AIR QUALITY
GENERAL PERMIT TO CONSTRUCT/OPERATE
OIL & GAS FACILITIES
(For Minor Facilities)

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

In compliance with the provisions of the Oklahoma Clean Air Act, as amended (27A O.S., et seq.) and rules promulgated thereunder, operators of oil and gas facilities (OGF), as described under Part 1, Section III below, are hereby granted permission to construct/operate such facilities as specified in an Authorization to Construct/Operate (hereinafter referred to as an "Authorization") issued under this general permit by the Department of Environmental Quality (DEQ). Parts 1 through 4 and Appendices A through C of this permit specify emission limitations and standards that constitute applicable requirements, including state-only requirements, and include operational requirements and limitations necessary to assure compliance with all applicable air pollution rules. All OGF shall remain subject to the Oklahoma Clean Air Act, Okla. Stat. tit. 27A §§ 2-5-101 to -118 (2004) and the rules promulgated thereunder at Okla. Admin. Code ("OAC"), Air Pollution Control, Title 252, Chapter 100-1-1 to -47-14 (2004).

The owner or operator of an OGF may request that the facility be granted an Authorization in accordance with this general permit by submitting to the Air Quality Division (AQD) a DEQ Notice of Intent (NOI) Form and a complete set of General Permit Application Forms for an OGF. Eligible facilities may apply for coverage under this permit at any time during the permit term. No facility, or part thereof, is authorized to construct or operate pursuant to the terms of this general permit unless an application for an Authorization using an NOI Form has been received by the AQD, or an Authorization has been issued for that facility.

Signed and issued this day, Dec. 17, 2008.

Eddie Terrill, Director

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Note: All terms written with initial capital letters are defined in Appendix C. Any reader of this permit should first read the definitions in Appendix C. Note that the term engine refers to both reciprocating internal combustion engines and gas-fired turbine engines.

PART 1 - REQUIREMENTS FOR GENERAL PERMIT

This permit is issued for the oil and gas facility (OGF) source category to establish (A) terms and conditions to implement applicable air pollution rules, (B) terms and conditions to implement applicable air pollution rules for specified categories of changes to those permitted sources, (C) terms and conditions for new requirements that apply to sources with existing permits, and (D) federally-enforceable caps on emissions. The permit is issued after finding that there are several permittees, permit applicants, or potential permit applicants who have the same or substantially similar operations, emissions, activities, or facilities; the permittees, permit applicants, or potential permit applicants emit the same types of regulated air pollutants; the operations, emissions, activities, or facilities are subject to the same or similar standards, limitations, and operating requirements; and the operations, emissions, activities, or facilities are subject to the same or similar monitoring requirements.

SECTION I. AUTHORITY

This permit is developed in accordance with the provisions of OAC 252:100-7-15 and 100-7-18.

SECTION II. APPLICABILITY/EXEMPTIONS

Operators of a facility with potential emissions less than 100 TPY of criteria pollutants, 10 TPY of an individual hazardous air pollutant (HAP), or 25 TPY of all HAP, may use this general permit or obtain a minor source construction or operating permit. Facilities that are a permit exempt facility in accordance with OAC 252:100-7 are not required to obtain either a general permit or a minor source construction or operating permit.

SECTION III. ELIGIBILITY

A. This permit is limited to air pollutant emitting sources located at OGF that are designed and operated for the production, gathering, processing, storage, or transportation of crude oil, refined petroleum products, natural gas, and natural gas liquids (NGL), including condensate.

The following types of facilities are generally eligible for coverage under this permit:

1. New facilities.

2. Existing facilities, including those with previously issued minor source construction and/or operating permits, or those previously exempted from the requirement to obtain a permit.

3. Facilities existing prior to the effective date of any applicable standard that would have created specific quantifiable and enforceable emission rates.

B. The following facilities are not eligible for this permit:

1. Facilities for which material facts were misrepresented or omitted from the application and the applicant knew or should have known of such misrepresentation or omission.

2. Facilities with emissions units, unless qualified as a de minimis facility under OAC 252:100, Appendix H, that are affected sources subject to:

   a. OAC 252:100-8 (Permits for Part 70 Sources)
   b. OAC 252:100-15 (Motor Vehicle Pollution Control Devices)
   c. OAC 252:100-17 (Incinerators)
   d. OAC 252:100-23 (Cotton Gins)
   e. OAC 252:100-24 (Grain, Feed, or Seed Operations)
   f. OAC 252:100-35 (Control of Emissions of Carbon Monoxide)
   g. 40 CFR Part 59 (National VOC Standards)
   h. 40 CFR Part 82, Subparts B, D, E, G, and H (Stratospheric Ozone Protection)
   i. 40 CFR Part 264 (Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities)

C. The following facilities, unless qualified as a de minimis facility under OAC 252:100, Appendix H, are not eligible to obtain an Authorization to Construct under this permit, but may be eligible for coverage under an Authorization to Operate if they obtain a minor source construction permit and all relevant requirements and limitations in that construction permit are incorporated into the Authorization to Operate:

1. Facilities with combustion equipment fired with fuels <u>other than</u> liquid petroleum gas (LPG) or natural gas with a maximum total sulfur content of 20 grains/100 scf @ 68 ˚F (343 ppmvd), or stationary reciprocating engines burning liquid fuels <u>other than</u> gasoline or diesel fuel with a total sulfur content less than 0.6% by weight, or No. 2 through No. 6 fuel oil with a total sulfur content less than 0.6% by weight.

2. Facilities with combustion equipment, excluding engines and emergency relief flares, with more than a total of 50 MMBtu/hr fired duty.

3. Facilities storing/distributing crude oil that do not meet all of the following.

   a. Facilities with at least 800 feet from the vent for any storage tank containing sour crude oil to terrain where the ground level is higher than the storage tank vent.
   b. Facilities with at least 100 feet from the vent for any storage tank containing sour crude oil to the property fence-line.
   c. Facilities that have a minimum height of 20 feet for the vent for any storage tank containing sour crude oil.

d. Facilities that can demonstrate a maximum H_2S concentration of 135 ppmw for all categories of crude oil stored at the facility. Such demonstration must be documented using the methods outlined in Appendix B of this permit.

4. Facilities that use incinerators, thermal oxidizers, regenerative or non-regenerative carbon adsorbers, or catalytic systems to control emissions of H_2S or VOC, including HAP, except for exhaust from engines. Facilities that use a flare that is subject to an NSPS or NESHAP standard, other than 40 CFR Part 60, Subpart A. For this permit, heater fireboxes that combust vapors from a glycol dehydrator flash tank or still vent are not considered incinerators or thermal oxidizers.

5. Facilities using a vapor-recovery/vapor disposal system, or other equipment of equal efficiency, required by any part of OAC 252:100-37, Control of VOCs, or OAC 252:100-39, Control of VOCs in Nonattainment Areas. Note that VOC storage vessels that are subject to equipment standards (e.g., a fixed roof in combination with an internal floating cover, an external floating roof, or a closed vent system and control device) in 40 CFR 60 Subparts K, Ka, or Kb are exempt from the requirements of OAC 252:100-37-15(a) and (b). In addition, VOC storage vessels that are subject to the equipment standards for external floating roofs in 40 CFR 60 Subparts Ka or Kb are exempt from the requirements of OAC 252:100-39-30.

6. Facilities with a VOC loading facility subject to OAC 252:100-37-16(a) or OAC 252:100-39-41. Note that facilities with a VOC Loading Operation as defined in Appendix C are eligible for an Authorization to Construct.

7. Facilities subject to OAC 252:100-31-26, Petroleum and Natural Gas Processes.

8. Facilities with "new fuel-burning equipment," as that term is defined in OAC 252:100-33, with a rated heat input of 50 MMBtu/hr or greater.

9. Facilities with an effluent water separator (as defined in OAC 252:100-37-2) that receives effluent water containing 200 gallons per day or more VOC.

10. Facilities with emission units subject to the following requirements, unless such requirements are specifically incorporated into the Authorization to Construct/Operate issued under this permit as provided for under Part 4, Section V of this permit:

a. NSPS requirements under 40 CFR Part 60 not addressed by Subpart A, Subpart Dc, Subpart K, Subpart Ka, Subpart Kb, Subpart GG, Subpart KKK, Subpart IIII, Subpart JJJJ, Subpart KKKK, or
b. NESHAP requirements under 40 CFR Part 61, or
c. NESHAP requirements under 40 CFR Part 63, except for any Subpart HH requirements for triethylene glycol dehydration units at area sources; any

Subpart ZZZZ requirements for RICE at area sources; and any Subpart BBBBBB requirements for gasoline distribution bulk terminals, bulk plants, and pipeline facilities at area sources.

11. Facilities with selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR) control systems on any engine or other combustion source. These are control systems that require injection of ammonia and do not include a 3-way catalyst (NSCR) or oxidation catalyst.

12. Facilities that require a specific emissions limitation(s) for a glycol dehydration unit in order to be a minor source.

13. Facilities located in an area that is federally designated as non-attainment.

14. Facilities that request an Alternative Emissions Reduction Authorization under OAC 252:100-11.

D. The DEQ may not issue a permit authorization sought by an applicant that has not paid all money owed to the DEQ or is not in substantial compliance with the Environmental Quality Code, rules of the Board, and/or the terms of any existing DEQ permits and orders. The DEQ may impose specific conditions on the applicant to assure compliance and/or a separate schedule that the DEQ considers necessary to achieve required compliance. Facilities that are not in compliance with all applicable State and Federal air requirements may become eligible for coverage under this permit through submission of a compliance plan meeting the requirements of Part 3 of this Permit.

E. The DEQ may refuse issuance of an Authorization to an applicant even though the facility meets the above eligibility criteria. In such a case, DEQ will provide to the facility a written explanation providing the reason(s) for the decision.

SECTION IV. AUTHORIZATIONS

An applicant for an Authorization under this General Permit may obtain coverage under this permit in one of the following ways.

A. An applicant proposing to construct a new facility that meets all of the eligibility requirements, excluding those facilities listed in Part 1, Section III.C, may apply for an Authorization to Construct by submitting an NOI Form and a complete set of General Permit Application Forms for an OGF. Coverage under this permit is effective, and the permittee may commence construction, upon receipt by the DEQ of the NOI. The earliest of (1) a legible dated U.S. Postal Service postmark (private metered postmarks are not acceptable); (2) a dated receipt from a commercial carrier or the U.S. Postal Service; or (3) a DEQ date stamped application, is acceptable documentation of receipt of the NOI. The Authorization to Construct is issued by the DEQ after confirming that the application is administratively complete, the proper fee has been received, and that the facility is eligible for coverage under the permit.

B. An applicant proposing to construct a new facility that meets the eligibility requirements listed in Part 1, Section III.C, must apply for a minor source construction permit for the facility since a case-by-case determination is most likely required in order to establish enforceable limitations for some particular emission unit. All relevant requirements and limitations in the minor source construction permit can be incorporated into the Authorization to Operate under the General Permit.

C. An applicant proposing to obtain coverage under this permit for an existing, previously permitted facility, need only submit an application for an Authorization to Operate if the facility meets all of the eligibility requirements, including those listed in Part 1, Section III.C. Any of the relevant requirements and limitations in the existing operating permit, and any new specific conditions that may be necessary to insure compliance with applicable rules and regulations, may be incorporated into the Authorization to Operate under the General Permit.

D. An applicant proposing to obtain coverage under this permit for an existing facility, not previously permitted, need only submit an application for an Authorization to Operate if the facility meets all of the eligibility requirements, excluding those facilities listed in Part 1, Section III.C. If the facility meets the eligibility requirements listed in Part 1, Section III.C, the applicant may apply for an Authorization to Operate for the facility, and shall include fees for both a minor source construction permit and the Authorization to Operate. The AQD will make any determinations for specific conditions that need to be incorporated into the Authorization to Operate.

E. An applicant proposing to modify an existing facility (e.g., add, modify, reconstruct, or replace equipment or increase emissions) already covered by an Authorization to Operate under this general permit must meet the requirements specified in Part 4, Section II of this permit. Note that an applicant proposing to modify an existing facility need not obtain a new Authorization to Operate, unless a minor source construction permit is required to make a modification as described under Part 1, Section III.C of this permit.

F. A new Authorization is not required to add or replace an engine, as long as the facility-wide emissions cap is not exceeded assuming operation of the new engine at its potential emission rates for its intended hours of operation. The addition or replacement of an engine shall be made in accordance with Paragraph H, Paragraph I, or Paragraph J of Part 2, Section IV.

SECTION V. PERMIT TERM

This general permit shall remain valid and in effect unless it is modified or revoked in accordance with DEQ rules.

The DEQ shall establish, at the time this permit is modified, the terms and conditions under which existing Authorizations under this permit will be eligible for reauthorization under a modified general permit.

PART 2 – SPECIFIC CONDITIONS

Facilities shall be designed, constructed, and operated to meet the following terms and conditions, and any other applicable air pollution rules specified in this permit, the facility's Authorization, and any other requirements specified by rule or statute.

SECTION I. Points of Emissions and Limitations for Each Point:
[OAC 252:100-7-15 and 7-18]

A. Facility-Wide Emissions Cap

Emission limitations shall be established in each Authorization issued under this permit as a facility-wide emissions cap. The emission limitations must be less than that level which would cause the facility to be classified as a major source.

In no case shall the permittee cause or allow the emission of any regulated air pollutant in such a concentration as to cause or contribute to a violation of ambient air quality standards or other applicable air pollution rules.

Compliance with these emission limitations shall be determined on an annual basis. Emissions shall be calculated and documented in accordance with OAC 252:100-5-2.1(c) and (d), or as otherwise specified in this permit or an Authorization.

The facility throughput and/or equipment hours of operation shall be constrained as necessary to not exceed any facility-wide emissions cap.

B. Hourly Emission Limitations for Engines

In addition to the facility-wide emissions cap established in Section I.A, hourly emission limitations shall be established in each Authorization issued under this permit, or in a Notice of Modification from the permittee, for all engines constructed or operated under this permit (all Emissions Limited Engines); unless qualified as a de minimis facility under OAC 252:100, Appendix H; unless the engine is an Emergency Use Engine; or unless the engine is an Uncontrolled Engine located at a True Minor Facility. The hourly emission limitations shall be based on manufacturer's data, EPA reference stack testing, or the latest revision of AP-42, Chapter 3. Appropriate safety factors may be applied.

SECTION II. Storage Tanks

The following specific conditions apply to VOC storage tanks, including those which qualify as a de minimis facility under OAC 252:100, Appendix H.

Emission Calculations

A. To demonstrate compliance with Part 2, Section I.A of this permit, the permittee shall estimate annual emissions of VOC and HAP from all storage tanks with a capacity of 400 gallons or more that store VOC (as defined in OAC 252:100-1-3). Estimates of emissions of VOC and HAP from storage tanks shall be calculated in accordance with AP-42 Chapter 7 and/or EPA approved software programs. Flash emission calculations shall follow the procedures presented in the AQD Fact Sheet, "Calculation of Flashing Losses/VOC Emissions from Hydrocarbon Storage Tanks," and be based on actual annual throughputs. [OAC 252:100-43]

B. The permittee may estimate VOC and HAP emissions from storage of crude oil, slop oil, or oily water (condensate excluded) using AQD approved "default" factors listed in the current GP-OGF application forms.

Oklahoma Air Pollution Control Rules

C. For all storage tanks equipped with an external floating roof (EFR) and with a capacity of more than 40,000 gallons, and that are not subject to an NSPS standard, the permittee shall perform routine inspections of all seal closure devices annually; measure the secondary seal gap annually when the floating roof is equipped with a vapor-mounted primary seal; and maintain records of the above inspections and maintenance or other repairs. [OAC 252:100-43]

D. 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 storage conditions, except for petroleum or condensate stored, processed and/or treated at a drilling or production facility prior to lease custody transfer and except for methanol stored at drilling or production facilities, shall be equipped with a permanent submerged fill pipe or be bottom filled. [OAC 252:100-37-15 and OAC 252:100-39-41]

E. VOC storage tanks constructed after December 28, 1974, with a capacity greater than 40,000 gallons storing a liquid with a vapor pressure of 1.5 psia or greater under actual storage conditions, except for petroleum or condensate stored, processed and/or treated at a drilling or production facility prior to lease custody transfer and except for methanol stored at drilling or production facilities, shall be a pressure vessel capable of maintaining working pressures that prevent the loss of VOC to the atmosphere, or shall be equipped with an external floating roof that meets the standards of OAC 252:100-37-15 (a)(1). [OAC 252:100-37-15(a)]

F. The permittee shall comply with all applicable requirements set forth in OAC 252:100-39-30.

1. Any petroleum liquid storage vessel operated under this permit which is equipped with an external floating roof, has a capacity greater than 40,000 gallons, and is located in Tulsa or Oklahoma County, is required to meet the additional requirements of OAC 252:100-39-30, Petroleum Liquid Storage including, but not limited to:

   i. Standards of OAC 252:100-39-30(c)(1);
   ii. Monitoring requirements for EFR tanks of OAC 252:100-39-30(c)(2), and;
   iii. Recordkeeping requirements of OAC 252:100-39-30(c)(3).

2. These requirements do not apply to petroleum liquid storage vessels that:

   i. are used to store waxy, high pour point crude oil;
   ii. have a capacity less than 422,675 gallons and are used to store produced crude oil or condensate prior to lease custody transfer;
   iii. contain a petroleum liquid with a true vapor pressure less than 1.5 psia;
   iv. contain a petroleum liquid with a true vapor pressure less than 4.0 psia, is of welded construction, and presently possesses a metallic-type shoe seal, a liquid-mounted foam seal, or a liquid-mounted liquid filled type seal;
   v. are of welded construction and are equipped with a metallic-type shoe primary seal and have a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal). [OAC 252:100-39-30(b)(1)]

Federal Regulations

G. The permittee shall comply with all applicable requirements set forth in NSPS 40 CFR Part 60, including, but not limited to, the following.

1. Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids. This subpart applies to storage tanks that have a capacity greater than 40,000 gallons, but not exceeding 65,000 gallons, and commenced construction, or modification after March 8, 1974, and prior to May 19, 1978; and to storage tanks that have a capacity greater than 65,000 gallons and commenced construction or modification after June 11, 1973, and prior to May 19, 1978. [40 CFR 60.110 to 60.113]

   i. § 60.110 Applicability and designation of affected facility.
   ii. § 60.111 Definitions.
   iii. § 60.112 Standard for volatile organic compounds (VOC).
   iv. § 60.113 Monitoring of operations.

2. Subpart Ka – Standards of Performance for Storage Vessels for Petroleum Liquids. This subpart applies to storage tanks that have a capacity greater than 40,000 gallons and commenced construction after May 18, 1978, and prior to July 23, 1984. [40 CFR 60.110a to 60.115a]

    i. § 60.110a Applicability and designation of affected facility.
    ii. § 60.111a Definitions.
    iii. § 60.112a Standard for volatile organic compounds (VOC).
    iv. § 60.113a Testing and procedures.
    v. § 60.114a Alternative means of emission limitation.
    vi. § 60.115a Monitoring of operations.

3. Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels). This subpart applies to storage tanks that have a capacity greater than 19,812 gallons and commenced construction, reconstruction, or modification after July 23, 1984. [40 CFR 60.110b to 60.117b]

    i. § 60.110b Applicability and designation of affected facility.
    ii. § 60.111b Definitions.
    iii. § 60.112b Standard for volatile organic compounds (VOC).
    iv. § 60.113b Testing and procedures.
    v. § 60.114b Alternative means of emission limitation.
    vi. § 60.115b Reporting and recordkeeping requirements.
    vii. § 60.116b Monitoring of operations

Recordkeeping

H. The permittee shall maintain records for all storage tanks with a capacity of 400 gallons or more that store VOC (as defined in OAC 252:100-1-3). The records shall include the tank identification number; date of manufacture; date of installation; tank capacity; type of tank; a description of the type of floating roof and seals if applicable; NSPS applicability; whether equipped with a submerged fill pipe or vapor recovery system; and the type of liquid stored. [OAC 252:100-43]

SECTION III. VOC Loading Operations

The following specific conditions apply to VOC Loading Operations.

Emission Calculations

A. The permittee shall estimate annual emissions of VOC and HAP from loading operations to demonstrate compliance with Part 2, Section I.A of this permit. Estimates of emissions of VOC from loading operations shall be calculated using the latest approved version of AP-42, "Compilation of Air Pollution Emission Factors," e.g., Chapter 5.2, equation 1, or an equivalent method approved by Air Quality and based on actual annual throughputs. [OAC 252:100-43]

B. The permittee may estimate VOC and HAP emissions from loading operations of crude oil, slop oil, oily water, and condensate using AQD approved "default" factors listed in the current GP-OGF application forms.

Oklahoma Air Pollution Control Rules

C. Each loading pipe handling a liquid with a vapor pressure of 1.5 psia or greater under actual storage conditions, except for petroleum or condensate stored, processed and/or treated at a drilling or production facility prior to lease custody transfer and except for methanol stored at drilling or production facilities, shall be equipped with a system for submerged filling of tank trucks or trailers which is installed and operated to maintain a 97 percent submergence factor. [OAC 252:100-37-16(b)]

SECTION IV. Combustion Equipment

The following specific conditions apply to combustion equipment, including those that qualify as a de minimis facility under OAC 252:100, Appendix H.

Emission Calculations

A. 1. The permittee shall estimate annual emissions of NO_X, CO, and VOC from all combustion equipment, and estimate annual emissions of formaldehyde (CH_2O) from engines, to demonstrate compliance with Part 2, Section I.A of this permit. For an engine, the annual emissions shall be calculated as either the engine's potential to emit (lb/hr) or the engine's permitted limit (lb/hr) of each pollutant, times the actual annual hours of operation, and converted to tons. For all other combustion equipment, the annual emissions shall be calculated based on actual annual hours of operation, maximum fired duty, and the emission factors that were used for the facility-wide emissions cap limitations established per Part 2, Section I.A or the latest revision of AP-42, and converted to tons. [OAC 252:100-43]

2. An emission factor considering add-on controls for CH_2O is acceptable when testing demonstrates continual compliance with the CO limits established in the authorization. [OAC 252:100-43]

B. Unless continuous operation (8,760 hours) is assumed for the calculation of actual emissions to demonstrate compliance with Part 2, Section I.A., the hours of operation of an engine or other combustion equipment shall be recorded with an hour meter, with a fuel meter recorded at least hourly, or monitored and recorded manually each day. If equipped with an hour meter, it must either be non-resettable or, if resettable, the date and hour each time the meter is reset must be maintained. [OAC 252:100-43]

Engine Emissions Tests (see Appendix D)

C. The permittee shall conduct an initial test of NO_X and CO emissions from any engine other than (1) an Emergency Use Engine, or (2) a natural gas-fired engine that has been certified to an emissions standard under NSPS Subpart JJJJ, or (3) an NSPS Subpart JJJJ applicable certified engine operated as a non-certified engine less than 100 HP. This test may be counted as the first quarterly test of an engine. Testing shall be conducted using EPA reference methods, if applicable, or a portable analyzer in accordance with a protocol meeting the requirements of the latest AQD "Portable Analyzer Guidance" document, or an equivalent method approved by AQD. The permittee shall send AQD a copy of the initial test as part of the NOI to Operate application, or within 60 days of startup of a new, modified, reconstructed, or replacement Engine. [OAC 252:100-43]

D. Initially, a quarterly test of NO_X and CO emissions is required for any uncontrolled Emissions Limited Engine not located at a True Minor Facility. At least once per calendar quarter, the permittee shall conduct tests of NO_X and CO emissions from the engine. Testing shall be conducted using a portable analyzer in accordance with a protocol meeting the requirements of the latest AQD "Portable Analyzer Guidance" document, or an equivalent method approved by AQD. Testing is required for any engine that runs for more than 220 hours during that calendar quarter. A quarterly test may be conducted no sooner than 20 calendar days after the most recent test. When four consecutive quarterly tests show the engine in compliance with its hourly permit limits, the testing frequency may be reduced to semi-annual testing. A semi-annual test may be conducted no sooner than 60 calendar days nor later than 180 calendar days after the most recent test. Likewise, when the following two consecutive semi-annual tests show compliance, the testing frequency may be reduced to annual testing. An annual test may be conducted no sooner than 120 calendar days nor later than 365 calendar days after the most recent test. Upon any showing of non-compliance with hourly permit limits, the testing frequency shall revert back to quarterly. [OAC 252:100-43]

E. For any controlled Emissions Limited Engine, the following requirements apply.
[OAC 252:100-43]

1. Four-stroke rich-burn (4SRB) engines using NSCR catalyst shall be equipped with an Air to Fuel Ratio Controller (AFRC). The AFRC shall be inspected and maintained at least once a month to ensure that the controller is functioning properly, holding its millivolt setpoint, and is not in alarm mode. Replacement of the oxygen sensor(s) is required every 2,200 operating hours or less, or in accordance with manufacturers' recommendations, and replacement shall be documented in accordance with Part 4, Section IV.A. A maintenance log of all AFRC inspections, periods of operation in alarm mode, and engine or AFRC maintenance shall be kept. At least once per calendar quarter, the permittee shall conduct tests of NO_X and CO emissions from the engines. Testing shall be conducted using a portable analyzer in accordance with a protocol meeting the requirements of the latest AQD "Portable Analyzer Guidance" document, or an equivalent method approved by AQD. Testing is required for any engine that runs for more than 220 hours during that calendar quarter. A quarterly test may be conducted no sooner than 20 calendar days after the most recent test.

2. At least once per calendar quarter, the permittee shall conduct tests of NO_X and CO emissions from any two-stroke and four-stroke lean-burn (2SLB and 4SLB) and compression ignition (CI) engine and gas turbine equipped with oxidation catalyst. Testing shall be conducted using a portable analyzer in accordance with a protocol meeting the requirements of the latest AQD "Portable Analyzer Guidance" document, or an equivalent method approved by AQD. Testing is required for any engine that runs for more than 220 hours during that calendar quarter. A quarterly test may be conducted no sooner than 20 calendar days after the last test.

F. If any engine tested is not in compliance with its hourly permit limits, the permittee shall make AFRC millivolt setpoint (if applicable) and other engine operating adjustments necessary to bring the engine into compliance and an excess emissions report shall be filed in accordance with the Standard Conditions, Part 4 Section III, of this permit.

G. For a new, reconstructed, or rebuilt [as that term is defined in 40 CFR §94.11(a) and (b)] Emissions Limited Engine, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine start-up (engine burn-in period) are not considered as excess emissions or violations of this permit.

Engine Addition, Modification, Reconstruction, or Replacement

H. Addition, modification, reconstruction, or replacement of an Emergency Use Engine is allowed at any time. The permittee shall keep a record of the date of the change; the new engine make, model, serial number, Maximum Rated Horsepower; and potential to emit (g/hp-hr, lb/hr, TPY).

I. Addition, modification, reconstruction, or replacement of any Uncontrolled Engine at a True Minor Facility is authorized under the following conditions.

1. The permittee shall send a Notice of Modification to AQD within 10 days of the start-up of the engine. The Notice of Modification shall include the date of the change; the new engine make, model, serial number, Maximum Rated Horsepower, intended hours of operation, fuel consumption (Btu/bhp-hr), stack flow (ACFM), stack temperature (°F), stack height (feet), and stack diameter (inches); potential to emit (g/hp-hr, lb/hr, and TPY); and a demonstration of compliance with the facility-wide emissions cap assuming operation of the new engine at its potential emissions rates for its intended hours of operation. Within 60 days of start-up, the permittee shall send to AQD a copy of an initial test of NO_X and CO emissions from the engine demonstrating that actual emission rates (lb/hr) are less than or equal to the potential emission rates (lb/hr) specified in the Notice of Modification. Testing shall be conducted using a portable analyzer in accordance with a protocol meeting the requirements of the latest AQD "Portable Analyzer Guidance" document, or an equivalent method approved by AQD.

2. The permittee shall attach a copy of the Notice of Modification to a copy of the Authorization to Operate kept either on-site, at a nearby manned facility, or at the nearest field office per the recordkeeping requirements of Part 4, Section IV.A.

J. Addition, modification, reconstruction, or replacement of an Emissions Limited Engine is authorized under the following conditions.

1. The permittee shall send AQD a Notice of Modification within 10 days of the start-up of the engine. The Notice of Modification shall include the date of the change; the new engine make, model, serial number, Maximum Rated Horsepower, intended hours of operation, fuel consumption (Btu/bhp-hr), stack flow (ACFM), stack temperature (°F), stack height (feet), and stack diameter (inches); potential to emit (g/hp-hr, lb/hr, and TPY); NO_X and CO emission limits (lb/hr); and a demonstration of compliance with the facility-wide emissions cap assuming operation of the new engine at its potential emission rate (for VOC) and limited emission rates (for NO_X and CO) for its intended hours of operation.

2. The permittee shall comply with the hourly emission rates for NO_X and CO (lb/hr) cited in the Notice of Modification for that engine and those limitations shall become an enforceable part of the existing Authorization to Operate. The permittee shall attach a copy of the Notice of Modification to a copy of the Authorization to Operate kept either on-site, at a nearby manned facility, or at the nearest field office per the recordkeeping requirements of Part 4, Section IV.A.

3. The new engine is subject to periodic testing in accordance with Part 2, Section IV of this permit. A copy of the first emissions test shall be provided to AQD within 60 days of start-up of the added, modified, reconstructed, or replacement engine. The test report shall include the new engine make, model, serial number, Maximum Rated Horsepower, fuel consumption (Btu/bhp-hr), stack flow (ACFM), stack temperature (^{o}F), stack height (feet), stack diameter (inches), and emissions rates (g/hp-hr, lb/hr, and TPY) at Maximum Rated Horsepower and continuous operation.

Oklahoma Air Pollution Control Rules

K. Each engine shall have a readily accessible permanent identification plate attached that shows the make, model number, and serial number. [OAC 252:100-43]

L. All fuel-burning equipment, including engines, shall at all times be properly operated and maintained in a manner that will minimize emissions of VOC. For heaters, temperature and available air shall be sufficient to provide essentially complete combustion. The permittee shall maintain maintenance records on engines to document compliance. [OAC 252:100-37-36]

M. Liquid fuel may be combusted only in Emergency Use Engines or in engines rated less than 50 horsepower. [OAC 252:100-31-25]

N. An Emergency Use Engine shall be equipped with a non-resettable hour meter. Operating hours for that engine shall not exceed 500 hours in any 12-month period. The permittee shall maintain a record of the operating hours for each Emergency Use Engine. [OAC 252:100-43]

Federal Regulations

O. The permittee shall comply with all applicable requirements in 40 CFR Part 60, Subpart Dc, for any Steam Generating Unit (as defined in Subpart Dc) that commenced construction, modification, or reconstruction after June 9, 1989, and that has a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr. For units burning natural gas or LPG, the only applicable Subpart Dc requirements are notification per the procedures of 40 CFR 60.7 (see Part 4, Section IV.B) as required by 40 CFR 60.48c (a), and records of the daily amount of fuel combusted per 40 CFR 60.48c (g). [40 CFR 60.40c – 60.48c]

P. The permittee shall comply with all applicable requirements in 40 CFR Part 60, Subpart IIII, for all stationary compression ignition (CI) internal combustion engines (ICE) that commenced construction, modification, or reconstruction after July 11, 2005, including, but not limited to, the following. [40 CFR 60.4200 to 60.4219]

1. §60.4200. Am I subject to this subpart? The date of construction is the date the engine is ordered by the owner or operator.

2. The emission standards of §60.4204, §60.4205, and §60.4206.

3. The fuel requirements of §60.4207. Beginning October 1, 2007, the operator must use non-road diesel fuel with a sulfur content of no more than 500 ppm. Beginning October 1, 2010, the operator must use non-road diesel fuel with a sulfur content of no more than 15 ppm.

4. The deadlines for importing or installing CI ICE produced in the previous model year in accordance with §60.4208.

5. Monitoring of any CI ICE according to the requirements of §60.4209.

6. Compliance requirements of §60.4211.

7. Performance tests requirements of §60.4212 and §60.4213.

8. Notification, reporting, and recordkeeping requirements of §60.4214.

9. §60.4219 What definitions apply to this subpart?

Q. The permittee shall comply with all applicable requirements in 40 CFR Part 60, Subpart GG, for all gas turbines that commenced construction, modification, or reconstruction after October 3, 1977, with a heat input at peak load equal to or greater than 10 MMBtu/hr, based on the lower heating value of the fuel, including, but not limited to, the following.
[40 CFR 60.330 to 60.335]

1. No turbine shall discharge into the atmosphere any gases that contain nitrogen oxides in excess of the limitation of §60.332(a)(2) except when firing emergency fuel.

2. Each turbine shall comply with either the sulfur dioxide emission limitation of §60.333(a) or the fuel sulfur content limitation of §60.333(b).

3. Emission monitoring for NO_X per §60.334(a) through (g).

4. Monitoring of the sulfur and nitrogen content of the turbine fuel pursuant to §60.334(h)(1) and (2), and §60.334(i). Per §60.334(h)(2), monitoring of the fuel nitrogen content is not required if the owner or operator does not take a NO_X allowance for fuel-bound nitrogen. Monitoring of fuel sulfur content is not required when a gaseous fuel is fired in the turbine and the owner or operator demonstrates that the gaseous fuel meets the definition of "*natural gas*" using one of the methods in §60.334(h)(3)(i) or (ii). §60.331 defines *natural gas* as containing 20 grains or less of total sulfur per 100 standard cubic feet and is either composed of at least 70 percent methane by volume or has a gross caloric value between 950 and 1,100 Btu/scf.

5. Performance test methods and procedures of §60.335.

R. The permittee shall comply with all applicable requirements in 40 CFR Part 60, Subpart KKKK, for all stationary combustion turbines that commenced construction, modification, or reconstruction after February 18, 2005, with a heat input at peak load equal to or greater than 10 MMBtu/hr, based on the higher heating value of the fuel, including, but not limited to, the following. [40 CFR 60.4300 to 60.4420]

1. Per §60.4305(b), stationary combustion turbines regulated under this subpart are exempt from the requirements of Subpart GG.

2. Per §60.4320, emission limits for NO_X specified in Table 1 of this subpart.

3. Per §60.4330, must not emit SO_2 in excess of 0.90 lbs/MWh gross output or, must not burn any fuel which contains total potential sulfur emissions in excess of 0.060 lbs SO_2/MMBtu heat input.

4. Must operate and maintain the turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during start-up, shutdown, and malfunction.

5. NO_X emission limitations of §60.4335 or §60.4340.

6. The requirements for the continuous emission monitoring system equipment if a NO_X CEMS is used to demonstrate compliance.

7. Monitor the sulfur content of the turbine fuel using the total sulfur methods described in §60.4335. Monitoring of fuel sulfur content is not required if potential sulfur emissions do not exceed 0.06 lbs SO_2/MMBtu and can be demonstrated by (a) the fuel quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract for the fuel, specifying that the total sulfur content for oil is less than 0.05 weight percent or the total sulfur content for natural gas is equal to or less than 20 grains per 100 standard cubic feet or, (b) representative fuel sampling is conducted in accordance with Section 2.3.14 or 2.3.2.4 of Appendix D to Part 75.

8. Reporting requirements of §60.4375, §60.4380, and §60.4395.

9. Initial and annual performance tests requirements for NO_X of §60.4400 and §60.4405.

10. Initial and annual performance tests requirements for SO_2 of §60.4415. Fuel sampling is one of the methods allowed.

11. §60.4420 What definitions apply to this subpart?

S. The permittee shall comply with all applicable requirements in 40 CFR Part 60, Subpart JJJJ, for all stationary spark ignition (SI) internal combustion engines (ICE) that commenced construction, modification, or reconstruction after June 12, 2006, including, but not limited to, the following. [40 CFR 60.4230 to 60.4246]

1. §60.4230 Am I subject to this subpart?

2. The emission standards of §60.4233 and §60.4234.

3. The fuel requirements of §60.4235.

4. The deadlines for importing or installing SI ICE produced in the previous model year in accordance with §60.4236.

5. The monitoring requirements of §60.4237.

6. The compliance requirements of §60.4243.

7. The performance test methods and other procedures of §60.4244.

8. The notification, reporting, and recordkeeping requirements of §60.4245.

9. §60.4246 What parts of the General Provisions apply to me?

10. §60.4248 What definitions apply to this subpart?

T. The permittee shall comply with all applicable requirements in 40 CFR Part 63, Subpart ZZZZ, for all existing, new, or reconstructed reciprocating internal combustion engines (RICE) including, but not limited to, the following. [40 CFR 63.6580 to 63.6675]

1. §63.6585 Am I subject to this subpart?

2. §63.6590 What parts of my plant does this subpart cover? Per §63.6590(c), an affected source that is a new or reconstructed stationary RICE located at an area source must meet the requirements of this part by meeting the requirements of 40 CFR Part 60 Subpart IIII for compression ignition engines or 40 CFR Part 60 Subpart JJJJ for spark ignition engines. No further requirements apply for such engines under this part.

3. §63.6595 When do I have to comply with this subpart?

4. §63.6675 What definitions apply to this subpart?

Notification and Recordkeeping

U. The permittee shall maintain a record of any malfunction that prevents quarterly testing of NO_X and CO emissions from an Emissions Limited Engine and notify AQD of the malfunction that prevented testing within 30 days of the end of that quarter.
[OAC 252:100-43]

V. The permittee shall keep records of the actual annual hours of operation, in accordance with the methods in Part 2, Section IV.B, for any engine or other combustion equipment for which actual hours of operation, instead of continuous operation, are used to calculate annual emissions. [OAC 252:100-43]

W. The permittee shall keep records that document each engine's maximum horsepower at ISO or manufacturer's standard condition and maximum RPM, and any de-rating factors used to determine a site-rated maximum horsepower (e.g., site ambient conditions, jacket water temperature, compression load limitations, speed limitations of engine or driven equipment, etc.). [OAC 252:100-43]

SECTION V. Glycol Dehydration Unit Process Vents

The following specific conditions apply to emissions from glycol dehydration unit process vents.

Emission Calculations

A. The permittee shall calculate emissions of VOC and HAP from glycol dehydration process vents to demonstrate compliance with Part 2, Section I.A of this permit. Estimates of emissions of VOC and HAP from any rich glycol flash tank vents or glycol regenerator still vents shall be calculated using either the GRI-GLYCalc program (Version 4.0 or later), a process simulator program, or the Atmospheric Rich/Lean (ARL) Method. The emission calculations shall be based on the potential to emit by assuming continuous operation using (1) the maximum design wet gas rate for the dehydrator unit, or (2) the maximum facility wet gas rate based on an inherent process limitation such as compressor horsepower or capacity limitations, or (3) the maximum facility wet gas rate based on an inherent limit on gas production, or (4) the average wet gas rate for the last 2 years plus a 20% safety factor; a Representative Extended Wet Gas Analysis; the normal process operating temperature and pressure; the expected removal efficiency of any glycol still vent condenser at its maximum design temperature; and the maximum pump rate of the lean glycol circulation pump. [OAC 252:100-43]

B. For facilities that have total potential HAP emissions from all dehydrator units above 80% of major source levels, based on the Representative Extended Wet Gas Analysis used in the permit application, the permittee shall sample and perform an extended wet gas analysis at least once each year for calculating compliance with the permit HAP limits per the procedures in paragraph A above. [OAC 252:100-43]

C. Emissions from any rich glycol flash tank vent or glycol regenerator still vent that are burned in a combustion device (flare or heater/boiler firebox) or recycled to the process need not be included in the emission calculations. The permittee shall insure that emissions excluded from the calculations in paragraph V.A. are burned in a combustion device or recycled to the process. [OAC 252:100-43]

Oklahoma Air Pollution Control Rules

D. If a condenser is used to control the emissions from the glycol still vent, then all of the still vent vapors must pass through the condenser. The condenser shall be designed to achieve the expected removal efficiency at the maximum expected condenser outlet temperature. The permittee shall inspect the condenser for proper operation and measure and record the condenser outlet temperature at least one day each month during daylight hours. Recording of the condenser outlet temperature is not required if the uncondensed vapors are burned in a combustion device or recycled to the process.
[OAC 252:100-43]

Federal Regulations

E. Triethylene glycol dehydration units (TEG units) subject to 40 CFR Part 63, Subpart HH (MACT for TEG units at area sources) shall comply with all applicable requirements of that subpart including, but not limited to, the following. [40 CFR 63.760 to 63.775]

1. 40 CFR 63.760: Applicability and designation of affected source.
2. 40 CFR 63.761: Definitions.
3. 40 CFR 63.762: Start-up, shutdowns, and malfunctions.
4. 40 CFR 63.764: General standards.
5. 40 CFR 63.765: Glycol dehydration unit process vents standards.
6. 40 CFR 63.772: Test methods, compliance procedures, and demonstrations.
7. 40 CFR 63.773: Inspection and monitoring requirements
8. 40 CFR 63.774: Recordkeeping requirements
9. 40 CFR 63.775: Reporting requirements
10. 40 CFR 63.776: Delegation of authority
11. 40 CFR 63.777: Alternate means of emission limitation

Recordkeeping

F. The permittee shall keep records demonstrating the method and data used for determining the maximum wet gas rate used to calculate the potential to emit from a glycol dehydrator per Part 2, Section V.A.; records of any required Representative Extended Wet Gas Analysis; and records of the GRI-GLYCalc printout or other emission calculation methods, including the condenser expected removal efficiency at its maximum design temperature. [OAC 252:100-43]

SECTION VI. Fugitive Emission Sources

The following specific conditions apply to fugitive VOC emission sources, unless qualified as a de minimis facility under OAC 252:100, Appendix H.

Emission Calculations

A. For any facility with a storage tank subject to, or grandfathered from, NSPS Subparts K or Ka, the permittee shall estimate annual emissions of VOC from fugitive emission sources to demonstrate compliance with Part 2, Section 1.A of this permit. Emissions of VOCs from fugitive sources shall be calculated using the factors in Table 2-4 (Oil and Gas Production Operations) of EPA's *1995 Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017)* or other methods approved by DEQ. [OAC 252:100-43]

Federal Regulations

B. The permittee shall comply with NSPS 40 CFR Part 60, Subpart KKK, Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants, including, but not limited to, the following: [40 CFR 60.630 – 60.636]

1. §60.630 Applicability and designation of affected facility.

2. §60.631 Definitions.

3. §60.632 Standards.

4. §60.633 Exceptions.

   i. Information and data used to demonstrate that a reciprocating compressor is in wet gas service to apply for the exemption in §60.633(f) shall be recorded in a log that is kept in a readily accessible location as per §60.635(c).

   ii. Information and data used to demonstrate that a reciprocating compressor is not in VOC service shall be recorded in a log that is kept in a readily accessible location as per §60.486(j).

   iii. For each compressor subject to the control standards of 40 CFR §§60.482-3(a) thru (h), the permittee may choose to apply the exemption of 40 CFR §60.482-3(i) (no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background) by monitoring the compressor initially, annually, and at any other time requested by AQD. The permittee shall keep records as required by 40 CFR §60.486(e) (1) and (2).

5. §60.634 Alternative means of emissions limitations.

6. §60.635 Recordkeeping requirements.

7. §60.636 Reporting Requirements.

Recordkeeping

C. The permittee shall maintain an approximate inventory record of fugitive emission sources at the facility. The record shall include the material handled for each fugitive source group, along with the following data sets for each fugitive component type: service (gas, heavy oil, light oil, and water/oil), component count, emission factor, and VOC content in weight percent. [OAC 252:100-43]

SECTION VII. Facility-wide Requirements

The following specific conditions apply facility-wide. [OAC 252:100-43]

Emission Calculations

A. For emission sources qualified as a de minimis facility under OAC 252:100, Appendix H, (other than storage tanks and combustion equipment), the permittee may calculate emissions or assume emissions are 5 TPY for each regulated pollutant emitted by each listed source.

Oklahoma Air Pollution Control Rules

B. Gas-fired combustion equipment operated under this permit shall be fueled only with liquid petroleum gas (LPG) or natural gas with a maximum total sulfur content of 20 grains/100 scf @ 68 ˚F (343 ppmvd). Compliance shall be demonstrated at least once annually and may be demonstrated by one of the following recordkeeping requirements. [OAC 252:100-43]

1. For gaseous fuel, a current gas company bill or a current gas contract, tariff sheet, or transportation contract for the natural gas fuel which demonstrates that the maximum total sulfur content of the natural gas fuel does not exceed 20 grains/100 scf.

2. Technical data or gas sampling data demonstrating that the maximum total sulfur content of natural gas from the facility's production area does not exceed 20 grains/100 scf.

3. Representative fuel sampling data (including on-line analyzer data, lab analysis, or sampling by Draeger tubes), which show that the maximum total sulfur content of the natural gas fuel does not exceed 20 grains/100 scf. The fuel shall be sampled and results recorded once each calendar year.

C. Liquid-fired combustion equipment operated under this permit shall be fueled only with gasoline, diesel or No. 2 through No. 6 fuel oil. Liquid fuels are limited to a maximum of 0.6% sulfur by weight, except for CI ICE that are subject to 40 CFR Part 60 Subpart IIII and RICE that are subject to 40 CFR Part 60 Subpart JJJJ, which must use fuel that meets the more stringent requirements of those subparts (see Part II, Sections IV.P and IV.S). The permittee shall provide with the application a fuel composition analysis that shows total sulfur content. Thereafter, the permittee shall perform a fuel analysis that shows total sulfur content once per load received and shall maintain records of the required fuel sulfur analysis. A one-time certification of sulfur content of a grade of fuel, with subsequent receipts stating the fuel grade delivered from the supplier, is sufficient to document compliance with this requirement. A new certification shall be obtained from each new supplier. [OAC 252:100-43]

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

E. Emission units, and control devices associated with any emission units constructed under this permit, shall comply with all applicable requirements of OAC 252:100-43, Testing, Monitoring, and Recordkeeping, and Appendix A of this permit. [OAC 252:100-43]

F. The permittee shall install, use, and maintain such monitoring equipment as specified in Appendix A of this permit, except as otherwise specified elsewhere in this permit or in an Authorization, or in applicable rules or statutes. [OAC 252:100-43]

G. The permittee shall document that all testing is conducted using methods specified in 40 CFR Parts 51, 60, 61, or 63, as applicable, or as otherwise specified in this permit or in an Authorization. A copy of these records shall be retained with the records containing the facility's test results. [OAC 252:100-43]

H. The permittee shall implement reasonable precautions or measures to minimize fugitive dust emissions from the handling, transporting or disposition of any substance or material which is likely to be scattered by the air or wind or is susceptible to being airborne or wind-borne. In addition, the permittee shall not cause or permit the discharge of any visible fugitive dust emissions beyond the property line in such a manner as to damage or to interfere with the use of adjacent properties, or to cause or contribute to the violation of ambient air quality standards. [OAC 252:100-29]

I. Exemption from OAC 252:100-31-26 negates the ineligibility clause of Part I, Section III, C.7. To document ongoing exemption status for 31-26 (monthly), facilities shall monitor the H_2S concentration of the gas going to the amine unit (at least quarterly), and the gas throughput (scfh, monthly average), to arrive at the allowed 0.3 lbs/hr or less exemption value. [OAC 252:100-31]

Federal Regulations

J. The permittee shall comply with all applicable requirements of 40 CFR Part 63 Subpart BBBBBB for any area source bulk gasoline terminal, pipeline breakout station, pipeline pumping station, and bulk gasoline plant including, including, but not limited to, the following. [40 CFR 63.11080 – 63.11100]

1. §63.11081 Am I subject to the requirements of this subpart?

2. §63.11082 What parts of my affected source does this subpart cover?

3. §63.11083 When do I have to comply with this subpart?

4. The emission limitations and management practices of §63.11086, §63.11087, §63.11088, and §63.11089.

5. §63.11092 What testing and monitoring requirements must I meet?

6. §63.11093 What notifications must I submit and when?

7. §63.11094 What are my recordkeeping requirements?

8. §63.11095 What are my reporting requirements?

9. §63.11098 What parts of the General Provisions apply to me?

10. §63.11100 What definitions apply to this subpart?

Recordkeeping

K. The permittee shall maintain records of emissions, including facility-wide calendar year totals of NO_X, CO, VOC, and HAP emissions, and any compliance demonstrations required by this permit. An emissions record shall describe calculated emissions of regulated air pollutants from all emission units. This record shall include the emission unit identification number, control method used, operating hours, and other operating parameters as specified in specific conditions for each particular emission unit. A copy of the records or a summary including sample calculations shall be submitted with the application for an Authorization to Operate under this permit. [OAC 252:100-43]

L. The permittee shall keep documents demonstrating the sulfur content of any fuel burned per paragraphs B and C of this section. [OAC 252:100-43]

M. The permittee shall maintain an equipment inventory. Such inventory shall be updated each time there is any change to any facility equipment (i.e., addition, removal, or replacement) that is subject to this permit, except for the fugitive components addressed in Section VI. The records shall include the equipment description, equipment serial or identification number, date of the change, description of the change, NSPS and/or NESHAP applicability, and a calculation of the potential to emit of the facility. A copy or summary of this record shall be provided with any application for a minor source construction permit or an application for an Authorization. If equipment is being added subject to NSPS or NESHAP that has not undergone the initial compliance demonstration as required by 40 CFR 60.8, the notification shall include a date and time for such required demonstration. [OAC 252:100-43]

PART 3 – SCHEDULE OF COMPLIANCE

Any facility reporting non-compliance in an application for Authorization under this permit must submit with such application a schedule of compliance for emission units or stationary sources that are not in compliance with all applicable air pollution rules.

A. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable air pollution rules for which the emission unit or stationary source is not in compliance.

B. This compliance schedule shall correspond to and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emission unit or stationary source is subject.

C. Any such schedule of compliance shall be supplemental to, and shall not sanction non-compliance with, the applicable air pollution rules on which it is based.

D. The approvable schedule of compliance may be incorporated into an Authorization if such is issued to the facility.

E. The permittee of a facility that is operating subject to a schedule of compliance shall submit to AQD progress reports 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.

Part 4 – STANDARD CONDITIONS

SECTION I. DUTY TO COMPLY

The permittee shall comply with all conditions of this permit and any Authorizations issued hereunder. This permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. Any permit non-compliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, for revocation of the approval to operate under the terms of this general permit, or for denial of an application to operate under the terms of this general permit.

[OAC 252:100-7-15(e) and 7-18]

SECTION II. FACILITY MODIFICATIONS AND MODIFICATION OF AUTHORIZATIONS UNDER THE TERMS OF THE GENERAL PERMIT

A. An Authorization shall be corrected if any applicable emission limitation or standard is found to be absent or is found to be in error. Correction of an Authorization shall not change the Effective Date of the Authorization.

B. The permittee shall obtain a major source construction permit for any modification that would cause an existing facility to no longer be classified as a minor facility.

[OAC 252:100-7-15(a)]

C. The permittee shall obtain a minor source construction permit for any modification described under Part 1, Section III.C of this permit. All other facility modifications may be constructed without a new Authorization, or without a construction permit, provided that the permittee notifies the DEQ in writing of the modification within 10 days following the start of operation. [OAC 252:100-7-18(a)]

D. The permittee shall apply for a new Authorization to Operate within 60 days of commencing operation of any modified facility authorized under a minor source construction permit or an Authorization to Construct issued under this permit, except for a de minimis facility under OAC 252:100, Appendix H. [OAC 252:100-7-18(a)]

E. The permittee shall apply for either a new Authorization to Operate or a relocation permit to relocate any portable source authorized under this permit. A facility must still meet the eligibility requirements of Part 1, Section III at the new location to use the general permit. [OAC 252:100-7-17]

F. An Authorization to Construct issued under this permit will terminate and become null and void if the construction is not commenced within 18 months of the issuance date, or if work is suspended for more than 18 months after it is commenced.

[OAC 252:100-7-15(f)]

SECTION III. REPORTING OF DEVIATIONS FROM PERMIT TERMS

In the event of any release which results in excess emissions, or when periodic compliance testing shows engine exhaust emissions in excess of the lb/hr limitations, the permittee shall comply with the provisions of OAC 252:100-9. [OAC 252:100-9]

SECTION IV. MONITORING, TESTING, RECORDKEEPING & REPORTING

A. The permittee shall keep a permanent copy of the Authorization to Operate, with the latest Notice of Modification attached, either on-site, at a nearby manned facility, or at the nearest field office. The permittee shall keep records as specified in this permit and any Authorization issued under this permit, including a copy of all Notices of Modification. These records, including monitoring data and support information, shall be retained either on-site, at a nearby manned facility, or at the nearest field office for a period of at least five years unless a longer period is specified by an applicable rule or statute. Support information includes all original recordings for continuous monitoring instrumentation and copies of all reports required by this permit or the Authorization. Records may be maintained in paper, electronic, or computerized form.
[OAC 252:100-5-2.1(c); OAC 252:100-7-15; OAC 252:100-7-18]

B. Any owner or operator subject to provisions of NSPS shall provide written notification as follows. However, a Notice of Modification that is timely submitted (within 10 days of start-up) shall suffice for notification under items 1, 2, and 3. [40 CFR §60.7]

1. A notification of the date of when construction of an affected facility will be commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

2. A notification of the actual date of initial start-up of an affected facility postmarked within 15 days after such date.

3. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.

4. If a continuous emission monitoring system is included in the construction, a notification of the date upon which the test demonstrating the system performance will commence, along with a pretest plan, postmarked no less than 30 days prior to such a date.

C. Any owner or operator subject to the provisions of NSPS shall maintain records of the occurrence and duration of any start-up or shutdown of the process containing such affected facilities, and shall record malfunctions in the operation of an affected facility or any malfunction of the air pollution control equipment, or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR §60.7(b)]

D. Any owner or operator subject to the provisions of NSPS shall maintain a file of all measurements and other information required by the subpart recorded in a permanent file suitable for inspection. This file shall be retained for at least two years following the date of such measurements, maintenance, and records. (Per paragraph A above, records shall be maintained for five years). [40 CFR §60.7(f)]

E. All testing must be conducted by methods approved by the Executive Director under the direction of qualified personnel. All tests shall be made and the results calculated in accordance with test procedures described or referenced in the permit and approved by Air Quality. [OAC 252:100-43]

F. The permittee shall document that all testing is conducted using methods specified in 40 CFR Parts 51 (SIP), 60 (NSPS), 61 (NESHAP), and 63 (MACT), as applicable, or as otherwise specified in this permit or in an Authorization. A copy of these records shall be retained with the facility's testing records. [OAC 252:100-43]

G. If the permittee monitors any pollutant more frequently than required by this permit, the results of this monitoring shall be included in the calculations used for determining compliance with the conditions of this permit. [OAC 252:100-43-6]

H. The permittee shall submit to AQD a copy of all reports submitted to EPA as required by 40 CFR Part 60, 61, and 63 for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-4 and 41-15]

SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

Any Authorization issued after the effective date of a new or modified requirement or standard applicable to a unit located at the facility, may incorporate such requirement or standard, which shall supersede any corresponding permit requirement that is less stringent than the newer requirement or standard. [OAC 252:100-7-15(a); OAC 252:100-7-18]

SECTION VI. ANNUAL EMISSIONS INVENTORY AND FEE PAYMENT

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emission inventories or allowable emissions. [OAC 252:100-5]

SECTION VII. 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.

SECTION VIII. PROPERTY RIGHTS

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

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.

SECTION IX. 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, or revoking and reissuing or terminating the permit or to determine compliance with the permit or the Authorization. [27A O.S. Supp. 1999, § 2-5-105(18)]

B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. Supp. 1999, § 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.

C. The transferor shall notify the AQD of the sale or transfer of ownership of this facility in writing not later than 30 days following the change in ownership. [Title 27A-2-5-112.G)]

SECTION X. DUTY TO SUPPLEMENT

The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in any information submittal, shall promptly submit such supplementary facts or corrected information. [OAC 252:100-4-7-8]

SECTION XI. REOPENING, MODIFICATION, AND REVOCATION

A. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit or an Authorization modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay any permit condition.
[27A O.S. Supp. 1999, § 2-5-112(B)(1)]

B. The permitting authority will reopen and revise or revoke this permit as necessary to remedy deficiencies if 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 air pollution rules. [27A O.S. Supp. 1999, § 2-5-112(B)(3)]

SECTION XII. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the DEQ to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1999, § 2-5-105 (18) for confidential information submitted to or obtained by the DEQ under this section).
[27A O.S. Supp. 1999, § 2-5-105]

A. Enter upon the permittee's premises during reasonable/normal working hours where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of the permit or the Authorization;

B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit or the Authorization;

C. 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 or the Authorization; and

D. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or the Authorization.

SECTION XIII. DE MINIMIS FACILITIES

The permittee is hereby authorized to operate emission sources and/or conduct activities that are listed on the "De Minimis Facilities" list in OAC 252:100, Appendix H.

SECTION XIV. GENERAL PROVISIONS UNDER NSPS AND NESHAPS

The permittee shall comply with all applicable requirements of the corresponding General Provisions, as set forth in 40 CFR Part 60 Subpart A, 40 CFR Part 61 Subpart A, and 40 CFR Part 63 Subpart A, for all equipment constructed or operated under this permit subject to NSPS or NESHAP. [OAC 252:100-4]

SECTION XV. STRATOPHERIC OZONE PROTECTION 40 CFR PART 82

The permittee shall comply with all applicable requirements of 40 CFR Part 82 Subparts A through H for the use of ozone-depleting substances, especially regulated refrigerants; and the maintaining, servicing, and repairing of any equipment using such substances.

SECTION XVI. UPDATE OF AUTHORIZATION TO OPERATE

AQD reserves the right to require a facility to apply for an updated Authorization to Operate in order to clarify the Authorization based on a substantial number of Notices of Modification.

APPENDIX A

CONSTRUCTION, OPERATION, MAINTENANCE, AND MONITORING REQUIREMENTS FOR CONTROL DEVICES

A. All control devices shall be constructed, operated, and maintained according to manufacturers' specifications, except as otherwise required by this permit, an Authorization, or applicable rules or statutes. Manufacturer's specifications shall be kept on-site or at the closest field office and made available to regulatory personnel upon request.

B. Where parametric monitoring is conducted in lieu of direct emission monitoring, the permittee shall demonstrate in the application for an Authorization to Operate that the operating range for such parameters, as recommended by manufacturers' specifications, assures compliance with applicable emission limitations and other applicable requirements.

C. Non-selective catalytic reduction (NSCR) systems shall, at a minimum, be constructed with an Air-to-Fuel Ratio Controller (AFRC) that operates on exhaust oxygen sensor control, with a sensor to measure the inlet temperature to the catalyst, and with connections that allow measurement of the pressure drop across the catalyst with either a pressure differential gage or a water manometer.

D. Oxidation catalyst systems shall, at a minimum, be constructed with a sensor to measure the inlet temperature to the catalyst and with connections that allow measurement of the pressure drop across the catalyst with either a pressure differential gage or a water manometer.

E. Condensers shall be constructed with a temperature sensor in the outlet and designed to achieve the expected removal efficiency at the maximum expected condenser outlet temperature, unless all vapor from the condenser is combusted or recycled to the process.

APPENDIX B

DEMONSTRATION OF MAXIMUM H_2S CONCENTRATION IN CRUDE OILS

For the general permit, a facility must demonstrate that the maximum H_2S concentration of any category of crude oil stored at the facility is no more than 135 ppmw. To do this, each category of crude oil handled at a facility shall be characterized by name using the standard terminology used in the petroleum industry to describe crude oils from specific locales and having similar characteristics, such as (but not limited to) "US-West Texas Sour," "US-Oklahoma Sour," "US-Mid Continent," "Kirkuk," "Hawkins," etc. A permit applicant may demonstrate the maximum expected H_2S concentration in each category of crude oil stored at the facility by one of three methods, subject to approval of AQD:

A. Certification by a responsible official in the permit application that only "sweet" crude oil is stored at the facility or that the maximum H_2S concentration of any "sour" crude oil stored at the facility is no more than 135 ppmw. "Sweet" crude oil is defined as having a total sulfur content of less than 0.5 wt%.

B. Documentation from a Crude Oil Assay Library or assays from the crude oil producer, seller, or buyer, that demonstrate that only "sweet" crude oil is stored at the facility or that the maximum H_2S concentration of any "sour" crude oil stored at the facility is no more than 135 ppmw.

C. Sampling by the applicant for H_2S concentration. Test methods may include UOP 163-89, ASTM D 5705 (the so-called "can test"), liquid phase H_2S analyzers, or lab certified liquid phase methods. For an initial compliance demonstration, one sample is required for each category of sour crude oil that requires sampling for compliance documentation, i.e., not demonstrated by A or B above. If the initial sample shows an H_2S concentration of 75 ppmw or less, then no more sampling is required for that category of sour crude oil. Otherwise, that category of crude oil must be sampled again, once each week for four weeks, and an average of the four samples calculated. If the average H_2S concentration is no more than 135 ppmv, compliance for that category of sour crude oil is demonstrated. This sampling procedure must be repeated in the future for any new category of sour crude oil stored at the facility that requires sampling for compliance with the 135 ppmw H_2S limit.

APPENDIX C

DEFINITIONS

The following definitions apply for terms used in this general permit.

"Engine" means any reciprocating internal combustion engine or any gas-fired turbine.

"Emergency Use Engine" means any engine that drives an emergency power generator, peaking power generator, firewater pump, or other emergency use equipment, and operates less than or equal to 500 hours per year.

"Emissions Limited Engine" means any engine that has lb/hr emission limitations specified under the conditions of an Authorization.

"Maximum Rated Horsepower" means an engine's maximum horsepower at ISO or manufacturer's standard conditions and maximum RPM, or an engine's maximum horsepower at engine site conditions and maximum RPM.

"Notice of Modification" means a written notice informing AQD of: (1) any modification or change of operations at the facility that would add a piece of equipment or a process that is subject to NSPS or NESHAP, or that would modify a piece of equipment or a process such that it becomes subject to NSPS or NESHAP, or that would change its facility classification (either from or to a True Minor Facility); (2) any modification to add a storage tank with a capacity of 400 gallons or more storing VOC, a VOC Loading Operation, any combustion equipment, or any dehydration unit; (3) any modification to change the hourly emissions limitations of an Emissions Limited Engine; or (4) any modification to add, modify, reconstruct, or replace an engine. Such notice shall contain calculations of the facility's new facility-wide potential to emit; the change in the facility's classification, if any; and the engine's potential to emit (g/hp-hr, lb/hr, and TPY) for all engines at the facility. Any emission limits for NO_X and CO (lb/hr) cited in the latest Notice of Modification, for any Emissions Limited Engine, become permit limitations for that engine and an enforceable part of the existing Authorization to Operate. The permittee shall attach a copy of the latest Notice of Modification to a copy of the Authorization to Operate kept either on-site, at a nearby manned facility, or at the nearest field office.

"Representative Extended Wet Gas Analysis" means an extended analysis (using GPA 2286 or similar approved methods) that provides speciated data for HAP components benzene, toluene, ethyl benzene, xylenes, and n-hexane. The sample must be representative of the maximum expected HAP content for normal operations of the glycol dehydrator.

"True Minor Facility" means a facility that has the potential to emit less than or equal to 80 TPY each of NO_X and CO.

"Uncontrolled Engine" means an engine, with or without an Air to Fuel Ratio Controller, that has no catalytic or oxidation catalyst control.

"VOC Loading Operation" means loading liquid VOC into a tank truck or trailer for transportation off-site or unloading of liquid VOC from a tank truck or trailer to a storage tank on-site. A VOC Loading Operation does not have the physical equipment (loading arm and pump) to conduct the type of loading regulated by OAC 252:100-37-16 and 100-39-41 for VOC loading facilities, even though it may or may not use tank trucks or trailers that meet the requirements for delivery vessels in OAC:252-100-39-41(d).

APPENDIX D

Summary of Engine Emissions Test Requirements

Engine Classification	One Time Initial Emission Test?	Hourly Emission Limits?	Quarterly Emission Tests?
All Emergency Use Engines; any natural gas-fired engine that has been certified to an emission standard under NSPS Subpart JJJJ; any NSPS Subpart JJJJ applicable certified engine operated as a non-certified engine less than 100 HP.	No	No	No
Uncontrolled Engines at a True Minor Facility	Yes	No	No. Must keep maintenance records for the engine.
All Other Uncontrolled Engines	Yes	Yes	Yes, initially. May go to semi-annual and then to annual upon consecutive tests demonstrating compliance.
All Controlled Emissions Limited Engines	Yes	Yes	Yes, plus monthly assurance monitoring (MAM) for rich-burn engines per Section IV.E of the specific conditions.