall limit the combined annual No. 2 fuel oil consumption (throughput) for the two gas turbines to 12,631,920 MMBtu/year. This fuel throughput is equivalent to about 92,203,796 gallons (2,195,329 bbls) of No. 2 fuel oil. Further, the combined turbine hourly fuel oil consumption rate shall be limited to 1,442 MMBtu/hour. [OAC 252:100-8-6(a)]
- At least once per calendar quarter, the permittee shall conduct tests of NO<sub>X</sub> and CO emissions in exhaust gases from each turbine and each replacement turbine when operating under representative conditions for that period. Testing is required for each turbine and replacement turbine if it runs for more than 220 hours during a calendar quarter. Testing shall be conducted using a portable analyzer in accordance with a protocol meeting the requirements of the "AQD Portable Analyzer Guidance" document or an equivalent method approved by Air Quality. Upon issuance of this permit, the initial quarterly testing shall occur during the next calendar quarter. No more than four successive calendar quarters shall elapse after the quarter in which a test was last performed without a subsequent test having been conducted. Turbines shall be tested no sooner than 20 days after the previous test. If more than 3,841,825 gallons (91,472 bbls) of fuel oil is burned in a turbine based on a 12-month rolling total, the next quarterly portable analyzer test must be conducted while using No. 2 fuel oil. When four consecutive quarterly tests show a turbine to be in compliance with the emissions limitations shown in the permit, then the testing frequency may be reduced to semi-annual testing. Likewise, when the following two consecutive semi-annual tests show compliance, the testing frequency may be reduced to annual testing. Upon any showing of non-compliance with emissions limitations or testing that indicates that emissions are within 10% of the emission limitations, the testing frequency shall revert to quarterly. Any reduction in the testing frequency shall be noted in the next required compliance certification. [OAC 252:100-8-6(a)(3)(A)]
- 8. When periodic compliance testing shows turbine exhaust emissions in excess of the lb/hr limits in Specific Condition Number 1, the permittee shall comply with the provisions of OAC 252:100-9 for excess emissions. [OAC 252:100-9]
- 9. Owners or operators of the turbines Unit #4 and Unit #5 shall install, calibrate, operate, and maintain all monitoring equipment necessary for continuously monitoring opacity when fuel oil is burned. Required emission monitoring systems shall be installed, calibrated, operated, and maintained in accordance with 40 CFR Part 60, Appendix B, and 40 CFR Part 51, Appendix P. Alternative monitoring requirements different from the provisions of Parts 1 through 5 of Appendix P may be approved by the DEQ on a case-by-case basis if continuous monitoring cannot be implemented by a source due to physical plant limitations or extreme economic reasons.

- 10. 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. 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]
- 11. The permittee is authorized to replace any internal combustion engine or turbine with emissions limitations specified in this permit with an engine or turbine that meets the following requirements:

  [OAC 252:100-8-6(f)(2)]
  - (a) The replacement engine or turbine shall comply with the same emissions limits as the engine or turbine that it replaced. This applies to lb/hr and TPY limits specified in this permit.
  - (b) The authorization of replacement of an engine or turbine includes temporary periods of 6 months or less for maintenance purposes.
  - (c) The permittee shall notify AQD in writing not later than 7 days prior to start-up of the replacement engine or turbine. Said notice shall identify the old engine/turbine and shall include the new engine/turbine make and model, serial number, horsepower rating, and pollutant emission rates (g/hp-hr, lb/hr, and TPY) at maximum horsepower for the altitude/location.
  - (d) Quarterly emissions tests for the replacement engine(s)/turbine(s) shall be conducted to confirm continued compliance with NO<sub>X</sub> and CO emission limitations. A copy of the first quarter testing shall be provided to AQD within 60 days of start-up of each replacement engine/turbine. The test report shall include the engine/turbine fuel usage, stack flow (ACFM), stack temperature (°F), and pollutant emission rates (g/hp-hr, lbs/hr, and TPY) at maximum rated horsepower for the altitude/location.
  - (e) Replacement equipment and emissions are limited to equipment and emissions which are not a modification under NSPS or NESHAP.
  - (f) Replacement equipment and emissions are limited to equipment and emissions which are not a modification or a significant modification under PSD. For existing PSD facilities, the permittee shall calculate the PTE or the net emissions increase resulting from the replacement to document that it does not exceed significance levels and submit the results with the notice required by paragraph (c) of this Specific Condition. The permittee shall attach each such notice to their copy of the relevant 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 described in OAC 252:100-8-6(d) does not apply to any change made pursuant to this paragraph.
  - (g) Engines whose installation and operation are authorized under this Specific Condition which are subject to 40 CFR Part 63, Subpart ZZZZ and/or 40 CFR Part 60, Subpart JJJJ shall comply with all applicable requirements.
  - (h) Turbines whose installation and operation are authorized under this Specific Condition which are subject to 40 CFR Part 60, Subpart KKKK shall comply with all applicable requirements.

[40 CFR 63.6585 through 63.6675]

- (a) § 63.6585 Am I subject to this subpart?
- (b) § 63.6590 What parts of my plant does this subpart cover?
- (c) § 63.6595 When do I have to comply with this subpart?
- (d) § 63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
- (e) § 63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?
- (f) § 63.6605 What are my general requirements for complying with this subpart?
- (g) § 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?
- (h) § 63.6615 When must I conduct subsequent performance tests?
- (i) § 63.6620 What performance tests and other procedures must I use?
- (j) § 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?
- (k) § 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?
- (1) § 63.6635 How do I monitor and collect data to demonstrate continuous compliance?
- (m) § 63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?
- (n) § 63.6645 What notifications must I submit and when?
- (o) § 63.6650 What reports must I submit and when?
- (p) § 63.6655 What records must I keep?
- (q) § 63.6660 In what form and how long must I keep my records?
- (r) § 63.6665 What parts of the General Provisions apply to me?
- (s) § 63.6675 What definitions apply to this subpart?
- 13. The turbines in EUG 4 (Unit #4 and Unit #5) 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.

- (1) § 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.
- 14. The permittee shall maintain records of operations as listed below. These records shall be maintained on site or at a local field office for at least five years after the date of recording and shall be provided to regulatory personnel upon request. [OAC 252:100-43]
  - (a) Periodic emissions testing with a portable analyzer as required by Specific Conditions 7 of each turbine and each replacement turbine.
  - (b) Analysis of the sulfur content for each shipment of No. 2 fuel oil and diesel fuel. A "shipment" of fuel oil or diesel may consist of multiple tanker truck quantities (all from the same source), in which case a single statement of sulfur content in % by weight (or maximum sulfur guarantee, % by wt.) from the supplier is sufficient.
  - (c) O&M records for any turbine not tested with a portable analyzer as required by Specific Condition 7 in each 6 month period.
  - (d) Opacity records required by Specific Condition 10, and records of continuously monitoring opacity required by Specific Condition 9.
  - (e) Total facility usage of natural gas, No. 2 fuel oil, and diesel fuel (monthly and 12-months rolling totals).
  - (f) The hourly fuel oil consumption rate for the two turbines combined (hourly totals).
  - (g) Operating hours for each turbine if operated less than 220 hours per quarter and not tested

- (monthly, quarterly, and 12-month rolling totals).
- (h) Operating hours for each emergency engine (monthly and 12-month rolling totals).
- (i) Records required by NEHSAP, Subpart ZZZZ.
- 15. No later than 30 days after each anniversary date of the issuance of the initial TV permit (December 2, 1998), 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)]
- 16. The following records shall be maintained on site to verify insignificant activities.

[OAC 252:100-43]

- (a) For 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: Records of 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 (annual).
- 17. This permit supersedes and replaces all previous Air Quality operating permits for this facility
- 18. 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)]

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

#### SECTION I. DUTY TO COMPLY

- A. This is a permit to operate / construct this specific facility in accordance with the federal Clean Air Act (42 U.S.C. 7401, et al.) and under the authority of the Oklahoma Clean Air Act and the rules promulgated there under. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]
- B. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ). The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances.

  [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]
- C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed.

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

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

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

- A. Any exceedance resulting from an emergency and/or posing an imminent and substantial danger to public health, safety, or the environment shall be reported in accordance with Section XIV (Emergencies). [OAC 252:100-8-6(a)(3)(C)(iii)(I) & (II)]
- B. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements.

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

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

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

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

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

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

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

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

  [OAC 252:100-8-6(a)(3)(C)(iii)]
- E. In addition to any monitoring, recordkeeping or reporting requirement specified in this permit, monitoring and reporting may be required under the provisions of OAC 252:100-43, Testing, Monitoring, and Recordkeeping, or as required by any provision of the Federal Clean Air Act or Oklahoma Clean Air Act.

  [OAC 252:100-43]
- F. Any Annual Certification of Compliance, Semi Annual Monitoring and Deviation Report, Excess Emission Report, and Annual Emission Inventory submitted in accordance with this permit shall be certified by a responsible official. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

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

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

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

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

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

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

- J. The reporting of total particulate matter emissions as required in Part 7 of OAC 252:100-8 (Permits for Part 70 Sources), OAC 252:100-19 (Control of Emission of Particulate Matter), and OAC 252:100-5 (Emission Inventory), shall be conducted in accordance with applicable testing or calculation procedures, modified to include back-half condensables, for the concentration of particulate matter less than 10 microns in diameter ( $PM_{10}$ ). NSPS may allow reporting of only particulate matter emissions caught in the filter (obtained using Reference Method 5).
- K. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 C.F.R. Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-8-6(c)(1) and OAC 252:100, Appendix Q]

## SECTION IV. COMPLIANCE CERTIFICATIONS

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

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

B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or

intermittent; the methods used for determining compliance, currently and over the reporting period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source. [OAC 252:100-8-6(c)(5)(C)(i)-(v)]

- C. The compliance certification shall contain a certification by a responsible official as to the results of the required monitoring. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

  [OAC 252:100-8-5(f) and OAC 252:100-8-6(c)(1)]
- D. Any facility reporting noncompliance shall submit a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable requirements. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the emissions unit or stationary source is in noncompliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based, except that a compliance plan shall not be required for any noncompliance condition which is corrected within 24 hours of discovery.

[OAC 252:100-8-5(e)(8)(B) and OAC 252:100-8-6(c)(3)]

# SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

The permittee shall comply with any additional requirements that become effective during the permit term and that are applicable to the facility. Compliance with all new requirements shall be certified in the next annual certification.

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

## SECTION VI. PERMIT SHIELD

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

  [OAC 252:100-8-6(d)(1)]
- B. Those requirements that are applicable are listed in the Standard Conditions and the Specific Conditions of this permit. Those requirements that the applicant requested be determined as not applicable are summarized in the Specific Conditions of this permit. [OAC 252:100-8-6(d)(2)]

#### SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories. The methods used to calculate emissions for inventory purposes shall be based on the best available information accepted by AQD.

[OAC 252:100-5-2.1, OAC 252:100-5-2.2, and OAC 252:100-8-6(a)(8)]

#### SECTION VIII. TERM OF PERMIT

- A. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance. [OAC 252:100-8-6(a)(2)(A)]
- B. A source's right to operate shall terminate upon the expiration of its permit unless a timely and complete renewal application has been submitted at least 180 days before the date of expiration.

  [OAC 252:100-8-7.1(d)(1)]
- C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced. [OAC 252:100-8-1.4(a)]
- D. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation. [OAC 252:100-8-4(b)(5)]

# SECTION IX. SEVERABILITY

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

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

#### SECTION X. PROPERTY RIGHTS

A. This permit does not convey any property rights of any sort, or any exclusive privilege.

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

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued.

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

#### SECTION XI. DUTY TO PROVIDE INFORMATION

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

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

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

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

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

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

### SECTION XII. REOPENING, MODIFICATION & REVOCATION

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

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

- B. The DEQ will reopen and revise or revoke this permit prior to the expiration date in the following circumstances: [OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]
  - (1) Additional requirements under the Clean Air Act become applicable to a major source category three or more years prior to the expiration date of this permit. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
  - (2) The DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable requirements.
  - (3) The DEQ or the EPA determines that inaccurate information was used in establishing the emission standards, limitations, or other conditions of this permit. The DEQ may revoke and not reissue this permit if it determines that the permittee has submitted false or misleading information to the DEQ.
  - (4) DEQ determines that the permit should be amended under the discretionary reopening provisions of OAC 252:100-8-7.3(b).
- C. The permit may be reopened for cause by EPA, pursuant to the provisions of OAC 100-8-7.3(d). [OAC 100-8-7.3(d)]
- D. The permittee shall notify AQD before making changes other than those described in Section XVIII (Operational Flexibility), those qualifying for administrative permit amendments, or those defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII). The notification should include any changes which may alter the status of a "grandfathered source," as defined under AQD rules. Such changes may require a permit modification.

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

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

#### SECTION XIII. INSPECTION & ENTRY

- A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(17) for confidential information submitted to or obtained by the DEQ under this section):
  - (1) enter upon the permittee's premises during reasonable/normal working hours where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

- (2) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (3) inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (4) as authorized by the Oklahoma Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit.

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

#### SECTION XIV. EMERGENCIES

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

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

- B. Any exceedance that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to AQD as soon as is practicable; but under no circumstance shall notification be more than 24 hours after the exceedance. [OAC 252:100-8-6(a)(3)(C)(iii)(II)]
- C. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

  [OAC 252:100-8-2]
- D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that: [OAC 252:100-8-6 (e)(2)]
  - (1) an emergency occurred and the permittee can identify the cause or causes of the emergency;
  - (2) the permitted facility was at the time being properly operated;
  - (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.
- E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [OAC 252:100-8-6(e)(3)]
- F. Every written report or document submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.

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

#### SECTION XV. RISK MANAGEMENT PLAN

The permittee, if subject to the provision of Section 112(r) of the Clean Air Act, shall develop and register with the appropriate agency a risk management plan by June 20, 1999, or the applicable effective date.

[OAC 252:100-8-6(a)(4)]

#### SECTION XVI. INSIGNIFICANT ACTIVITIES

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

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

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

#### SECTION XVII. TRIVIAL ACTIVITIES

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

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

# SECTION XVIII. OPERATIONAL FLEXIBILITY

A. A facility may implement any operating scenario allowed for in its Part 70 permit without the need for any permit revision or any notification to the DEQ (unless specified otherwise in the permit). When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating.

[OAC 252:100-8-6(a)(10) and (f)(1)]

- B. The permittee may make changes within the facility that:
  - (1) result in no net emissions increases,
  - (2) are not modifications under any provision of Title I of the federal Clean Air Act, and
  - (3) do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded;

provided that the facility provides the EPA and the DEQ with written notification as required below in advance of the proposed changes, which shall be a minimum of seven (7) days, or twenty four (24) hours for emergencies as defined in OAC 252:100-8-6 (e). The permittee, the DEQ, and the EPA shall attach each such notice to their copy of the permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or

condition that is no longer applicable as a result of the change. The permit shield provided by this permit does not apply to any change made pursuant to this paragraph. [OAC 252:100-8-6(f)(2)]

# SECTION XIX. OTHER APPLICABLE & STATE-ONLY REQUIREMENTS

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

- (1) Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning Subchapter. [OAC 252:100-13]
- (2) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU. [OAC 252:100-19]
- (3) For all emissions units not subject to an opacity limit promulgated under 40 C.F.R., Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for:

[OAC 252:100-25]

- (a) Short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity;
- (b) Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;
- (c) An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or
- (d) Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.
- (4) No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]
- (5) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur [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 airtight 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 NORTH ROBINSON, SUITE 4100
P.O. BOX 1677
OKLAHOMA CITY, OKLAHOMA 73101-1677

# AEP – Public Service Company of Oklahoma,

having complied with the requirements of the law, is hereby granted permission to operate the Weleetka Power Station, located in Section 22, Township 10N, Range 11E of the Indian Meridian, in Okfuskee 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.

Eddie Terrill, 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: Operating Permit No. 2019-0563-TVR3

Weleetka Power Station AQD Facility ID: 216

Section 22, Township 10N, Range 11E, Okfuskee County, Oklahoma.

Dear Mr. Ruffin:

Air Quality Division has completed the initial review of your permit application referenced above. This application has been determined to be a **Tier II**. In accordance with 27A O.S. § 2-14-302 and OAC 252:004-7-13(c) the enclosed draft permit is now ready for public review. The requirements for public review include the following steps which <u>you</u> 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 this draft permit on the DEQ website and access to the application through the DEO website.
- 3. Send to AQD a copy of the proof of publication notice from Item #1 above together with any additional comments or requested changes which you may have on the draft permit.

Thank you for your cooperation in this matter. If we may be of further service, please contact Junru Wang at <u>Junru.Wang@deq.ok.gov</u> or (405) 702-4197.

Sincerely,

Phillip Fielder, P.E.

Chief Engineer

AIR QUALITY DIVISION

Chillip Fielder

707 NORTH ROBINSON, P.O. BOX 1677, OKLAHOMA CITY, OKLAHOMA 73101-1677



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: Operating Permit No. 2019-0563-TVR3

Weleetka Power Station AQD Facility ID: 216

Section 22, Township 10N, Range 11E, Okfuskee County, Oklahoma.

Dear Mr. Ruffin:

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

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

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

Sincerely,

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

Enclosure

# 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 a public meeting is requested by either the applicant or the public, 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;
- 7. Name, address, and telephone number of the applicant and DEQ contacts;
- 8. Any additional information required by DEQ rules or deemed relevant by applicant;
- 9. A 30-day opportunity to request a formal public meeting on the draft permit.

### **SAMPLE NOTICE on page 2.**

# DEO 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 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.state.ok.us/

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

This public notice shall include notice to the public that this permit is subject to Environmental Protection Agency (EPA) review, EPA objection, and petition to EPA, as provided by 40 CFR § 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.

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.

For additional information, contact ...names, addresses and telephone numbers of contact persons for the applicant, or contact DEQ at: Chief Engineer, Permits Section, Air Quality Division, 707 N. Robinson, Suite 4100, P.O. Box 1677, Oklahoma City, OK, 73101-1677, (405) 702-4100.