

# DRAFT

## OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

### MEMORANDUM

July 23, 2025

**TO:** Phillip Fielder, P.E., Permits and Engineering Group Manager

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

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

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

**FROM:** Caleb Jobe, E.I., Existing Source Permits Section

**SUBJECT:** Evaluation of Permit Application No. **2015-0383-C (M-2)**  
Tinker Air Force Base  
Midwest City Air Depot  
Facility ID: 1518  
Tinker AFB, Oklahoma County  
Section 24, Township 11N, Range 2W, Oklahoma County, Oklahoma  
Latitude: 35.42994° N and Longitude: 97.39738° W  
Address: 7535 5<sup>th</sup> Street, Building 400

### SECTION I. INTRODUCTION

Tinker Air Force Base (AFB), located in Oklahoma County, Oklahoma, is an existing PSD major source (SIC Code 9711) with permitted emissions of NO<sub>x</sub>, CO, and VOCs exceeding 250 TPY each. The facility is also a major source of HAPs. Facility-wide operations at Tinker AFB are currently authorized by Permit Number 2015-0383-TVR2, issued by the Oklahoma Department of Environmental Quality (ODEQ) on September 1, 2016. The facility has requested “traditional” review.

### SECTION II. PROPOSED CHANGES

In this application, the applicant requests an increase in emissions associated with facilities needed to support the new B-21 Software Programming Office, 76<sup>th</sup> Software Engineering Group (SWEG) and Navy missions. Specifically, the project will be adding three (3) 1.6 MMBTUH natural gas boilers; eight (8) 0.1 MMBTUH gas fired heaters; nine (9) emergency generators of varying HP; and nine (9) diesel storage tanks that are considered insignificant per OAC 252:100 Appendix I. The projected emission increase after control is 12.4 TPY for NO<sub>x</sub>, 43.90 TPY for CO, 6.51 TPY for VOC, 3.46 TPY for PM<sub>10</sub>, 0.83 TPY for SO<sub>x</sub>, and 0.43 TPY for total HAPs.

The permit will establish limits for NO<sub>x</sub> emissions from the engines using SCR to ensure that the PSD SER is not exceeded. Therefore, the facility will be taking a limit to avoid an applicable

requirement and is considered a significant modification.

The permit is considered a Tier II permit based on new construction (a physical change) for an existing major source for a facility change that is not considered minor under OAC 252:100-8-7.2(b)(1).

**SECTION II. PROCESS DESCRIPTION**

There is no change in the process description from the previous permit. Activities to be performed at the B-21 Software Program Office, SWEG and Navy facilities will be similar to activities currently occurring at Tinker AFB and addressed by Tinker’s existing Title V permit. The new facilities will include the following new emission sources: natural gas-fired boilers and heaters to provide heat to Building 9201, nine (9) emergency generators, and nine (9) integrated diesel fuel belly storage tanks.

**SECTION III. PROJECT EQUIPMENT**

Boilers and Heaters

The B-21 Software Program Office, SWEG and Navy facilities will use boilers and heaters to provide heat and steam to the new hangars, buildings, and processes, all of which will be fired exclusively with pipeline-quality natural gas. Design specifications and manufacturers for the boilers and heaters have been selected for those that will be installed at Tinker AFB. The total design heat input capacity for the boilers and heaters category (EC-11) is 4.8 MMBTUH.

The types and manufacturers of the gas fired heaters to be installed at the Navy aircraft parts storage area have not been determined. The total estimated design heat input capacity for each of the gas fired heaters is approximately 0.1 MMBTUH.

The potential emissions of the heaters are included in this permit to evaluate total project emissions increase. Combustion of natural gas will contribute emissions of NO<sub>x</sub>, CO, VOCs, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and carbon dioxide equivalent (CO<sub>2e</sub>).

**Boilers and Heaters**

Type of Unit	EUG	# of Operating Units	Emission Unit ID*	Unit Heat Input Capacity (MMBTUH)	Total Operating Capacity (MMBTUH)
Hot Water Boiler	EC-11	3	0676 0677 0678	1.6	4.8
Gas Fired Infrared Units	N/A Insignificant	8	N/A	0.1	0.8
<b>TOTAL OPERATING HEAT INPUT CAPACITY FOR BUILDING 9201</b>					<b>5.6</b>

\* - Emission Unit numbers have been assigned as place holders until the units are operational.

Diesel-Fueled Emergency Engines (IC2)

A total of 10 emergency generators are planned to provide back-up power for the B-21 Software Program Office, including one existing unit and nine new units listed below. These engines will use only ultra-low-sulfur diesel fuel.

**Emergency Generators**

Location	Emission Unit Group	Emission Unit ID*	Unit Size (kW/bhp)
Bldg. 9201 (existing unit)	IC2	7467	600 / 805
Bldg. 9201 – SWEG	IC2	7480	1500 / 2011
Bldg. 9301 - CUP	IC2	7481	1750 / 2611
		7482	
Bldg. 9201 - SWEG	IC2	7483	2000 / 2956
		7484	
Bldg. 9201	IC2	7485	2750 / 4060
		7486	
		7487	
		7488	

Storage Tanks

Nine new integrated belly storage tanks are proposed as part of the emergency generators. The tanks listed below will be installed as part of the B-21 Software Program Office project. Each generator will also be equipped with a urea storage tank as part of the SCR control.

**Insignificant Storage Tanks**

Location	Emission Unit Group	Emission Unit ID*	Contents	Tank Size (gal)
Bldg. 9201 – belly tank for 1,500 kW gen set	Insignificant	7930	Diesel	3,000
Bldg. 9201 – belly tanks for 2,000 kW gen sets	Insignificant	7931	Diesel	4,000
	Insignificant	7932	Diesel	4,000
CUP – belly tanks for 1,750 kW gen sets	Insignificant	7933	Diesel	3,500
	Insignificant	7934	Diesel	3,500
Bldg. 9201 – belly tanks for 2,750 kW gen sets	Insignificant	7935	Diesel	5,000
	Insignificant	7936	Diesel	5,000
	Insignificant	7937	Diesel	5,000
	Insignificant	7938	Diesel	5,000

The processes or operations associated with the project that are not expected to be “insignificant activities” as defined by OAC 252:100-8-2 have been identified but the actual equipment to be used is not yet determined. When the actual equipment is installed on Tinker AFB, an Emission Unit (EU) number will be assigned to each air emission source. These EU numbers will be categorized in accordance with EUGs defined in Tinker AFB’s existing Title V permit; the applicable EUGs are listed below.

**Air Emission Source Categories**

<b>Emission Unit Group (EUG) Code</b>	<b>EUG Name</b>	<b>Emission Category</b>
EC-11	ExtComb-11	Natural Gas Boilers, Less than or equal to 5 MMBTUH
IC2	IntComb-2	Stationary RICE, Emergency Power
Insignificant Activities	NA	Insignificant heaters, space heaters, furnaces, expansion torches, foundry/process ovens, ranges/deep fryers, less than or equal to 5 MMBTUH and not subject to Boiler MACT
Insignificant Activities	NA	Insignificant storage tanks – storage tanks associated with auxiliary emergency use generators

**SECTION IV. PROJECT POTENTIAL EMISSIONS**

Emissions from the gas fired infrared units and belly tanks will be represented in the emissions section to demonstrate that their potential emissions are not being controlled nor limited to avoid regulatory requirements and will be considered insignificant for the purposes of the specific conditions.

**BOILERS AND HEATERS**

PTE estimates for NOx and CO for the three natural gas boilers were calculated using emission factors from manufacturer’s Boiler Certification letter. PTE estimates for VOCs, SO<sub>2</sub>, PM, and HAPs for the boilers were performed using the emissions factors from AP-42 (7/98). PTE estimates for NOx, CO, VOCs, SO<sub>2</sub>, PM, and HAPs for heaters were performed using the emissions factors from AP-42 (7/98). PTE for each natural gas-fired boilers and heaters have been estimated assuming 8,760 hours of operation per year.

**Boiler and Heater Emission Factors**

<b>Point</b>	<b>Units</b>	<b>NOx (lb/MMBTU)</b>	<b>CO (lb/MMBTU)</b>	<b>VOC (lb/MMBTU)</b>	<b>SO<sub>2</sub> (lb/MMBTU)</b>	<b>PM<sub>10</sub> (lb/MMBTU)</b>
Gas Fired Infrared Unit	8	0.098	0.0824	0.0054	0.0006	0.0075
Natural Gas Fired Boiler	3	0.015	0.065	0.0054	0.0006	0.0075

**Boiler and Heater Annual Emissions**

<b>Point</b>	<b>Total Input (MMBTUH)</b>	<b>NOx (TPY)</b>	<b>CO (TPY)</b>	<b>VOC (TPY)</b>	<b>SO<sub>2</sub> (TPY)</b>	<b>PM<sub>10</sub> (TPY)</b>
Gas Fired Infrared Unit	0.8	0.343	0.289	0.019	0.002	0.026
Natural Gas Fired Boiler	4.8	0.315	1.367	0.114	0.013	0.158
<b>Total Emissions</b>		<b>0.658</b>	<b>1.656</b>	<b>0.133</b>	<b>0.015</b>	<b>0.184</b>

The boilers in EC-11 will be added to the associated TV permit in a similar manner to the other units of that EUG. The heaters will be included under Emission Unit ID 0500, the aggregated insignificant source for boilers, heaters, et al with heat input less than or equal to 5 MMBTUH. The three boilers will be added to Appendix A and will be subject to the specific conditions associated with the EUG. These units will not be given emission limits due to the insignificant levels of potential emissions.

EMERGENCY GENERATORS

The B-21 Software Program Office project will include four 2,750-kilowatt diesel-fueled emergency generators to provide back-up power for the B-21 Software Program Office with one such generators being redundant. Two additional 1,750-kilowatt diesel-fueled emergency generators are planned to provide back-up power for the CUP. Two 2,000-kilowatt and one 1,500-kilowatt diesel-fueled emergency generators are planned to provide back-up power for the SWEG offices. The engines to be purchased will be Tier 2 EPA certified engines. These engines will be equipped with SCR control to reduce emissions of NOx below the NSPS standards. The SCR will include sampling ports for future emission testing (if applicable).

NO<sub>x</sub>+VOC, CO, and PM<sub>10</sub> emission estimates from the emergency engines of 1,500 kW and higher were calculated using default NSPS IIII factors to show controlled PTE. CO, PM<sub>10</sub>, and SO<sub>2</sub> emission estimates from the 600 kW emergency engine were calculated using the Cummins manufacture emission data sheet. AP-42 emission factors for VOC and NOx were used to determine a ratio of NOx to VOC to estimate NOx and VOC emission factors using the manufacturer provided “NMHC + NOx” emission factor for the 600 kW generator.

**Emission Factors from AP-42 (10/96) Table 3.3-1**

<b>Pollutant</b>	<b>AP-42 Factor (lbs/MMBTUH)</b>	<b>Factor Modifier</b>
VOC	0.36	0.08
NO <sub>x</sub>	4.41	0.92

The following table provides the emission limits for each criteria pollutant assuming a maximum of 500 hours of annual operation. Ammonia slip for SCR controlled units was calculated using a draft engineering evaluation. Total HAP emissions were estimated using the emission factors from AP-42, Table 3.3-2 for diesel fuel (10/96).

**Controlled Generator Emission Factors, per unit in kilowatt rating**

Generator kW Rating	Emission Factors (g/hp-hr)						
	NMHC+ NO <sub>x</sub>	NO <sub>x</sub> <sup>(2)</sup>	VOC <sup>(2)</sup>	CO	PM	SO <sub>2</sub>	NH <sub>3</sub> <sup>(1)</sup>
600	3.9	3.588	0.312	0.3	0.09	0.11	--
1,500	4.8	4.704	0.384	2.6	0.20	0.10	0.04
1,750	4.8	4.704	0.384	2.6	0.20	0.10	0.04
2,000	4.8	4.704	0.384	2.6	0.20	0.10	0.04
2,750	4.8	4.704	0.384	2.6	0.20	0.004	0.04

- (1) Ammonia slip emission factor calculated with engineering draft evaluation.
- (2) AP-42 Emission factor ratio used to calculate estimated uncontrolled emission factor from combined factor.
- (3) Emission factors from NSPS IIII 40 CFR Part 1039 Appendix 1, Tier 2 Emission Standards

**Emissions using NSPS IIII, total for units in the kilowatt rating**

Unit kW Rating	No. of Units	Unit Size (bhp)	Annual Emissions TPY					
			NO <sub>x</sub>	VOC	CO	PM	SO <sub>2</sub>	NH <sub>3</sub>
600	1	805	1.592	0.138	0.133	0.040	0.049	--
1,500 <sup>(1)</sup>	1	2,011	5.213	0.426	2.882	0.222	0.111	0.044
1,750 <sup>(1)</sup>	2	2,611	13.539	1.105	7.483	0.576	0.288	0.115
2,000 <sup>(1)</sup>	2	2,956	15.328	1.251	8.472	0.652	0.326	0.130
2,750 <sup>(1)</sup>	4	4,060	42.069	3.437	23.272	1.790	0.036	0.358
<b>TOTAL Emissions</b>			<b>77.712</b>	<b>6.358</b>	<b>42.242</b>	<b>3.279</b>	<b>0.809</b>	<b>0.648</b>

- (1) - Equipped with SCR

Emissions are shown with the requested voluntary emission rate limit of 0.6 g/hp-hr NO<sub>x</sub> to demonstrate that the requested limit would be required to reduce the emissions of NO<sub>x</sub> below PSD levels.

**Requested Emission Factors, per unit in the kilowatt rating**

Generator kW Rating	Emission Factors (g/hp-hr)					
	NO <sub>x</sub>	VOC <sup>(2)</sup>	CO <sup>(2)</sup>	PM <sup>(2)</sup>	SO <sub>2</sub>	NH <sub>3</sub> <sup>(1)</sup>
1,500	0.6	0.384	2.6	0.20	0.10	0.04
1,750	0.6	0.384	2.6	0.20	0.10	0.04
2,000	0.6	0.384	2.6	0.20	0.10	0.04
2,750	0.6	0.384	2.6	0.20	0.004	0.04

- (1) - Ammonia slip emission factor calculated with engineering draft evaluation.
- (2) - Equivalent to the NSPS Subpart IIII - non-emergency engine steady-state emission standards for generator sets with a maximum engine power > 560-kW of §1039.101(b).

**Annual Emissions, total for units in the kilowatt rating**

Unit kW Rating	No. of Units	Unit Size (bhp)	Annual Emissions TPY					
			NOx	VOC	CO	PM	SO <sub>2</sub>	NH <sub>3</sub>
600	1	805	1.592	0.138	0.133	0.040	0.049	-
1,500 <sup>(1)</sup>	1	2,011	0.665	0.426	2.882	0.222	0.111	0.044
1,750 <sup>(1)</sup>	2	2,611	1.727	1.105	7.483	0.576	0.288	0.115
2,000 <sup>(1)</sup>	2	2,956	1.955	1.251	8.472	0.652	0.326	0.130
2,750 <sup>(1)</sup>	4	4,060	5.370	3.173	23.272	1.790	0.036	0.358
<b>TOTAL Annual Emissions</b>			<b>11.309</b>	<b>6.358</b>	<b>42.242</b>	<b>3.279</b>	<b>0.809</b>	<b>0.648</b>

(1)- Equipped with SCR

**MAINTENANCE AND STARTUP EMISSIONS**

The emergency engines will operate for one hour each month at 50% load for maintenance and readiness. During this operation, the SCR control units require 15 minutes to reach steady state based on manufacturer’s data. Uncontrolled MSS emissions are calculated based on manufacturer’s data and 3 hours of annual operation and the assumption that each engine is operating at half its rated horsepower. Controlled MSS emissions are calculated based on the emission factors for a controlled Tier 2 engine and 9 hours of operation annually and the assumption that each engine is operating at half its rated horsepower.

**Uncontrolled Emission Factors**

Generator kW Rating	Emission Factors (g/hp-hr)					
	NMHC+ NO <sub>x</sub>	NO <sub>x</sub>	VOC	CO	PM	SO <sub>2</sub>
600	3.9	3.588 <sup>(1)</sup>	0.312 <sup>(1)</sup>	0.3	0.09	0.11
1,500	--	5.52	0.04	0.32	0.02	0.103
1,750	--	6.7	0.03	0.31	0.01	0.1
2,000	--	7.9	0.04	0.11	0.01	0.1
2,750	--	6.9	0.1	1.01	0.1	0.004

(1) AP-42 Emission factor ratio used to calculate estimated uncontrolled emission factor from combined factor.

**MSS Annual Emissions**

Unit kW Rating	No. of Units	Unit Size (0.5 bhp)	Annual Emissions TPY					
			NOx	VOC	CO	PM	SO <sub>2</sub>	NH <sub>3</sub>
600 <sup>(1)</sup>	1	402.5	0.019	0.002	0.002	<0.001	0.001	-
1,500	1	1,005.5	0.018	<0.001	0.001	<0.001	<0.001	-
1,750	2	1,305.5	0.058	<0.001	0.003	<0.001	0.001	-
2,000	2	1,478	0.077	<0.001	0.001	<0.001	0.001	-
2,750	4	2,030	0.185	0.003	0.027	0.003	<0.001	-
<b>TOTAL Uncontrolled Emissions</b>			<b>0.339</b>	<b>0.003</b>	<b>0.032</b>	<b>0.003</b>	<b>0.002</b>	<b>-</b>

Unit kW Rating	No. of Units	Unit Size (0.5 bhp)	Annual Emissions TPY					
			NO <sub>x</sub>	VOC	CO	PM	SO <sub>2</sub>	NH <sub>3</sub>
1,500	1	1,005.5	0.006	0.004	0.026	0.002	0.001	<0.001
1,750	2	1,305.5	0.016	0.010	0.067	0.005	0.003	0.001
2,000	2	1,478	0.018	0.011	0.076	0.006	0.003	0.001
2,750	4	2,030	0.048	0.031	0.209	0.016	<0.001	0.003
<b>TOTAL Controlled MSS Emissions</b>			<b>0.087</b>	<b>0.056</b>	<b>0.379</b>	<b>0.029</b>	<b>0.007</b>	<b>0.006</b>
<b>TOTAL MSS Emissions</b>			<b>0.426</b>	<b>0.059</b>	<b>0.411</b>	<b>0.032</b>	<b>0.009</b>	<b>0.006</b>

<sup>(1)</sup> – 600 kW generator is not equipped with SCR and operates all 12 hours uncontrolled.

Standard controls on the engine would result in NO<sub>x</sub> emissions over 40 TPY therefore the requested emission rate limit is taken to avoid PSD applicability. The engines will have the following limits per this request.

**Generator NO<sub>x</sub> Limits, per unit in the kilowatt rating**

Unit kW Rating	Unit ID	NO <sub>x</sub> Limit	
		lb/hr	TPY <sup>(1)</sup>
1,500	7480	2.660	0.69
1,750	7481	3.454	0.90
	7482	3.454	0.90
2,000	7483	3.910	1.03
	7484	3.910	1.03
2,750	7485	5.370	1.40
	7486	5.370	1.40
	7487	5.370	1.40
	7488	5.370	1.40

<sup>(1)</sup> Based on 500 hours of operation and 12 hours of MSS

**STORAGE TANKS**

The B-21 Software Program Office project will include nine diesel underbelly storage tanks that are classified as Insignificant per OAC 252:100 Appendix I, “storage tanks with less than or equal to 10,000 gallons capacity that store volatile organic liquids with a true vapor less than or equal to 1 psia at maximum storage temperature.”

Emission estimates for the diesel generator tanks were calculated using the EPA TANKS 5.1 tool which uses calculations from AP-42 (06/20), Section 7.1, the listed annual throughput, and the material properties of diesel fuel.

Location	Emission Unit ID	Tank Size (gal)	Annual Throughput	Estimated Emissions (lb/yr)	Estimated Emissions (TPY)
Bldg. 9201 – belly tank for 1,500 kW gen set	7930	3,000	47,500	1.535	0.001

Location	Emission Unit ID	Tank Size (gal)	Annual Throughput	Estimated Emissions (lb/yr)	Estimated Emissions (TPY)
Bldg. 9201 – belly tanks for 2,000 kW gen sets	7931	4,000	70,000	2.155	0.001
	7932	4,000	70,000	2.155	0.001
CUP – belly tanks for 1,750 kW gen sets	7933	3,500	56,650	1.849	0.001
	7934	3,500	56,650	1.849	0.001
Bldg. 9201 – belly tanks for 2,750 kW gen sets	7935	5,000	94,500	3.358	0.002
	7936	5,000	94,500	3.358	0.002
	7937	5,000	94,500	3.358	0.002
	7938	5,000	94,500	3.358	0.002
<b>Total Tank VOC Emissions</b>					<b>0.013</b>

**Emission Increases from Project Sources**

Air Emission Category	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	HAPs
	TPY	TPY	TPY	TPY	TPY	TPY	TPY
Boilers & Heaters	0.66	1.66	0.13	0.02	0.18	0.18	0.05
Emergency Engines	11.74	42.24	6.36	0.81	3.28	3.28	0.38
Tanks	-	-	0.01	-	-	-	-
<b>Totals</b>	<b>12.40</b>	<b>43.90</b>	<b>6.50</b>	<b>0.83</b>	<b>3.46</b>	<b>3.46</b>	<b>0.43</b>

**SECTION V. PSD REVIEW**

The Project Potential Emissions in Section IV for the air emission sources of this project, which are the subject of this permitting action, will not result in emission increases exceeding the SERs for VOCs (40 TPY), NO<sub>x</sub> (40 TPY), CO (100 TPY), SO<sub>2</sub> (40 TPY), or PM (25 TPY), PM<sub>10</sub> (15 TPY), PM<sub>2.5</sub> (10 TPY), nor GHGs (75,000 TPY of CO<sub>2e</sub>). This permitting action does not require a PSD review.

**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 40 CFR. These requirements are addressed in the “Federal Regulations” section.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]  
 Subchapter 3 enumerates the primary and secondary ambient air quality standards and the PSD increments. The Primary Standards are in Appendix E and the 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 of Air Contaminant Sources) [Applicable]  
Subchapter 5 requires sources of air contaminants to register with DEQ's Air Quality Division (AQD), file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. The owner/operator will be required to submit emissions inventories and pay the appropriate fees.

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable]  
Part 5 includes the general administrative requirements for Part 70 permits. Any planned changes in the operation of the facility that result in emissions not authorized in the permit and 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 HAP or 20 percent of any threshold less than 10 TPY for a HAP that EPA may establish by rule

Tinker AFB submitted a Title V permit application on March 5, 1999. The Title V Operating permit for Tinker AFB was issued on May 11, 2005, with subsequent updates. Currently, Tinker AFB is operating under Permit No. 2015-0383-TVR2 issued on September 1, 2016. In addition, ODEQ has issued multiple construction permits, one for the modification of the engine test cells, one for relocation of the fuel component testing operations, and three constructions associated with the KC-46 aircraft project. Tinker AFB submitted a Title V Renewal application on February 26, 2021.

Emission limitations and operational requirements necessary to assure compliance with all applicable requirements for all sources are based on information in the application and current operating permit, or developed from the applicable requirements.

Section 8-4 requires a construction permit prior to the following:

- Construction of a new source that would require an operating permit under 40 CFR Part 70;
- Reconstruction of a major HAP source under 40 CFR Part 63;
- Any physical change or change in method of operation that would be a significant modification under OAC 252:100-8-7.2(b)(2); or
- Any physical change or change in method of operation that would increase the PTE of any one regulated air pollutant by more than 10 TPY, calculated using the approach in 40 CFR § 49.153(b).

The requested modifications are physical changes or changes in method of operation that would be a significant modification under OAC 252:100-8-7.2(b)(2) and would increase the PTE of a regulated air pollutant by more than 10 TPY. Based on this determination, the requested modifications require a construction permit.

Part 7 A review was completed for all regulated NSR pollutants for the B-21 Software Program

Office Program which resulted in an emission increase (NO<sub>x</sub>, CO, VOC, PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and CO<sub>2e</sub>). Since none of the projected emission increases were above the SER, this permit action does not require PSD evaluation.

OAC 252:100-9 (Excess Emissions Reporting Requirements) [Applicable]  
 Except as provided in OAC 252:100-9-7(a)(1), the owner or operator of a source of excess emissions shall notify the Director as soon as possible but no later than 4:30 p.m. the following working day of the first occurrence of excess emissions in each excess emission event. No later than 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 for excess emissions reporting required by 40 CFR 60, 61, or 63.

OAC 252:100-13 (Open Burning) [Applicable]  
 Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter.

OAC 252:100-19 (Particulate Matter (PM)) [Applicable]  
 This subchapter specifies PM emission limits based on heat input capacity and applies to the combustion of fuel in any new or existing fuel-burning unit. Emissions shall not exceed the limits specified in Appendix C of this regulation. Emission factors from AP-42 are considered representative of expected emissions rates in absence of specific manufacturers' data.

This subchapter specifies a PM emissions limitation of 0.6 lb/MMBTU from fuel-burning equipment with a rated heat input of 10 MMBTUH or less. For external combustion units burning natural gas, AP-42, Table 1.4-2 (7/98) lists the total PM emissions for natural gas to be 7.6 pounds per million cubic feet (lb/MMft<sup>3</sup>) or about 0.0076 lb/MMBTU.

For fuel-burning equipment rated less than 1,000 MMBTUH but greater than 10 MMBTUH, the allowable PM emissions are calculated using the formula:  $E = 1.042808 X^{(-0.238561)}$ , where E is the limit in lb/MMBTU and X is the maximum heat input. The table below lists the fuel-burning equipment and their applicable emission limits.

Equipment	Number of Units	Max. Heat Input (MMBTUH) (HHV)	Allowable PM Emission Rate (lb/MMBTU) (HHV)	Potential PM Emissions (lb/MMBTU) (HHV)
Hot Water Boiler	3	1.6	0.6	0.053
Gas Fired Infrared Units	8	0.1	0.6	0.0033
805-hp Engine	1	5.4	0.6	0.006
2,011-hp Engine	1	13.3	0.56	0.006
2,611-hp Engine	2	15.9	0.54	0.006

Equipment	Number of Units	Max. Heat Input (MMBTUH) (HHV)	Allowable PM Emission Rate (lb/MMBTU) (HHV)	Potential PM Emissions (lb/MMBTU) (HHV)
2,956-hp Engine	2	19.6	0.51	0.006
4,060-hp Engine	4	26.5	0.48	0.006

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

No discharge of greater than 20 percent opacity is allowed except for short-term occurrences that consist of not more than one 6-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. When burning natural gas, there is very little possibility of exceeding these standards. To ensure compliance with Subchapter 25, the permit requires all heaters and boilers to use natural gas as fuel and all diesel-fueled emergency engines to use ultra-low sulfur diesel as fuel. Both fuels are described in the Specific Conditions for each type of equipment.

OAC 252:100-29 (Control of 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 has negligible potential to violate this requirement; therefore, it is not necessary to require specific precautions to be taken.

OAC 252:100-31 (Control of Emissions of Sulfur Compounds) [Applicable]

No person shall cause, suffer, or allow the discharge into the atmosphere of sulfur oxides measured as SO<sub>2</sub> in excess of 0.8 lb/MMBTU heat input, maximum 3-hour average from liquid fuel-burning equipment.

Part 5 Limits SO<sub>2</sub> emissions from new fuel-burning equipment (constructed after July 1, 1972). For gaseous fuels, the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. The permit requires the use of pipeline natural gas with a maximum sulfur content of 4 ppmv (0.0007 lb/MMBTU) for all fuel-burning equipment to ensure compliance with Subchapter 31.

For liquid fuels, the limit is 0.8 lb/MMBTU heat input averaged over 3 hours. For diesel fuel combustion, AP-42, Table 3.4-1 (4/2025), lists the SO<sub>2</sub> emissions as 1.01S lb/MMBTU. The limit and this factor equates to a sulfur content of about 0.8 % S. NSPS Subpart IIII limits the engines to combustion of ultra-low sulfur diesel with a maximum sulfur content of 15 ppmw.

OAC 252:100-33 (Control of Emissions of Nitrogen Oxides) [Not Applicable]

This subchapter sets limits of NO<sub>x</sub> emissions from fuel-burning equipment with a rated heat input of 50 MMBTU/hr or more. The B-21 Software Program Office Project will not have any fuel-burning equipment with a rated heat input greater than or equal to 50 MMBTU/hr.

OAC 252:100-35 (Control of Emissions of Carbon Monoxide) [Not Applicable]

None of the following affected sources is 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 (Control of Emissions of VOCs) [Applicable]  
Part 3 requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia at maximum storage temperature to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. The underbelly storage tanks have a capacity over 400 gallons but a vapor pressure less than 1.5 psia and therefore aren't subject to this subpart.

Part 5 limits the VOC content of coatings from any coating line or other coating operation. Coating of parts and products is considered under Section 37-25. There is no applicable equipment in this project subject to this subpart.

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

Part 7 requires all effluent water separators openings or floating roofs to be sealed or equipped with an organic vapor recovery system. No effluent water separators are located at this facility.

OAC 252:100-39 (VOCs in Nonattainment and Former Nonattainment Areas) [Applicable]  
This subchapter imposes additional conditions beyond those of Subchapter 37 on emissions of organic materials from new and existing facilities in Tulsa and Oklahoma counties.  
Section 39-41 requires storage tanks with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. The underbelly storage tanks are stored at a lower vapor pressure than the threshold and are therefore not subject to this section.  
Section 47 covers VOC emissions from aerospace industries coating operations, with requirements specifically applicable to aerospace vehicle and component coating operations at aerospace manufacturing, rework, or repair facilities located in Tulsa County that have the potential to emit more than 10 TPY of VOC from coating operations. Coating operations include associated cleaning operations and surface preparation. None of the associated operations occur as part of this project.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Applicable]  
This subchapter regulates toxic air contaminants (TAC) that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by ODEQ prior to June 11, 2004, to control a TAC, shall be retained unless a modification is approved by the ADQ Director. Because no AOC has been designated anywhere in the state, there are no specific requirements for this facility at this time.

OAC 252:100-43 (Sampling and Testing Methods) [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 AQD Director may require

the owner or operator of any source in 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 AQD director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to ADQ at least 30 days prior to any EPA Reference Method stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

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

OAC 252:100-11	Alternative Emissions Reduction	not eligible
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Grain, Feed, or Seed Facility	not in source category
OAC 252:100-40	Friable Asbestos	not type of source category
OAC 252:100-47	Municipal Solid Waste Landfills	not type of source category

**SECTION VII. FEDERAL REGULATIONS**

PSD, 40 CFR Part 52 [Not Applicable]

This permitting action will not result in increases in emissions in excess of PSD SER. Any future increases of emissions must be evaluated for PSD if they exceed a SER (40 TPY NO<sub>x</sub>, 100 TPY CO, 40 TPY VOC, 40 TPY SO<sub>2</sub>, 25 TPY PM<sub>10</sub>, 10 TPY PM<sub>2.5</sub>, and 75,000 TPY CO<sub>2e</sub>).

NSPS, 40 CFR Part 60 [Subparts A, and IIII Applicable]

Subpart A, General Provisions. This subpart contains requirements for general notification and reporting requirements.

Subpart IIII, Stationary Compression Ignition Internal Combustion Engines. This subpart affects stationary compression ignition (CI) internal combustion engines (ICE) based on power and displacement ratings, depending on date of construction, beginning with those constructed after July 11, 2005. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator. The new diesel-fired emergency engines were manufactured after the applicability date and are subject to this subpart. The engines must meet the Tier 2 emission standards for new nonroad CI engines for the appropriate rated power as described in [40 CFR Part 1039, Appendix I](#), for all pollutants and the smoke standards as specified in [§1039.105](#). The applicable emission standards are shown in the table below.

**NSPS Subpart IIII – 40 CFR Part 1039 Appendix I  
Tier 2 Emission Standards (g/kW-hr)**

Rated power (kW)	NO <sub>x</sub> + NMHC	CO	PM
kW > 560	6.4	3.5	0.20

Stationary CI ICE that use diesel fuel must use diesel fuel that meets the requirements of [§1090.305](#) for nonroad diesel fuel including a maximum sulfur content of 15 ppmw.

Any operation other than emergency operation, including maintenance and testing, emergency demand response, and operation in non-emergency situations, for 50 hours per year is prohibited. There is no time limit on the use of an emergency stationary internal combustion engine (ICE) in emergency situations. Emergency stationary ICE may be operated for any combination of the purposes specified in § 60.4211(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. All applicable requirements were incorporated into the specific conditions.

NESHAP, 40 CFR Part 61

[Not Applicable]

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

NESHAP, 40 CFR Part 63

[Subpart ZZZZ and DDDDD Applicable]

Subpart GG, Aerospace Manufacturing and Rework Facilities. This subpart applies because Tinker AFB is currently a major source for HAPs and performs operations meeting the applicability criteria. Discussion of the applicable requirements is presented in sections covering the specific emission unit groups. Compliance is demonstrated by the use of compliant solvents, installation, operation, and maintenance of appropriate filters and surface coating equipment, and use of logs to track usage. Routine inspections and training are performed.

Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE). This subpart affects any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions. Owners and operators of the following new or reconstructed RICE must meet the requirements of Subpart ZZZZ by complying with either 40 CFR Part 60, Subpart IIII (for CI engines) or 40 CFR Part 60, Subpart JJJJ (for SI engines):

The new emergency engines are subject to this subpart and will comply with this subpart by complying with NSPS, Subpart IIII. No further requirements apply for engines subject to NSPS under this part.

Subpart DDDDD, Industrial, Commercial and Institutional Boilers and Process Heaters. This subpart affects industrial, commercial and institutional boilers and process heaters at major sources of HAPs. On January 31, 2013, EPA published the final changes to this subpart, which became effective on April 1, 2013. This subpart establishes emission limitations and work practice standards for HAP emitted from industrial, commercial, and institutional boilers and process heaters within a fuel subcategory located at major sources of HAP. A boiler or process heater is new or reconstructed if it commenced construction or reconstruction after June 4, 2010.

The hot water boilers installed for this project are considered units in the Gas 1 subcategory because they are only fired by natural gas. Units in the Gas 1 subcategory will conduct the tune-

up as a work practice for all regulated emissions under this subpart. Hot water heaters with a capacity of less than 120 gallons are not subject to this subpart. All applicable requirements have been incorporated into the permit.

Compliance Assurance Monitoring (CAM), 40 CFR Part 64 [Not Applicable]

This part applies to any pollutant-specific emission unit at a major source that is required to obtain an operating permit, for any application for an initial operating permit submitted after April 18, 1998, that addresses “large emissions units,” or any application that addresses “large emissions units” as a significant modification to an operating permit, or for any application for renewal of an operating permit, if it meets all of the following criteria:

- It is subject to an emission limit or standard for an applicable regulated air pollutant;
- It uses a control device to achieve compliance with the applicable emission limit or standard; and
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant greater than major source thresholds (100 TPY of a criteria pollutant, 10 TPY of a HAP, or 25 TPY of total HAP).

None of the project sources meet all three criteria.

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

Naturally occurring hydrocarbon mixtures, prior to entry into a natural gas processing plant or a petroleum refining process unit, including condensate, crude oil, field gas, and produced water, are exempt for the purpose of determining whether more than a threshold quantity of a regulated substance is present at the stationary source. This facility is not a natural gas processing plant as defined in §68.3(b) of 40 CFR Part 68. More information on this federal program is available on the web page: [www.epa.gov/ceppo](http://www.epa.gov/ceppo).

Stratospheric Ozone Protection, 40 CFR Part 82 [Not Applicable]

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

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

Class II substances consist of 33 HCFCs. A complete phase-out of Class II substances, scheduled in phases starting by 2002, is required by January 1, 2030.

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 that 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.

## SECTION VIII. COMPLIANCE

### **Tier Classification**

This application has been determined to be **Tier II** based on a new construction permit for an existing major source facility operating under a Part 70 operating permit. This permit will be processed through the traditional NSR process.

The permittee submitted a landowner affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certified that the applicant owns ~4900 acres of the land and leases ~430 acres from Oklahoma County. This 50-year lease dated September 24, 2008, authorizes Tinker AFB to conduct permitted operations on the leased property.

### **Public Review**

The applicant published the “Notice of Filing a Tier II Application” in *The Oklahoman*, a daily newspaper printed in Oklahoma County, on January 30, 2025. The notice stated that the application was available for public review at the Midwest City Library at 8143 East Reno, Midwest City, Oklahoma or at the Air Quality Division’s Main Office in Oklahoma City, Oklahoma.

The applicant will publish the “Notice of Tier II Draft Permit” in *The Oklahoman*, a daily newspaper printed in Oklahoma County. The notice will state that the draft permit will be available for public review at the Midwest City Library at 8143 East Reno, Midwest City, Oklahoma or at the Air Quality Division’s Main Office in Oklahoma City, Oklahoma.

### **Tribal Comments**

Tribal nations will be notified.

### **State Comments**

The facility is not located within 50 miles of the border of any state adjacent to the state of Oklahoma. Therefore, notification to the bordering states for this permit is not required.

### **Fees Paid**

A construction permit fee will be submitted by the applicant upon receipt of an invoice.

**SECTION X. SUMMARY**

Tinker AFB will continue to operate under Permit No. 2015-0383-TVR2, issued September 2, 2010 and concurrently with Permit No. 2015-0383-C (M-2) when it is issued.

This facility has demonstrated the ability to comply with all Air Quality rules and regulations. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues concerning this facility. Issuance of the modified construction permit is recommended, pending public, tribal, and EPA review.

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

**Tinker Air Force Base  
B-21 Software Program Office Project**

**Permit Number 2015-0383-C (M-2)**

The permittee is authorized to construct in conformity with the specifications submitted to Air Quality on November 8, 2024. The Evaluation Memorandum dated July 23, 2025, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain specific operating standards, or monitoring, reporting, and recordkeeping (MRR) requirements. Commencing construction/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 252:100-8-34(b)]

**EUG EC-11: Natural Gas-Fired Boilers and Heaters:** Emissions limits for NO<sub>x</sub>, CO and VOC are listed below:

**Emission Limits for Natural Gas-Fired Boilers and Heaters**

<b>Emission Unit Group (EUG)</b>	<b>Location</b>	<b>Emission Unit ID</b>	<b>Total Heat Input Capacity (MMBTUH)</b>
EC-11	Bldg. 9201	0676	1.6
		0677	1.6
		0678	1.6

- a. The heaters and boilers shall only be fired with pipeline-grade natural gas with a maximum sulfur content of 4 ppmv (0.25 gr/100 SCF). Compliance can be shown by the following methods: for gaseous fuel, a current gas company bill, laboratory analysis, stain-tube analysis, gas contract, tariff sheet, or other approved methods. Compliance shall be demonstrated at least once every calendar year. [OAC 252:100-31]
- b. The permittee shall comply with all applicable requirements of NESHAP Subpart DDDDD<sub>2</sub>, Industrial, Commercial and Institutional Boilers and Process Heaters including but not limited to the following: [40 CFR Part 63 Subpart DDDDD]
  - i. The permittee shall perform a tune-up of each new (installed after January 31, 2013) emission unit within five years of its installation date, followed by subsequent periodic (5-year) tune-ups. Each periodic tune-up shall be performed no later than 61 months after completion of the previous turn-up.  
[40 CFR §63.7500(e) and 40 CFR Part 63 Subpart DDDDD Table 3]
  - ii. The permittee shall ensure that emissions from these boilers are calculated (on an aggregate basis) and reported in the Annual Emission Inventory. [OAC 252:100-5]
  - iii. The permittee shall notify EPA of the startup of a new or reconstructed unit no later than 15 days after the actual startup date of the unit. [40 CFR §63.7545(c)]
  - iv. The permittee shall report performance of each annual tune-up to EPA in a compliance

report no later than the next January 31, after the tune-up.

[40 CFR §63.7550]

- v. § 63.7480 What is the purpose of this subpart?
  - vi. § 63.7485 Am I subject to this subpart?
  - vii. § 63.7490 What is the affected source of this subpart?
  - viii. § 63.7491 When do I have to comply with this subpart?
  - ix. § 63.7499 What are the subcategories of boilers and process heaters?
  - x. § 63.7500 What emission limitations, work practice standards, and operating limits must I meet?
  - xi. § 63.7501 Affirmative defense for violation of emission standards during malfunction?
  - xii. § 63.7505 What are my general requirements for complying with this subpart?
  - xiii. § 63.7510 What are my initial compliance requirements and by what date must I conduct them?
  - xiv. § 63.7515 When must I conduct subsequent performance tests, fuel analyses, or tune-ups?
  - xv. § 63.7520 What stack tests and procedures must I use?
  - xvi. § 63.7521 What fuel analyses, fuel specification, and procedures must I use?
  - xvii. § 63.7522 Can I use emissions averaging to comply with this subpart?
  - xviii. § 63.7525 What are my monitoring, installation, operation, and maintenance requirements?
  - xix. § 63.7530 How do I demonstrate initial compliance with the emission limitations, fuel specifications and work practice standards?
  - xx. § 63.7533 Can I use efficiency credits earned from implementation of energy conservation measures to comply with this subpart?
  - xxi. § 63.7535 Is there a minimum amount of monitoring data I must obtain?
  - xxii. § 63.7540 How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?
  - xxiii. § 63.7541 How do I demonstrate continuous compliance under the emissions averaging provision?
  - xxiv. § 63.7545 What notifications must I submit and when?
  - xxv. § 63.7550 What reports must I submit and when?
  - xxvi. § 63.7555 What records must I keep?
  - xxvii. § 63.7560 In what form and how long must I keep my records?
  - xxviii. § 63.7565 What parts of the General Provisions apply to me?
  - xxix. § 63.7570 Who implements and enforces this subpart?
  - xxx. § 63.7575 What definitions apply to this subpart?
- c. The permittee shall ensure that the units designated with the EU-IDs 0676, 0677, and 0678 shall be equipped with low-NO<sub>x</sub> burners and be manufacturer-guaranteed for the following emission factors: 0.015 pound NO<sub>x</sub> per MMBTU for and 0.065 pound CO per MMBTU.

**EUG IC2: Diesel-Fueled Emergency Engines:** Emission limitations have been established for IC2. . Emission limitations for each emergency engine rating size are as follows:

**Emission Limits for Emergency Engines, per unit**

EUG	Unit Rating / EU	NO <sub>x</sub>	
		lb/hr	TPY
IC2	1,500-kW / 7480	2.660	0.69
	1,750-kW / 7481	3.454	0.90
	1,750-kW / 7482	3.454	0.90
	2,000-kW / 7483	3.910	1.03
	2,000-kW / 7484	3.910	1.03
	2,750-kW / 7485	5.370	1.40
	2,750-kW / 7486	5.370	1.40
	2,750-kW / 7487	5.370	1.40
	2,750-kW / 7488	5.370	1.40

- a. Each engine shall be equipped with a non-resettable hour meter. Each engine shall be operated for no more than 500 hours per 12-month period. For each diesel-fueled emergency engine, the permittee shall record hours operated each month with compliance based on 12-month rolling totals.
- b. Each engine shall have a permanent identification plate attached that shows the make, model number, and serial number. [OAC 252:100-43]
- c. The permittee shall comply with Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, NSPS, Subpart IIII, for all affected emission units, including, but not limited to, the following: [40 CFR Part 60 Subpart IIII ]
  - i. §60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?
  - ii. §60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?
  - iii. §60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?
  - iv. §60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?
  - v. §60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?
  - vi. §60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?
  - vii. §60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?
  - viii. §60.4218 What parts of the General Provisions apply to me?
- e. The permittee shall comply with all applicable requirements of the NESHAP: Reciprocating Internal Combustion Engines, Subpart ZZZZ, for each affected facility including but not limited to the provisions listed below. [40 CFR Part 63 Subpart ZZZZ]
  - i. § 63.6580 What is the purpose of subpart ZZZZ?
  - ii. § 63.6585 Am I subject to this subpart?

- iii. § 63.6590 What parts of my plant does this subpart cover?
  - iv. § 63.6595 When do I have to comply with this subpart?
  - v. § 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?
  - vi. § 63.6605 What are my general requirements for complying with this subpart?
  - vii. § 63.6625 What are my monitoring, installation, operation, and maintenance requirements?
  - viii. § 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?
  - ix. § 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?
  - x. § 63.6650 What reports must I submit and when?
  - xi. § 63.6655 What records must I keep?
  - xii. § 63.6660 In what form and how long must I keep my records?
  - xiii. § 63.6665 What parts of the General Provisions apply to me?
  - xiv. § 63.6670 Who implements and enforces this subpart?
  - xv. § 63.6675 What definitions apply to this subpart?
- f. At least once each year the permittee shall conduct tests of NO<sub>x</sub> concentration in exhaust gases from the generator engines when operating under representative conditions for the season. Testing shall be conducted using EPA reference methods, if applicable, or a portable analyzer in accordance with a protocol meeting the requirements of the latest AQD "Portable Analyzer Guidance" document, or an equivalent method approved by AQD.
- g. The permittee shall ensure the engines listed above be abated at all times of operation by an approved Selective Catalytic Reduction (SCR) System. The engine and SCR System shall be installed, maintained, and operated in accordance with the manufacturer specifications and/or best modern practice. This condition shall not apply to EU 7467.
- h. The permittee shall ensure the engines equipped with an SCR System do not exceed the following emission limits: 0.6 grams of NO<sub>x</sub> per bhp-hour.
- i. Compliance with emission limits for the emergency engines in the above tables shall be demonstrated based on the following.
- 1. Emissions shall be determined using manufacturer emission data sheets, AP-42 factors, fuel sulfur content, and operating hours of the emergency engines.
  - 2. Emissions shall be calculated and recorded on a 12-month rolling total.
- j. Diesel particulate filters shall be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.
- k. The owner or operator shall monitor reductant quality and tank levels and alert operators to the need to refill the reductant tank before it is empty, or to replace the reductant if it does not meet concentration specifications.
- 1. The minimum interval for replenishing the diesel exhaust fluid (DEF) is the number of engine operating hours necessary to consume a full tank of fuel based on normal usage starting from full fuel capacity for the equipment.
2. **Recordkeeping Requirements:** The permittee shall maintain records of operations as

listed below. These records shall be maintained on-site for at least five years after the date of recording and shall be provided to regulatory personnel upon request.

[OAC 252:100-43 & 40 CFR Part 63, Subpart A]

- a. This permit shall incorporate all Specific Conditions, Compliance Monitoring, Reporting, and Recordkeeping requirements specified in the Specific Conditions of Permit No. 2015-0383-TRV2.
  - b. Natural Gas-Fired Boilers and Heaters.
    - i. For the fuel burned, the appropriate document(s) as described in Specific Condition for natural gas-fired boilers and heaters.
    - ii. Operation, maintenance, and inspection log for each boiler/heater.
    - iii. The permittee shall calculate and maintain annual emissions calculations based on the capacity of the unit and report them in the Annual Emission Inventory.
    - iv. Records required by 40 CFR Part 63, NESHAP, Subpart DDDDD.
  - c. Diesel-Fueled Emergency Engines.
    - i. O&M records for each emergency engine.
    - ii. Spreadsheet of emission calculations based on fuel usage, SCR operation and emission reduction efficiency, and emission data to demonstrate compliance with emission limits.
    - iii. Hours of operation for each emergency engine measured by a non-resettable hour meter(monthly and 12-month rolling total).
    - iv. Duration and number of startups.
    - v. Vendor or manufacturer's emission data for each emergency engine with and without SCR.
    - vi. Results of testing of NO<sub>x</sub> and CO exhaust in grams/hp-hr from each emergency engine to verify vendor's emission data.
    - vii. Compliance with the sulfur emission standards shall be fulfilled by using only low sulfur diesel oil (0.05 weight percent or less).
    - viii. Records required by 40 CFR Part 60, NSPS, Subpart IIII.
    - ix. Records required by 40 CFR Part 63, NSPS, Subpart ZZZZ.
3. **Operating Permit:** The permittee shall apply for a modification of their current Title V operating permit within 180 days of operational start-up of any new equipment.

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

**SECTION I. DUTY TO COMPLY**

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

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

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

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

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

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

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

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

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

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

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

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

B. Records of required monitoring shall include:

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

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

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

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

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

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

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

[OAC 252:100-43]

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

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

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

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

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

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

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

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

#### SECTION IV. COMPLIANCE CERTIFICATIONS

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

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

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

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

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

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

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

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

## **SECTION VI. PERMIT SHIELD**

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

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

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

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

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

**SECTION VIII. TERM OF PERMIT**

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

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

C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced. [OAC 252:100-8-1.4(a)]

D. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation. [OAC 252:100-8-4(b)(5)]

**SECTION IX. SEVERABILITY**

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

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

**SECTION X. PROPERTY RIGHTS**

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

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

**SECTION XI. DUTY TO PROVIDE INFORMATION**

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

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

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

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

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

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

**SECTION XII. REOPENING, MODIFICATION & REVOCATION**

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

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

B. The DEQ will reopen and revise or revoke this permit prior to the expiration date in the following circumstances:

[OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]

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

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

[OAC 100-8-7.3(d)]

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

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

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

### SECTION XIII. INSPECTION & ENTRY

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

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

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

### SECTION XIV. EMERGENCIES

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

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

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

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

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

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

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

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

## SECTION XV. RISK MANAGEMENT PLAN

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

## SECTION XVI. INSIGNIFICANT ACTIVITIES

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

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

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

**SECTION XVII. TRIVIAL ACTIVITIES**

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

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

**SECTION XVIII. OPERATIONAL FLEXIBILITY**

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

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

- (1) result in no net emissions increases,
- (2) are not modifications under any provision of Title I of the federal Clean Air Act, and
- (3) do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded;

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

**SECTION XIX. OTHER APPLICABLE & STATE-ONLY REQUIREMENTS**

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

- (1) Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning Subchapter. [OAC 252:100-13]
- (2) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU. [OAC 252:100-19]
- (3) For all emissions units not subject to an opacity limit promulgated under 40 C.F.R., Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for: [OAC 252:100-25]

- (a) Short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity;
  - (b) Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;
  - (c) An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or
  - (d) Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.
- (4) No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]
- (5) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]
- (6) Volatile Organic Compound (VOC) storage tanks built after December 28, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with a vapor-recovery system. [OAC 252:100-37-15(b)]
- (7) All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]

## SECTION XX. STRATOSPHERIC OZONE PROTECTION

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

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

B. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the 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]



**MAJOR SOURCE NSR PERMIT**

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

**Permit No. 2015-0383-C (M-2)**

**Tinker Air Force Base**

**having complied with the requirements of the law, is hereby granted permission to construct the B-21 Software Program Office Project, located within their boundaries in Midwest City, Oklahoma County, Oklahoma, subject to Specific Conditions and Standard Conditions dated July 21, 2009, both of which are attached.**

**In the absence of construction commencement, this permit shall expire 18 months from the issuance date, except as authorized under Section VIII of the Standard Conditions.**

**DRAFT**

\_\_\_\_\_  
**Division Director**  
**Air Quality Division**

\_\_\_\_\_  
**Date**

Tinker Air Force Base  
Attn: Mr. James Brown  
72 ABW/CEANP  
7535 5<sup>th</sup> Street Bldg 400  
Tinker AFB, OK 73145-9010

SUBJECT: Permit No. **2015-0383-C (M-2)**  
Tinker Air Force Base  
Fac ID: 1518  
Midwest City Air Depot

Dear Mr. Brown:

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 you must accomplish:

1. Publish at least one legal notice (one day) in at least one newspaper of general circulation within the county where the facility is located (Instructions enclosed);
2. Submit sample notice and provide date of publication to **AQD 5 days prior to notice publishing**;
3. Provide for public review, for a period of 30 days following the date of the newspaper announcement, a copy of the application and draft permit at a convenient location (preferentially at a public location) within the county of the facility;
4. Send AQD a signed affidavit of publication for the notice(s) from Item #1 above within 20 days of publication of the draft permit. Any additional comments or requested changes you have for the draft permit or the application should be submitted within 30 days of publication.

Thank you for your cooperation in this matter. If we may be of further service, please contact Caleb Jobe, at [Caleb.Jobe@deq.ok.gov](mailto:Caleb.Jobe@deq.ok.gov), or at (405) 702-4187.

Sincerely,



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

Tinker Air Force Base  
Attn: Mr. James Brown  
72 ABW/CEANP  
7535 5<sup>th</sup> Street Bldg 400  
Tinker AFB, OK 73145-9010

SUBJECT: Permit No. **2015-0383-C (M-2)**  
Tinker Air Force Base  
Fac ID: 1518  
Midwest City Air Depot

Dear Mr. Brown:

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

As is customary with permit actions for federal installations in Oklahoma, permit fees are not collected until the permit is issued. Please consider this letter to be the invoice for the permit, with a fee of \$5,000 now due. Payment should go to Ms. Kerri Housley, Air Quality Division, 707 N. Robinson, Suite 4100, Oklahoma City, OK, 73102, and reference the permit number in the correspondence.

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 1<sup>st</sup> 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 authorization number above and contact at [Caleb.Job@deq.ok.gov](mailto:Caleb.Job@deq.ok.gov), or at (405) 702-4187.

Sincerely,

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

Encl.



Version 1 – For those using the Traditional NSR Process for a construction permit application review

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

**A Tier ...II or III... application for an air quality ...type of permit or permit action being sought (e.g., construction permit for a new major facility or construction permit for a modification at an existing major facility)... has been filed with the Oklahoma Department of Environmental Quality (DEQ) by applicant, ...name and address.**

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

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

**This draft permit would authorize the facility to emit the following regulated pollutants: (list each pollutant and amounts in tons per year (TPY)). [For facility modifications only, either add the phrase: , which represents (identify the emissions change involved in the modification)., or add the sentence: The modification will not result in a change in emissions.] [For PSD permits only, add: The project will consume the following increment levels: (list the amount of increment consumption for each pollutant in ug/m<sup>3</sup>).]**

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

**Information on all permit actions including draft permits, proposed permits, final issued permits and applicable review timelines are available in the Air Quality section of the DEQ Web page: <http://www.deq.ok.gov/>.**

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





**Department of Environmental Quality (DEQ)**  
**Air Quality Division (AQD)**  
**Acronym List**  
**11-21-24**

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

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