

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

**MEMORANDUM**

**April 15, 2021**

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

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

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

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

**FROM:** Morgan McGrath, P.E., Eng. Section, Regional Office at Tulsa (ROAT)

**SUBJECT:** Evaluation of Permit Application No. **2020-0252-TVR4**  
Vicinity Energy Tulsa, Inc.  
Tulsa Facility – 202 S Frisco Avenue (SIC 4961/NAICS 221330)  
AQD Facility ID: 1636  
Latitude 36.15204°, Longitude -95.99755°  
Section 2, Township 19N, Range 12E  
Physical Address: 202 S. Frisco Avenue, Tulsa, Oklahoma 74103

**SECTION I. INTRODUCTION**

Vicinity Energy Tulsa, Inc. (“Vicinity” or “the applicant”) has submitted an application for a Title V Renewal for their Tulsa Facility – 202 S Frisco Avenue (facility). The facility is currently operating under Permit No. 2015-1043-TVR3 (M-2) issued January 29, 2020.

The facility is a PSD major stationary source and an area source of HAP emissions.

**SECTION II. FACILITY DESCRIPTION**

The Vicinity Tulsa facility sells and distributes chilled water and low-pressure steam for cooling and heating buildings located in the immediate downtown Tulsa area.

The three (3) existing boilers (T-101, T-102, and T-103) which produce steam near 600 psig. Some of the steam is used to power three refrigeration centrifugal compressors, two forced-draft fans, and two boiler feed water pumps. The remainder of the steam is reduced to 150 psig for customer space heating. Steam reduction is accomplished using a back-pressure steam turbine (driving a 500-KW generator) and pressure-reducing valves. The applicant owns and operates the piping systems that carries the steam/chilled water to and from the customer. The boilers burn commercial-grade natural gas as a primary fuel. The emergency generator burns only No. 2 diesel fuel, which is stored in a double walled 500 gallon above ground tank.

Chilled water production starts with conventional Freon refrigeration systems where the refrigerant is compressed, cooled with water from the cooling towers, and expanded to refrigeration temperatures. This cold refrigerant is used to produce chilled water by heat exchangers. The chilled water is then piped through a closed loop system to the customer for building cooling. Reciprocating engines are used to drive three chilled water pumps, four condensing water pumps, and three cooling tower fans. Each engine has an exhaust stack, and none of the engines are equipped with catalytic converters. In addition to the engines and boilers described above there are ancillary heat exchangers, evaporative water cooling towers, controls, piping systems, etc.

Vicinity operates the facility continuously (24 hours per day, every day of the year).

**SECTION III. PERMIT HISTORY**

Permits	Date Issued	Description
2015-1043-TVR3	07/11/2016	3 <sup>rd</sup> Part 70 Renewal
2015-1043-TVR3 (M-1)	02/06/2018	Minor Modification for addition of a temporary boiler
2015-1043-TVR3 (M-2)	01/29/2020	Administrative Amendment to incorporate a name change of their company from Veolia Energy Tulsa, Inc. to Vicinity Energy Tulsa, Inc.

**SECTION IV. REQUESTED CHANGES**

In the renewal, the following changes were requested as part of the application:

1. The permanent removal of the Temporary Boiler (EU ID Temp Boiler). Since the unit was permanently removed from the site, the associated specific conditions were also removed;
2. The permanent removal of all out of service standby engines (3 engines total);
3. The permanent removal of internal combustion engines T-107, T-111, T-112, T-113, and T-114. T-107 and T-111 were permitted engines with assigned emission limits in the specific conditions. Since these engines were permanently removed from the site, the associated specific conditions, including emission limits and testing requirements, were also removed. All other engines were considered grandfathered and not assigned emissions limits.
4. Incorporation of the high level citation of 40 CFR Part 63, Subpart ZZZZ; and
5. Incorporation of up-to-date insignificant activities. Specifically, the TDS concentration associated with cooling tower emissions has been updated to reflect 2019 city water data. Emissions of particulate matter have increased from 0.9 TPY to 1.7 TPY. See Section VIII for details on the calculation.

AQD has taken the opportunity in the renewal to update all federal and state regulations that apply to the facility.

**SECTION V. EQUIPMENT**

**EUG 1 Boilers**

<b>EU</b>	<b>Description</b>	<b>S/N</b>	<b>Install Date</b>	<b>Status</b>
T-101	113-MMBTUH-Murray Natural Gas Boiler	10143	1970	Grandfathered
T-102	113-MMBTUH-Murray Natural Gas Boiler	10142	1970	Grandfathered
T-103	177-MMBTUH-Babcock Natural Gas Boiler	24189	1976	Non-exempt

**EUG 2 Internal Combustion Engines**

<b>EU</b>	<b>Description</b>	<b>S/N</b>	<b>Installation Date</b>	<b>Status</b>
T-105	400-Hp Waukesha L3711G	48350	1970	Grandfathered <sup>(1)</sup>
T-106	400-Hp Waukesha L3711G	48418	1970	Grandfathered <sup>(1)</sup>
T-108	400-Hp Waukesha L3711G	48302	1970	Grandfathered <sup>(1)</sup>
T-109	400-Hp Waukesha L3711G	48294	1970	Grandfathered <sup>(1)</sup>
T-110	400-Hp Waukesha L3711G	48303	1970	Grandfathered <sup>(1)</sup>
<b>Emergency Engine</b>				
T-116	635-Hp Cummins VT1710PG636	683429-3	1970	Grandfathered <sup>(1)</sup>

<sup>1</sup>Commenced construction prior to promulgation of potentially applicable state rules and has not been modified. Therefore, the sources are considered grandfathered in the context of state rules but are otherwise affected sources under 40 CFR Part 63, Subpart ZZZZ.

**EUG-3 INSIGNIFICANT ACTIVITIES**

A list of insignificant activity equipment/operations at the facility is listed below. Each equipment/operation is qualified under the appropriate insignificant activity in Section VII.

<b>EU</b>	<b>Description</b>
TK-1	500 Gallon Diesel Tank
CT-1	Cooling Tower
W-1	Welding
TC-1	Torch Cutting

**SECTION VI. EMISSIONS**

The primary source of emissions is from the combustion of natural gas from fuel burning equipment. Fuel-burning equipment includes steam boilers, reciprocating engines, and the emergency generator which is fired on diesel fuel. All emissions are calculated using 8,760 hours of operation per year.

**EUG-1 BOILERS**

Emissions are shown in the following tables using natural gas fuel. Boiler emissions at 100% firing rate burning natural gas are based on AP-42 (7/98), Section 1.4, Table 1.4-1 and 1.4-2, with the exception that emissions of NO<sub>x</sub> from T-103 are based on stack test data (12/2011) taken while firing natural gas.

**Emission Parameters for EUG 1**

EU	MMSCFY	Emission Factors (lb/MMSCF)				
		NO <sub>x</sub>	CO	PM <sub>10/2.5</sub>	VOC	SO <sub>2</sub>
T-101	989.9	280	84	7.6	5.5	0.6
T-102	989.9	280	84	7.6	5.5	0.6
T-103	1550.6	136 <sup>(1)</sup>	84	7.6	5.5	0.6

<sup>(1)</sup>Based on stack testing (12/2011)

**Potential Emissions from EUG 1**

EU	NO <sub>x</sub>		CO		PM <sub>10/2.5</sub> <sup>(1)</sup>		VOC		SO <sub>2</sub>	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
T-101	31.64	138.58	9.49	41.57	0.86	3.76	0.62	2.72	0.07	0.30
T-102	31.64	138.58	9.49	41.57	0.86	3.76	0.62	2.72	0.07	0.30
T-103	24.07	105.44	14.87	65.12	1.35	5.89	0.97	4.26	0.11	0.47
<b>Total</b>	<b>87.35</b>	<b>382.60</b>	<b>33.85</b>	<b>148.27</b>	<b>3.06</b>	<b>13.42</b>	<b>2.22</b>	<b>9.71</b>	<b>0.24</b>	<b>1.06</b>

<sup>1</sup> Per footnote (c) on Table 1.4-2 of AP-42 (07/98), all PM (total, condensable, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM<sub>10</sub> emissions shown in the table is assumed to be equivalent to PM<sub>2.5</sub>.

Preliminary estimates of this formaldehyde were done by AQD using emissions factors from AP-42 (7/98), Section 1.4, and the equipment ratings, assuming 1,020 BTU/SCF.

**Formaldehyde Emissions**

EU	Heat Input (MMBTUH)	Emissions Factor (lb/MMBTU)	Emissions	
			(lb/hr)	(TPY)
T-101	113	7.35 E-5	0.008	0.035
T-102	113	7.35 E-5	0.008	0.035
T-103	177	7.35 E-5	0.013	0.057

**EUG-2 INTERNAL COMBUSTION ENGINES**

Emissions of NO<sub>x</sub>, CO, and VOC from the 4SRB reciprocating engines running at rated capacity are based on manufacturer’s emission factors and heat balance data to convert horsepower ratings to heat input ratings. For the Waukesha model L3711G engines, a conversion factor of 8,700 BTU/hp-hr (rounded to 9,000) was adopted from heat balance data for the model L3711G engines (3.31 MMBTUH/engine). Emissions of PM, SO<sub>2</sub>, and H<sub>2</sub>CO from the reciprocating engines are based on Table 3.2-3 of AP-42 (7/00).

The facility also has a 635-hp (4.45 MMBTUH) reciprocating diesel engine/generator set (T-116) to furnish emergency electrical power. Emissions of NO<sub>x</sub>, CO, VOC, PM<sub>10</sub> and SO<sub>2</sub>, from the emergency generator are based on manufacturer’s emission factors. Potential emissions of H<sub>2</sub>CO are based on emission factors from AP-42 Section 3.4 (10/96), Table 3.4-3, and 500 hours of operation annually.

**Engine Emission Factors**

ID#	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	H <sub>2</sub> CO
	lb/hp-hr	lb/hp-hr	lb/hp-hr	lb/MMBTU	lb/MMBTU	lb/MMBTU	lb/MMBTU
T-105	3.30E-02	3.30E-02	2.20E-03	5.88E-04	1.94E-02 <sup>2</sup>	1.94E-02 <sup>3</sup>	2.05E-02
T-106	3.30E-02	3.30E-02	2.20E-03	5.88E-04	1.94E-02 <sup>2</sup>	1.94E-02 <sup>3</sup>	2.05E-02
T-108	3.30E-02	3.30E-02	2.20E-03	5.88E-04	1.94E-02 <sup>2</sup>	1.94E-02 <sup>3</sup>	2.05E-02
T-109	3.30E-02	3.30E-02	2.20E-03	5.88E-04	1.94E-02 <sup>2</sup>	1.94E-02 <sup>3</sup>	2.05E-02
T-110	3.30E-02	3.30E-02	2.20E-03	5.88E-04	1.94E-02 <sup>2</sup>	1.94E-02 <sup>3</sup>	2.05E-02
T-116	3.10E-02	6.68E-03	2.47E-03	4.04E-04 <sup>1</sup>	2.20E-03 <sup>1,4</sup>	2.20E-03 <sup>1,4</sup>	7.89E-05

<sup>1</sup> Units are in terms of lb/hp-hr.

<sup>2</sup> Considered less than or equal to 1 micron in aerodynamic diameter. Therefore, for filterable PM emissions, PM<sub>10</sub> (filterable) = PM<sub>2.5</sub> (filterable). PM<sub>10</sub> = PM<sub>10</sub> (filterable) + PM (condensable)

<sup>3</sup> PM<sub>2.5</sub> (filterable) + PM (condensable)

<sup>4</sup> Engine manufactures data does not differentiate PM<sub>10</sub> from PM<sub>2.5</sub>; therefore, for permitting purposes applicant has assumed they are equivalent.

**Engine Emissions**

ID#	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		PM <sub>10</sub>		PM <sub>2.5</sub>		H <sub>2</sub> CO	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
T-105	13.20	57.82	13.20	57.82	0.88	3.85	0.00	0.01	0.06	0.28	0.06	0.28	0.07	0.30
T-106	13.20	57.82	13.20	57.82	0.88	3.85	0.00	0.01	0.06	0.28	0.06	0.28	0.07	0.30
T-108	13.20	57.82	13.20	57.82	0.88	3.85	0.00	0.01	0.06	0.28	0.06	0.28	0.07	0.30
T-109	13.20	57.82	13.20	57.82	0.88	3.85	0.00	0.01	0.06	0.28	0.06	0.28	0.07	0.30
T-110	13.20	57.82	13.20	57.82	0.88	3.85	0.00	0.01	0.06	0.28	0.06	0.28	0.07	0.30
T-116	19.69	4.92	4.24	1.06	1.57	0.39	0.26	0.06	1.39	0.35	1.39	0.35	<0.01	<0.01

## Facility-Wide Summary

### Criteria Pollutants

Since potential emissions of NO<sub>x</sub> and CO exceed 100 TPY, the facility is considered to be a Part 70 major source for these pollutant(s). For permitting purposes, PM<sub>2.5</sub> is assumed to be equal to PM<sub>10</sub>.

#### Emission Summary (Hourly)

EU-Point	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
T-101	31.64	9.49	0.62	0.07	0.86	0.86
T-102	31.64	9.49	0.62	0.07	0.86	0.86
T-103	24.07	14.87	0.97	0.11	1.35	1.35
T-105	13.20	13.20	0.88	< 0.01	0.06	0.06
T-106	13.20	13.20	0.88	< 0.01	0.06	0.06
T-108	13.20	13.20	0.88	< 0.01	0.06	0.06
T-109	13.20	13.20	0.88	< 0.01	0.06	0.06
T-110	13.20	13.20	0.88	< 0.01	0.06	0.06
T-116	19.69	4.24	1.57	0.26	1.40	1.40

#### Emission Summary (Annual)

EU-Point	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
	TPY	TPY	TPY	TPY	TPY	TPY
T-101	138.58	41.57	2.72	0.30	3.76	3.76
T-102	138.58	41.57	2.72	0.30	3.76	3.76
T-103	105.44	65.12	4.26	0.47	5.89	5.89
T-105	57.82	57.82	3.85	0.01	0.28	0.28
T-106	57.82	57.82	3.85	0.01	0.28	0.28
T-108	57.82	57.82	3.85	0.01	0.28	0.28
T-109	57.82	57.82	3.85	0.01	0.28	0.28
T-110	57.82	57.82	3.85	0.01	0.28	0.28
T-116	4.92	1.06	3.85	0.06	0.35	0.35
IA*	--	--	<5.0	--	<5.0	<5.0
<b>Total</b>	<b>676.62</b>	<b>438.42</b>	<b>37.80</b>	<b>1.18</b>	<b>20.16</b>	<b>20.16</b>

\*IA - Insignificant activities

### Hazardous Air Pollutants (HAPs)

Since any individual HAP does not exceed 10 TPY and combined total HAP is less than 25 TPY, the facility is considered an area source of HAP emissions.

**SECTION VII. INSIGNIFICANT ACTIVITIES**

The insignificant activities identified and justified in the renewal permit application are duplicated below. Appropriate recordkeeping of activities indicated below with "\*" is specified in the Specific Conditions (hours, quantity, or capacity). Any activity to which a state or federal applicable requirement applies is not insignificant even if it is included on this list.

1. \* Welding and soldering operations utilizing less than 100 pounds of solder and 53 tons per year of electrodes.
2. \* Torch cutting and welding of under 200,000 tons of steel fabricated per year.
3. \* Activities that have the potential to emit less than 5.0 TPY (actual) of any criteria pollutant.
  - The 500-gallon diesel tank.
  - The evaporative water cooling tower system uses no chrome in the treating of the water. Vicinity estimated PM/PM<sub>10</sub> as the product of circulating rate (gpm, design rate), total dissolved solids (avg. TDS concentration for CY 2019 from city water) and drift rate to obtain emissions of 0.4 PPH or 1.7 TPY.

Flow (gpm) × TDS Conc. (ppm) × Cycles × Drift Rate (%) × Density × 60 (min/hr)

$$\frac{45,000 \text{ gal}}{\text{minute}} \times \frac{140 \text{ parts}}{10^6 \text{ parts}} \times 12 \text{ cycles} \times \frac{0.001 \text{ drift}}{100} \times \frac{8.34 \text{ lb}}{\text{gal}} \times \frac{60 \text{ minutes}}{\text{hour}} = 0.40 \text{ lb/hr}$$

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

OAC 252:100-1 (General Provisions) [Applicable]  
Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-2 (Incorporation by Reference) [Applicable]  
This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations listed in OAC 252:100, Appendix Q. These requirements are addressed in the “Federal Regulations” section.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]  
Subchapter 3 enumerates the primary and secondary ambient air quality standards and the significant deterioration increments. At this time, all of Oklahoma is in “attainment” of these standards.

OAC 252:100-5 (Registration, Emissions Inventory and Annual Operating Fees) [Applicable]  
Subchapter 5 requires sources of air contaminants to register with Air Quality, file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. Emission inventories were submitted and fees paid for previous years as required.

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable]  
Part 5 includes the general administrative requirements for Part 70 permits. Any planned changes in the operation of the facility that result in emissions not authorized in the permit and that exceed the “Insignificant Activities” or “Trivial Activities” thresholds require prior notification to AQD and may require a permit modification. Insignificant activities refer to those individual emission units either listed in Appendix I or whose actual calendar year emissions do not exceed the following limits.

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

Emission limitations and operational requirements necessary to assure compliance with all applicable requirements for all sources are taken from the operating permit application, previous issued permits, or are developed from the applicable requirement.

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



required in the case of ongoing emission events and in the case of excess emissions reporting required by 40 CFR Parts 60, 61, or 63.

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

OAC 252:100-19 (Particulate Matter (PM)) [Applicable]  
 Section 19-4 regulates emissions of PM the combustion of fuel in any new and existing fuel-burning unit, with emission limits based on maximum design heat input rating as specified in Appendix C of OAC 252:100. Fuel-burning unit is defined in OAC 252:100-19 as any internal combustion engine or gas turbine, or other combustion device used to convert the combustion of fuel into usable energy. Thus, the equipment listed below is subject to the requirements of this subchapter.

AP-42 (7/98) Table 1.4-1 lists natural gas total PM emissions to be 7.6 lb/MMSCF or about 0.0075 lb/MMBTU (based on gas having a heating value of 1,020 BTU/SCF). Therefore, the boilers will be in compliance when operated using good combustion practices. AP-42 (7/00), Section 3.2, Table 3.2-3 lists the total PM emissions from 4-stroke, rich-burn natural gas-fired engines to be 0.02 lb/MMBTU. AP-42 (10/96), Table 3.4-1 lists total PM emissions for large stationary diesel engines to be 0.10 lb/MMBTU. Therefore, the engines will be in compliance when operated using good combustion practices.

<b>Equipment</b>	<b>Maximum Heat Input (MMBTUH)</b>	<b>Appendix C Emission Limit (lb/MMBTU)</b>	<b>Potential Emission Rate (lb/MMBTU)</b>
Boiler T-101	113	0.34	0.0075
Boiler T-102	113	0.34	0.0075
Boiler T-103	177	0.31	0.0075
Engine T-105	3.31	0.60	0.02
Engine T-106	3.31	0.60	0.02
Engine T-108	3.31	0.60	0.02
Engine T-109	3.31	0.60	0.02
Engine T-110	3.31	0.60	0.02
Emergency Engine T-116	4.45	0.60	0.10

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]  
 No discharge of greater than 20% opacity is allowed except for short-term occurrences that consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. When burning natural gas there is very little possibility of exceeding these standards. The diesel engine is subject to this requirement, but no additional precautions, beyond those included in the standard conditions are required to ensure compliance.

## OAC 252:100-29 (Fugitive Dust)

[Applicable]

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

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

[Applicable]

Part 2, Section 37-7 limits the ambient air concentration of hydrogen sulfide (H<sub>2</sub>S) emissions from any facility to 0.2 ppmv (24-hour average) at standard conditions which is equivalent to 283 µg/m<sup>3</sup>. Fuel-burning equipment fired with commercial natural gas or ultra-low sulfur diesel will not have the potential to exceed the H<sub>2</sub>S ambient air concentration limit. The other processes at this facility do not produce substantial amounts of H<sub>2</sub>S.

Part 3, Section 31-16 contains SO<sub>2</sub> emissions monitoring requirements for any fossil fuel-fired steam generator unit that was in being on or before July 1, 1972. The owner or operator is required to install, calibrate, maintain, and operate a continuous SO<sub>2</sub> emissions monitoring system for any fossil fuel-fired steam generator that utilizes an air pollution abatement operation to reduce the emissions of sulfur oxides. T-101 and T-102 were in operation before July 1, 1972; however, they are uncontrolled. Therefore, this part is not applicable.

Part 5, Section 31-25, limits sulfur dioxide emissions from new equipment (constructed after July 1, 1972). For liquid fuels the limit is 0.8 lb/MMBTU heat input averaged over 3 hours. For gaseous fuels the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. For fuel gas having a gross calorific value of approximately 1,020 BTU/SCF, this limit corresponds to fuel sulfur content of approximately 1,227 ppmv. The permit requires the use of gaseous fuel with sulfur content less than 1,227 ppmv to ensure compliance with Subchapter 31. The emergency diesel engine was construction prior to July 1, 1972 and is not subject to the sulfur dioxide requirements.

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

[Applicable]

The purpose of this subchapter is to control the emission of nitrogen oxides from stationary sources to prevent the Oklahoma air quality standards from being exceeded and insure that the present level of air quality in Oklahoma is not degraded. Section 33-2 sets equipment standards for emissions of oxides (of nitrogen measured as nitrogen dioxide from fuel-burning equipment with a rated heat input of 50 MMBTUH or greater). For gas-fired fuel-burning affected equipment, emissions of nitrogen oxides (calculated as nitrogen dioxide) shall not exceed 0.20 lb/MMBTU (86 ng/J) heat input, three-hour average.

Boiler T-101, T-102, and T-103 exceed the 50 MMBTUH threshold. However, Boilers T-101 and T-102 are grandfathered (constructed prior to February 14, 1972) and has not been identified by the applicant to have been altered, replaced, or rebuilt after February 14, 1972 resulting in increased emissions of nitrogen oxides.

T-103 is subject to the limit in this subchapter. Periodic performance testing is incorporated into the specific condition of the permit in order to demonstrate continuous compliance with the limit.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]  
This subchapter affects gray iron cupolas, blast furnaces, basic oxygen furnaces, petroleum catalytic cracking units, and petroleum catalytic reforming units. There are no affected sources.

OAC 252:100-37 (Volatile Organic Compounds) [Part 7 Applicable]  
Part 3 requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. The vapor pressure of diesel is less than 1.5 psia; therefore, Part 3 does not apply to the diesel storage tank.  
Part 5 limits the VOC content of coating used in coating lines or operations. This facility will not normally conduct coating or painting operations except for routine maintenance of the facility and equipment, which is not an affected operation. Owners and operators of sources that emit less than 100 pounds of VOC per 24-hour day are exempt from the requirements of this section.  
Part 7 requires fuel-burning equipment to be operated and maintained so as to minimize VOC emissions. Temperature and available air must be sufficient to provide essentially complete combustion. The fuel combustion equipment at the facility are designed to provide essentially complete combustion of organic materials.

OAC 252:100-39 (Organic Compounds, Nonattainment Areas) [Not Applicable]  
This subchapter imposes additional conditions beyond those of Subchapter 37 on emissions of organic materials from new and existing facilities in Tulsa and Oklahoma Counties. This facility is located in Tulsa County. However, none of the additional requirements contained in this Subchapter apply to this facility at this time.

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

OAC 252:100-43 (Testing, Monitoring, and Recordkeeping) [Applicable]  
This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any EPA Reference Method stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with

applicable requirements if the appropriate performance or compliance test or procedure had been performed. Each emissions unit must be evaluated for periodic testing in accordance with the Periodic Testing Standardization guidance issued December 1, 2011, on a pollutant by pollutant basis. The frequency of the periodic testing requirement is based on the quantity of emissions an emission unit is permitted to emit. Periodic testing requirements are not required for an emission unit that is subject to an applicable requirement that already requires periodic testing, continuous emission monitoring (CEM), or predictive emission monitoring (PEMS). The facility has several units that are considered grandfathered sources which do not have permitted emission limits. Therefore, periodic testing requirements have not been evaluated for those units. Periodic testing requirements for permitted sources were evaluated with recommendations summarized in the table below.

**Periodic Testing Review**

<b>EU</b>	<b>Pollutant</b>	<b>TPY</b>	<b>Current Monitoring</b>	<b>Periodic Testing</b>
T-103	NOx	105.44	YES	YES – Every 5 Years

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

OAC 252:100-7	Permits for Minor Facilities	not in source category
OAC 252:100-11	Alternative Reduction	not eligible
OAC 252:100-15	Mobile Sources	not in source category
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Feed & Grain Facility	not in source category
OAC 252:100-47	Landfills	not in source category

**SECTION IX. FEDERAL REGULATIONS**

PSD, 40 CFR Part 52

[Not Applicable for this Permit Action]

Total potential emissions for NO<sub>x</sub> and CO are greater than the major source threshold level of 100 TPY. PSD affects new major stationary sources and major modifications to existing stationary sources. Any future increases of emissions must be evaluated for PSD if they exceed a significance level (100 TPY CO, 40 TPY NO<sub>x</sub>, 40 TPY SO<sub>2</sub>, 40 TPY VOC, 25 TPY PM, 15 TPY PM<sub>10</sub>, 0.6 TPY Lead).

NSPS, 40 CFR Part 60

[Not Applicable]

Subpart D, Fossil Fuel Fired Steam Generating Units, apply to units with heat rating greater than 250 MMBTUH for which construction, modification or reconstruction commenced after August 17, 1971. All units are less than 250 MMBTUH. This subpart is not applicable.

Subpart Da, Standards of Performance for Electric Utility Steam Generating Units, apply to units with heat rating greater than 250 MMBTUH for which construction, modification or reconstruction commenced after September 18, 1978. All units are less than 250 MMBTUH and were manufactured before the applicability date. This subpart is not applicable.

Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, apply to units with heat rating greater than 100 MMBTUH for which construction, modification or reconstruction commenced after June 19, 1984. All units are greater than 100 MMBTUH but commenced construction prior to the applicability date.

Subparts Dc, Steam Generating Units, apply to units with heat rating of 10 MMBTUH to 100 MMBTUH for which construction, modification or reconstruction commenced after June 9, 1989. All units are greater than 100 MMBTUH and were manufactured before the applicability date.

Subpart K, Ka, Kb, Storage Vessels. There are no tanks affected by these subparts. The 500-gallon diesel fuel storage tank is less than the capacity and vapor pressure thresholds. This subpart does not apply.

Subpart GG, Stationary Gas Turbines, affects stationary gas turbines with a heat input at peak load of greater than or equal to 10.7 gigajoules per hour (10 MMBTU/hr) based on the lower heating value (LHV) of the fuel and that commenced construction, reconstruction, or modification after October 3, 1977, and on or before February 18, 2005. No stationary gas turbines are at the facility. This subpart does not apply.

Subpart IIII, Stationary Compression Ignition Internal Combustion Engines, affects stationary compression ignition (CI) internal combustion engines (ICE) based on power and displacement ratings, depending on date of construction, beginning with those constructed after July 11, 2005. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator. The emergency generator, T-116, was constructed prior to the effective date. This subpart does not apply.

Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines (SI-ICE), promulgates emission standards for all new SI engines ordered after June 12, 2006, and all SI engines modified or reconstructed after June 12, 2006, regardless of size. There were no SI engines ordered, modified, or reconstructed after June 12, 2006. Therefore, there are no affected engines at this time. The facility maintains an on-site engine pool for purposes of having standby engine replacements on-site and ready to minimize downtime during maintenance and repairs. Specific conditions in the permit require records of maintenance, repairs, parts replacement, including the date and time of each servicing, the service performed, and the costs of the service for each engine

identified on the list. It prohibits increasing the engine pool with off-site engines except as replacements authorized by the replacement provisions of the specific conditions and requires that the engine pool list be maintained, tracked, and updated for each engine. This subpart does not apply.

Subpart KKKK, Stationary Combustion Turbines, establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBTU) per hour based on the higher heating value of the fuel, that commenced construction, modification, or reconstruction after February 18, 2005. There are no stationary turbines at the facility. This subpart does not apply.

NESHAP, 40 CFR Part 61 [Not Applicable]

There are no emissions of any of the regulated pollutants: arsenic, asbestos, benzene, beryllium, coke oven emissions, mercury, radionuclides, or vinyl chloride except for trace amounts of benzene.

NESHAP, 40 CFR Part 63 [Subpart ZZZZ Applicable]

Subpart Q, Industrial Process Cooling Towers applies to all new and existing industrial process cooling towers (IPCT) that are operated with chromium-based water treatment chemicals on or after September 8, 1994, and are either major sources of HAPs or are integral parts of facilities that are major sources of HAPs as defined in §63.401. No owner or operator of an IPCT shall use chromium-based water treatment chemicals in any affected IPCT. The cooling tower does not use chromium-based treatment and the facility is not a major source of HAPs. This subpart does not apply.

Subpart YYYY, Stationary Combustion Turbines, establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emissions from stationary combustion turbines located at major sources of HAP emissions, and requirements to demonstrate initial and continuous compliance with the emission and operating limitations. There are no stationary turbines at the facility. This subpart does not apply.

Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE). This subpart affects existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions. All EUG 2 engines at the facility are subject to Subpart ZZZZ as existing units located at an area source of HAP emissions.

**EUG 2 Internal Combustion Engines**

EU	Description	S/N	Installation Date	Subpart 4Z
T-105	400-Hp Waukesha L3711G	48350	1970	Existing
T-106	400-Hp Waukesha L3711G	48418	1970	Existing
T-108	400-Hp Waukesha L3711G	48302	1970	Existing
T-109	400-Hp Waukesha L3711G	48294	1970	Existing
T-110	400-Hp Waukesha L3711G	48303	1970	Existing
Emergency Engine				
T-116	635-Hp Cummins VT1710PG636	683429-3	1970	Existing

As stated in §§63.6603 and 63.6640, owners or operators must comply with the requirements listed in Table 2d for existing stationary RICE located at area sources of HAP emissions. To be

considered to be a an emergency stationary RICE under this subpart, the permittee must operate the engine according to the requirements of § 63.6640(f)(1) through (4). There is no time limit on the use of the engine in emergency situations. Operation during non-emergency situations (e.g., for maintenance checks, readiness testing, and up to 50 hours of non-emergency power generation) is limited to a total of 100 hours per calendar year. In addition, the permittee will be required to comply with work practice standards applicable to the operation of the engine. A summary of those requirements (from Table 2d of this subpart) is in the following table.

<b>Engine Category</b>	<b>Requirements Applicable During Normal Operation<sup>1</sup></b>
Emergency stationary CI RICE and black start stationary CI RICE <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>3</sup> b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>3</sup> b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary

- <sup>1</sup> During Startup - Minimize the engine’s time spent at idle and minimize the engine’s startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
- <sup>2</sup> If the engine is operating during an emergency, these management practices may be delayed until the emergency is over.
- <sup>3</sup> Or use an oil analysis program as described in § 63.6625(i) or (j) to extend oil life.

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

Subpart JJJJJ, Industrial, Commercial, and Institutional Boilers Area Sources. Affected sources include industrial, commercial, or institutional boiler as defined in §63.11237 located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in §63.2, except as specified in §63.11195. Per §63.11195(e), gas-fired boilers are not subject to this subpart. All boilers at the facility are gas-fired. This subpart does not apply.

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 three (3) of the following criteria:

- It is subject to an emission limit or standard for an applicable regulated air pollutant
- It uses a control device to achieve compliance with the applicable emission limit or standard
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant of 100 TPY

None of the equipment at the facility utilize a control device to comply with an applicable emission limit or standard. CAM does not apply at this time.

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

The definition of a stationary source does not apply to transportation, including storage incident to transportation, of any regulated substance or any other extremely hazardous substance under the provisions of this part. More information on this federal program is available on the web page: [www.epa.gov/rmp](http://www.epa.gov/rmp).

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

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

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

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

The standard conditions of the permit address the requirements specified at § 82.156 for persons opening appliances for maintenance, service, repair, or disposal; § 82.158 for equipment used during the maintenance, service, repair, or disposal of appliances; § 82.161 for certification by an approved technician certification program of persons performing maintenance, service, repair, or disposal of appliances; § 82.166 for recordkeeping; § 82.158 for leak repair requirements; and §



82.166 for refrigerant purchase records for appliances normally containing 50 or more pounds of refrigerant.

## SECTION X. COMPLIANCE

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

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

Inspection Type	Date	Summary/Results
Full Inspection	01/10/2020	In compliance
Full Inspection	03/22/2018	In compliance
Full Inspection	01/07/2016	One violation for failing to conduct and submit records of maintenance for emergency engine. Case closed 2/28/2017.

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

## SECTION XI. TIER CLASSIFICATION, PUBLIC AND EPA REVIEW

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

The applicant published the “Notice of Filing a Tier II Application” in the Tulsa World newspaper, a local newspaper in Tulsa County on May 31, 2020. The notice stated that the application was available for review at Vicinity Energy located at 302 S. Boston Ave, Suite 1501 in Tulsa County, and also at the Air Quality Division’s main office in Oklahoma City. The information on all permit actions is available for review by the public in the Air Quality section of the DEQ web page at <https://www.deq.ok.gov>.

The applicant will publish the “Notice of Tier II Draft Permit” as a legal notice in a newspaper of general circulation in the area where the source is located. The notice of draft permit will state that the draft permit will be available for public review at a location in the county where the facility is located, and that the draft permit will also be available for public review at the Air Quality Division main office. The draft permit will be available for a 30-day public review period. The draft permit will also be available for public review on the Air Quality section of the DEQ web page at <https://www.deq.ok.gov>.

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

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

If the Administrator does not object in writing during the 45-day EPA review period, any person that meets the requirements of this subsection may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection. Any such petition shall be based only on objections to the permit that the petitioner raised with reasonable specificity during the public comment period provided for in 27A O.S. § 2-14-302.A.2., unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period. If the Administrator objects to the permit as a result of a petition filed under this subsection, the DEQ shall not issue the permit until EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection. If the DEQ has issued a permit prior to receipt of an EPA objection under this subsection, the DEQ will modify, terminate, or revoke such permit, and shall do so consistent with the procedures in 40 CFR §§ 70.7(g)(4) or (5)(i) and (ii) except in unusual circumstances. If the DEQ revokes the permit, it may thereafter issue only a revised permit that satisfies EPA's objection. In any case, the source will not be in violation of the requirement to have submitted a timely and complete application.

## **SECTION XII. SUMMARY**

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

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

**Vicinity Energy Tulsa, Inc.  
Tulsa Facility – 202 S Frisco Avenue**

**Permit Number 2020-0252-TVR4  
Facility ID Number 1636**

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on May 27, 2020 and subsequent information thereafter. The Evaluation Memorandum dated April 15, 2021, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein:

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

**A. EUG-1 BOILERS** Grandfathered status applies to only the engines identified in the following table. Grandfathered status does not supersede the requirement(s) to evaluate the applicability of NSPS, NESHAP, or PSD when changes to the boilers(s) result in a reconstruction or modification.

<b>EU</b>	<b>Description</b>	<b>S/N</b>	<b>Install Date</b>	<b>Status</b>
T-101	113-MMBTUH Murray Boiler	10143	1970	Grandfathered
T-102	113-MMBTUH Murray Boiler	10142	1970	Grandfathered
T-103	177-MMBTUH Babcock Boiler	24189	1976	Non-exempt

**Emission Limits for T-103**

<b>EU</b>	<b>NO<sub>x</sub></b>		<b>CO</b>	
	<b>lb/hr <sup>(1)</sup></b>	<b>TPY <sup>(2)</sup></b>	<b>lb/hr <sup>(1)</sup></b>	<b>TPY <sup>(2)</sup></b>
T-103	24.07	105.44	14.87	65.12

<sup>(1)</sup> Expressed as a three-hour average

<sup>(2)</sup> Expressed as a monthly rolling, 12-month total

- i. Emissions of NO<sub>x</sub> from T-103 shall not exceed 0.20 lb-NO<sub>x</sub>/MMBTU, three-hour average. Compliance shall be demonstrated by periodic testing as indicated in Specific Condition No. 7. [OAC 252:100-33]
- ii. Compliance with the hourly NO<sub>x</sub> emission limitations shall be demonstrated based on periodic testing as contained in Specific Condition No. 7. [OAC 252:100-8-6(a)]
- iii. Compliance with the annual NO<sub>x</sub> and CO emission limitations in Specific Condition 1. (A) shall be demonstrated on a monthly rolling 12-month total basis. Each calendar month the applicant shall determine emissions by multiplying the total quantity of each natural gas fuel combusted during that month times the appropriate emission factors

found in Table 1.4 of AP-42 (07/98), or, using representative emission factors developed from AQD approved stack testing data. [OAC 252:100-8-6(a)]

**B. EUG-2 INTERNAL COMBUSTION ENGINES.** There are no emission limits applied to these units under Title V, but they are limited to the existing equipment as they are.

- i. Grandfathered status applies to only the engines identified in the following table. Grandfathered status does not supersede the requirement(s) to evaluate the applicability of NSPS, NESHAP, or PSD when changes to the engine(s) result in a reconstruction or modification. Additionally, PSD applicability must be checked at each engine replacement, regardless of grandfathered status or whether the replacement engine is from the on-site engine pool. Requirements for any replacement engine are addressed in Specific Condition No. 4.

EU	Description	S/N	Installation Date	Status
T-105	400-Hp Waukesha L3711G	48350	1970	Grandfathered
T-106	400-Hp Waukesha L3711G	48418	1970	Grandfathered
T-108	400-Hp Waukesha L3711G	48302	1970	Grandfathered
T-109	400-Hp Waukesha L3711G	48294	1970	Grandfathered
T-110	400-Hp Waukesha L3711G	48303	1970	Grandfathered
<b>Emergency Engine</b>				
T-116	635-Hp Cummins VT1710PG636	683429-3	1970	Grandfathered

**C. EUG—3 Insignificant Sources.** The recordkeeping requirements are specified in Specific Condition No. 10.

- 2. All natural gas combustion equipment shall be fired with commercial grade natural gas defined in Part 72 as having 0.5 grains/100 SCF. Compliance can be shown for gaseous fuel by a gas company bill. Compliance shall be demonstrated at least once every calendar year. [OAC 252:100-31]
- 3. Each piece of fuel-burning equipment operating at the facility shall have a permanent identification plate attached, which shows the make, model number, and serial number. [OAC 252:100-43]
- 4. The permittee is authorized to replace any internal combustion engine with emissions limitations specified in this permit with an engine or turbine that meets the following requirements: [OAC 252:100-8-6(f)(2)]
  - (a) The replacement engine shall comply with the same emissions limits as the engine or turbine that it replaced. This applies to lb/hr and TPY limits specified in this permit.
  - (b) The authorization of replacement of an engine includes temporary periods of 6 months or less for maintenance purposes.
  - (c) The permittee shall notify AQD in writing not later than 7 days prior to start-up of the replacement engine or turbine. Said notice shall identify the old engine/turbine and shall

include the new engine/turbine make and model, serial number, horsepower rating, and pollutant emission rates (g/hp-hr, lb/hr, and TPY) at maximum horsepower for the altitude/location.

- (d) Quarterly emissions tests for the replacement engine(s)/turbine(s) shall be conducted to confirm continued compliance with NO<sub>x</sub> and CO emission limitations. A copy of the first quarter testing shall be provided to AQD within 60 days of start-up of each replacement engine/turbine. The test report shall include the engine/turbine fuel usage, stack flow (ACFM), stack temperature (°F), and pollutant emission rates (g/hp-hr, lb/hr, and TPY) at maximum rated horsepower for the altitude/location.
  - (e) Replacement equipment and emissions are limited to equipment and emissions which are not a modification under NSPS or NESHAP.
  - (f) Replacement equipment and emissions are limited to equipment and emissions which are not a modification or a significant modification under PSD. For existing PSD facilities, the permittee shall calculate the PTE or the net emissions increase resulting from the replacement to document that it does not exceed significance levels and submit the results with the notice required by paragraph (c) of this Specific Condition. The permittee shall attach each such notice to their copy of the relevant permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield described in OAC 252:100-8-6(d) does not apply to any change made pursuant to this paragraph.
  - (g) Engines whose installation and operation are authorized under this Specific Condition which are subject to 40 CFR Part 63, Subpart ZZZZ and/or 40 CFR Part 60, Subpart JJJJ shall comply with all applicable requirements.
5. All applicable fuel-burning or refuse-burning equipment shall be operated to minimize emissions of VOC. Among other things, such operation shall assure that the equipment is not overloaded; that it is properly cleaned, operated, and maintained; and that temperature and available air are sufficient to provide essentially complete combustion. [OAC 252:100-37-36]
6. T-101 and T-102 are large enough to require permitting if they were modified sources. The permittee shall maintain Operating and Maintenance records sufficient to demonstrate that these sources have not been modified or reconstructed to an extent requiring permitting.  
[OAC 252:100-43]
7. The permittee shall conduct performance testing as specified below and furnish a written report to the AQD. Performance tests shall be conducted under representative conditions of the affected source and presents the greatest challenge to the emission standard, without creating an unsafe condition. A sampling protocol and notification of testing date(s) shall be submitted to AQD thirty (30) days in advance of commencement of testing, The testing protocol shall include the proposed representative conditions at which the tests will be conducted and in accordance with AQD Guidelines for Conduction Air Quality Stack Tests in Oklahoma (12/18). If a pre-test meeting is determined to be necessary by the source or AQD, the meeting shall be conducted 14 calendar days before the testing date. The owner or operator shall make available to the Administrator such records necessary to determine the conditions of the performance tests. The

following USEPA methods shall be used for testing of emissions, unless otherwise approved by AQD. [OAC 252:100-43]

EU	Description	Pollutant Tested	Test Method Required	Frequency
T-103	177-MMBTUH Babcock Boiler	NO <sub>x</sub>	1-4, 7E	Once every 5 years <sup>(1)</sup>

<sup>(1)</sup>To be completed during the term of Permit No. 2020-0252-TVR4.

8. EUG 2 units are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines. On or after the compliance date(s) specified in §63.6595, the permittee shall comply with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ, including but not limited to, the following:

[40 CFR Subpart ZZZZ (§§63.6580-63.6675, Table 1-Table 8, Appendix A to Subpart ZZZZ)]

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

9. The permittee shall maintain records of operations as listed below. These records shall be maintained on-site or at a local field office for at least five years after the date of recording and shall be provided to regulatory personnel upon request. [OAC 252:100-8-6(a)(3)(B)]

- a) Emissions of NO<sub>x</sub> and CO (monthly rolling, 12 month total) as described in Specific Condition No. 1(A);
  - b) For the fuel(s) burned, the appropriate document(s) as described in Specific Condition No. 2;
  - c) O&M records for those grandfathered emission units identified in EUG-1 and EUG-2. Such records shall at a minimum include the dates of operation and maintenance, type of work performed, and any increase in emissions, as a result;
  - d) Performance test results on T-103 as described in Specific Condition No. 7;
  - e) Records as required by 40 CFR Part 63, NESHAP Subpart ZZZZ;
  - f) The permittee has to keep records of emissions per OAC 252:100-36.2(c) to show that the emission increases do not exceed the PSD significance levels for those existing units with projected actual emissions.
10. The following records shall be maintained on-site or at a local field office to verify insignificant activities. [OAC 252:100-43]
- a) For welding and soldering operations utilizing less than 100 pounds of solder and 53 tons per year of electrodes: amount of solder and electrodes used (cumulative annual);
  - b) For torch cutting and welding of less than 200,000 tons of fabricated steel: amount of steel cut and welded (cumulative annual);
  - c) For activities that have the potential to emit less than 5.0 TPY (actual) of any criteria pollutant: type of activity and the amount of emissions from that activity (cumulative annual).
11. This facility is considered an existing Prevention of Significant Deterioration (PSD) facility. As such, the facility is subject to the provisions of OAC 252:100-8-36.2(c) for any project as defined therein. [OAC 252:100-8-36.2(c)]
12. No later than 30 days after each anniversary date of the issuance of the original Title V permit (October 15, 1999), the permittee shall submit to Air Quality Division of DEQ, along with a copy to the US EPA Region 6, a certification of compliance with the terms and conditions of this permit. [OAC 252:100-8-6(c)(5)(A), (C), & (D)]
13. The permittee shall be authorized to operate this facility continuously (24 hours per day, every day of the year). [OAC 252:100-8-6(a)]
14. This permit shall supersede all previous Air Quality operating permits for this facility, which are now canceled.





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

**SECTION I. DUTY TO COMPLY**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. Records of required monitoring shall include:

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

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

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

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

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

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

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

[OAC 252:100-43]

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

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

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

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

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

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

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

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

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

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

#### **SECTION IV. COMPLIANCE CERTIFICATIONS**

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

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

B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the methods used for determining compliance, currently and over the reporting period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source.

[OAC 252:100-8-6(c)(5)(C)(i)-(v)]

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

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

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

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

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

#### **SECTION VI. PERMIT SHIELD**

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

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

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

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

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

**SECTION VIII. TERM OF PERMIT**

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

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

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

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

**SECTION IX. SEVERABILITY**

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

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

**SECTION X. PROPERTY RIGHTS**

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

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

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

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

**SECTION XI. DUTY TO PROVIDE INFORMATION**

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

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

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

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

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

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

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

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

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

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

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

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

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

[OAC 100-8-7.3(d)]

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

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

E. Activities that will result in air emissions that exceed the trivial/insignificant levels and that are not specifically approved by this permit are prohibited.

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

## **SECTION XIII. INSPECTION & ENTRY**

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right

to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(17) for confidential information submitted to or obtained by the DEQ under this section):

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

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

#### SECTION XIV. EMERGENCIES

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

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

B. Any exceedance that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to AQD as soon as is practicable; but under no circumstance shall notification be more than 24 hours after the exceedance.

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

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

[OAC 252:100-8-2]

D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that:

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

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

E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

[OAC 252:100-8-6(e)(3)]

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

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

#### **SECTION XV. RISK MANAGEMENT PLAN**

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

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

#### **SECTION XVI. INSIGNIFICANT ACTIVITIES**

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

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

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

#### **SECTION XVII. TRIVIAL ACTIVITIES**

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

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

#### **SECTION XVIII. OPERATIONAL FLEXIBILITY**

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

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

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

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



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

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

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

- (1) Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning Subchapter. [OAC 252:100-13]
- (2) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU. [OAC 252:100-19]
- (3) For all emissions units not subject to an opacity limit promulgated under 40 C.F.R., Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for: [OAC 252:100-25]
  - (a) Short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity;
  - (b) Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;
  - (c) An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or
  - (d) Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.
- (4) No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]
- (5) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]

- (6) Volatile Organic Compound (VOC) storage tanks built after December 28, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with a vapor-recovery system. [OAC 252:100-37-15(b)]
- (7) All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]

## SECTION XX. STRATOSPHERIC OZONE PROTECTION

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

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

B. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant. [40 CFR 82, Subpart B]

C. The permittee shall comply with the following standards for recycling and emissions reduction except as provided for MVACs in Subpart B: [40 CFR 82, Subpart F]

- (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156;
- (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158;
- (3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161;
- (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to § 82.166;
- (5) Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.158; and
- (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

**SECTION XXI. TITLE V APPROVAL LANGUAGE**

A. DEQ wishes to reduce the time and work associated with permit review and, wherever it is not inconsistent with Federal requirements, to provide for incorporation of requirements established through construction permitting into the Source's Title V permit without causing redundant review. Requirements from construction permits may be incorporated into the Title V permit through the administrative amendment process set forth in OAC 252:100-8-7.2(a) only if the following procedures are followed:

- (1) The construction permit goes out for a 30-day public notice and comment using the procedures set forth in 40 C.F.R. § 70.7(h)(1). This public notice shall include notice to the public that this permit is subject to EPA review, EPA objection, and petition to EPA, as provided by 40 C.F.R. § 70.8; that the requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process; that the public will not receive another opportunity to provide comments when the requirements are incorporated into the Title V permit; and that EPA review, EPA objection, and petitions to EPA will not be available to the public when requirements from the construction permit are incorporated into the Title V permit.
- (2) A copy of the construction permit application is sent to EPA, as provided by 40 CFR § 70.8(a)(1).
- (3) A copy of the draft construction permit is sent to any affected State, as provided by 40 C.F.R. § 70.8(b).
- (4) A copy of the proposed construction permit is sent to EPA for a 45-day review period as provided by 40 C.F.R. § 70.8(a) and (c).
- (5) The DEQ complies with 40 C.F.R. § 70.8(c) upon the written receipt within the 45-day comment period of any EPA objection to the construction permit. The DEQ shall not issue the permit until EPA's objections are resolved to the satisfaction of EPA.
- (6) The DEQ complies with 40 C.F.R. § 70.8(d).
- (7) A copy of the final construction permit is sent to EPA as provided by 40 CFR § 70.8(a).
- (8) The DEQ shall not issue the proposed construction permit until any affected State and EPA have had an opportunity to review the proposed permit, as provided by these permit conditions.
- (9) Any requirements of the construction permit may be reopened for cause after incorporation into the Title V permit by the administrative amendment process, by DEQ as provided in OAC 252:100-8-7.3(a), (b), and (c), and by EPA as provided in 40 C.F.R. § 70.7(f) and (g).
- (10) The DEQ shall not issue the administrative permit amendment if performance tests fail to demonstrate that the source is operating in substantial compliance with all permit requirements.

B. To the extent that these conditions are not followed, the Title V permit must go through the Title V review process.

**SECTION XXII. CREDIBLE EVIDENCE**

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any provision of the Oklahoma implementation plan, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [OAC 252:100-43-6]



# PART 70 PERMIT

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

Permit No. 2020-0252-TV4

Vicinity Energy Tulsa Incorporated,

having complied with the requirements of the law, is hereby granted permission to operate all the sources within the boundaries of their facility located at 202 S. Frisco Avenue, Tulsa, Oklahoma, subject to Standard Conditions dated July 21, 2016, and Specific Conditions, both attached.

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

DRAFT/PROPOSED

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

\_\_\_\_\_  
Date



SCOTT A. THOMPSON  
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT  
Governor

Vicinity Energy Tulsa, Inc.  
Attn: Mr. Jeff Tate  
320 South Boston Ave Suite 1501  
Tulsa, OK 74103-4704

SUBJECT: Permit Application No. **2020-0252-TV R4**  
Tulsa Facility – 202 S Frisco Avenue (SIC 4961/NAICS 221330)  
AQD Facility ID: 215  
Physical Address: 202 S. Frisco Avenue, Tulsa, Oklahoma 74103

Dear Mr. Tate:

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

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

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

Sincerely,

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

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

Enclosures



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

## **APPLICANT RESPONSIBILITIES**

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

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

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

**SAMPLE NOTICE continued on next page.**

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

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

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

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

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

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

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

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

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



**Department of Environmental Quality (DEQ)**  
**Air Quality Division (AQD)**  
**Acronym List**  
**2-9-21**

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

<b>NSR</b>	New Source Review	<b>SRU</b>	Sulfur Recovery Unit
<b>O<sub>3</sub></b>	Ozone	<b>T</b>	Tons
<b>O&amp;G</b>	Oil and Gas	<b>TAC</b>	Toxic Air Contaminant
<b>O&amp;M</b>	Operation and Maintenance	<b>THC</b>	Total Hydrocarbons
<b>O&amp;NG</b>	Oil and Natural Gas	<b>TPY</b>	Tons per Year
<b>OAC</b>	Oklahoma Administrative Code	<b>TRS</b>	Total Reduced Sulfur
<b>OC</b>	Oxidation Catalyst	<b>TSP</b>	Total Suspended Particulates
<b>PAH</b>	Polycyclic Aromatic Hydrocarbons	<b>TV</b>	Title V of the Federal Clean Air Act
<b>PAE</b>	Projected Actual Emissions	<b>µg/m<sup>3</sup></b>	Micrograms per Cubic Meter
<b>PAL</b>	Plant-wide Applicability Limit	<b>US EPA</b>	U. S. Environmental Protection Agency
<b>Pb</b>	Lead	<b>VMT</b>	Vehicle Miles Traveled
<b>PBR</b>	Permit by Rule	<b>VOC</b>	Volatile Organic Compound
<b>PCB</b>	Polychlorinated Biphenyls	<b>VOL</b>	Volatile Organic Liquid
<b>PCE</b>	Partial Compliance Evaluation	<b>VRT</b>	Vapor Recovery Tower
<b>PEA</b>	Portable Emissions Analyzer	<b>VRU</b>	Vapor Recovery Unit
<b>PFAS</b>	Per- and Polyfluoroalkyl Substance	<b>YR</b>	Year
<b>PM</b>	Particulate Matter	<b>2SLB</b>	2-Stroke Lean Burn
<b>PM<sub>2.5</sub></b>	Particulate Matter with an Aerodynamic Diameter <= 2.5 Micrometers	<b>4SLB</b>	4-Stroke Lean Burn
<b>PM<sub>10</sub></b>	Particulate Matter with an Aerodynamic Diameter <= 10 Micrometers	<b>4SRB</b>	4-Stroke Rich Burn
<b>POM</b>	Particulate Organic Matter or Polycyclic Organic Matter		
<b>ppb</b>	Parts per Billion		
<b>ppm</b>	Parts per Million		
<b>ppmv</b>	Parts per Million Volume		
<b>ppmvd</b>	Parts per Million Dry Volume		
<b>PSD</b>	Prevention of Significant Deterioration		
<b>psi</b>	Pounds per Square Inch		
<b>psia</b>	Pounds per Square Inch Absolute		
<b>psig</b>	Pounds per Square Inch Gage		
<b>RACT</b>	Reasonably Available Control Technology		
<b>RATA</b>	Relative Accuracy Test Audit		
<b>RFG</b>	Refinery Fuel Gas		
<b>RICE</b>	Reciprocating Internal Combustion Engine		
<b>RO</b>	Responsible Official		
<b>ROAT</b>	Regional Office at Tulsa		
<b>RVP</b>	Reid Vapor Pressure		
<b>SCC</b>	Source Classification Code		
<b>SCF</b>	Standard Cubic Foot		
<b>SCFD</b>	Standard Cubic Feet per Day		
<b>SCFM</b>	Standard Cubic Feet per Minute		
<b>SCR</b>	Selective Catalytic Reduction		
<b>SER</b>	Significant Emission Rate		
<b>SI</b>	Spark Ignition		
<b>SIC</b>	Standard Industrial Classification		
<b>SIP</b>	State Implementation Plan		
<b>SNCR</b>	Selective Non-Catalytic Reduction		
<b>SO<sub>2</sub></b>	Sulfur Dioxide		
<b>SO<sub>x</sub></b>	Sulfur Oxides		
<b>SOP</b>	Standard Operating Procedure		

