

AIR PERMIT ROUTING/APPROVAL SLIP-Permits



AI No.	158873	Company	Minor Source General Permit	Date Received	
Activity No.	PER20190001	Facility	Crude Oil & Natural Gas Production	Permit Type	MSOG Master Renewal
CDS No.	N/A	Permit No.	N/A	Expedited Permit	□yes □no

1. Technical Review		Approved		Date rec'd	e'd Date FW		Comments		
Permit Writer									
Air Quality / Modeling Toxics									
PSD/NNSR									
Technical Advisor									
Supervisor									
Other (Regulatory Review	(w)	1680	6		1/22/	2020			
	req'd)	Approv	ved	Date rec'd	Date			Comments	
Supervisor									
Manager		KAP			1/20/2	020			
Administrator		Bp:	7		1/29	20	arhoted		
Assistant Secretary (PN)		- M			1/30		Public hear		yes no
3. Response to Comments (if P!	N req'd)	Approv	ved	Date rec'd	Date	FW		Comments	
Supervisor Manager									
Administrator									
Legal (BFD)									
4. Final Approval		Approv	ved	Date rec'd	Date	FW		Comments	
Supervisor									
Manager									
Administrator		BDJ			3 30	20	No con	uents received.	
Assistant Secretary		6m			4771	20			
1. Technical Review					1.7				
PN of App needed	yes	⊠ no	Date	e of PN of App)			Newspaper	
Fee paid	☐ yes	no							
NSPS applies	⊠ yes	no	PSE	NNSR applie	es		yes 🛛 no	NESHAP applies	yes no
2. Post-Technical Review									1
Company technical review	☐ yes	⊠ no □	n/a	E-mail date				Remarks received	yes no
Surveillance technical review	☐ yes	es 🛛 no 🗌 n/a		E-mail date				Remarks received	yes no
3. Public Notice									
Public Notice Required	⊠yes	no							
Library									
LDEQ Website	PN Da	te							
Company notification e-mail sent	Date e	-mailed							
EPA PN notification e-mail sent	Date e	-mailed							
OES PN mailout	Date n	nailed			1111				Transfer of
4. Final Review		9/				/ Tumum			
Public comments received	yes [no	EPA	A comments re	c'd		yes 🗌 no		
Company comments received	yes [no		info entered in mit Sec VI	to		yes 🗌 no		
Comments									



OFFICE OF ENVIRONMENTAL SERVICES

Minor Source Air General Permit Crude Oil and Natural Gas Production

PROPOSED RENEWAL/MODIFICATION

AGENCY INTEREST NO. 158873 ACTIVITY NO. PER20190001

In accordance with the Louisiana Environmental Quality Act, as amended (La. R.S. 30:2001, et seq.: "the Act") and the rules and regulations effective or promulgated under the authority of the Act (LAC 33:III.501 and LAC 33:III.513), this Air General Permit is hereby issued. This permit authorizes persons who meet the requirements set forth herein and have been approved by this Office to construct, operate, and modify crude oil and natural gas production facilities in accordance with the emissions limitations, monitoring requirements, and other conditions of this permit.

This general permit first became effective on September 15, 2010, and was modified on May 17, 2011; November 15, 2012; July 9, 2013; and October 28, 2016.

This renewal/modification shall become effective on September 16, 2020, and shall expire on September 16, 2030.

Issued on

April 7, 2020

Elliott B. Vega Assistant Secretary

CRUDE OIL AND NATURAL GAS PRODUCTION

I. STATEMENT OF AUTHORITY – LAC 33:III.513.A

- 1. The permitting authority may issue a general permit intended to cover numerous similar sources or activities. General permits shall be issued in accordance with LAC 33:III.519 and, prior to issuance, shall undergo public notice. Each general permit shall incorporate terms and conditions applicable to sources that would qualify for the general permit. Any general permit shall identify criteria by which sources may qualify for the general permit and may provide for applications which deviate from the requirements of LAC 33:III.517.
- 2. The owner or operator of any source that would qualify for the general permit may apply for authorization to operate under the general permit. The application must include all information necessary to determine qualification for and to assure compliance with the general permit.
- 3. The permitting authority may approve an owner or operator's application for authorization to operate under the general permit without repeating the public participation procedures. Such an approval shall not be a final permit action for purposes of judicial review regarding the terms and conditions of the general permit.
- 4. Any source which is issued the general permit shall be subject to enforcement action for operation without a permit if the source is later determined not to qualify for the general permit.

II. ELIGIBILITY

This minor source air general permit authorizes construction, operation, and modification of crude oil and natural gas production facilities that meet the eligibility requirements outlined herein.

Facilities eligible for coverage under this general permit include:

- crude oil and natural gas production and field facilities classified under Standard Industrial Classification (SIC) Code 1311—Crude Petroleum and Natural Gas [North American Industry Classification System (NAICS) 211120 or 211130]; and
- "midstream" facilities (i.e., contracted facilities which generally compress and/or process natural gas between the producing property and a natural gas processing plant or sales gas pipeline compressor station). Such facilities may be classified under SIC Code 1389—Oil and Gas Field Services, Not Elsewhere Classified (NAICS 213112).

This general permit does not address operations engaged in the transmission and/or storage of natural gas under SIC Code 4922–Natural Gas Transmission (NAICS 486210) or those engaged in the processing of natural gas under SIC Code 1321–Natural Gas Liquids (NAICS 211112), unless a facility is classified as such only by its use of Joule-Thomson (J-T) equipment as part of a "forced" process to extract natural gas liquids (NGL). See Section V of this general permit for more information.

CRUDE OIL AND NATURAL GAS PRODUCTION

Facilities must maintain eligibility to operate under this permit. This permit does **not** authorize operations that are not compliant with the established eligibility conditions. Prior to initiating any modification to a facility that would prohibit it from being covered under this general permit, the permittee must request a site-specific air permit. If a modification rendering the facility ineligible for this general permit is effected without a site-specific permit in place, the modification will be deemed unauthorized from the date construction commenced, and the owner or operator will be subject to enforcement action.

Facilities Excluded from Coverage

This general permit cannot be used to authorize construction and operation of:

- 1. "Part 70 Sources" as defined in LAC 33:III.502.
- 2. Except as described in LAC 33:III.501.B.3.a-b, facilities subject to regulatory requirements promulgated on or before August 29, 2010, not addressed by this general permit.
 - If a federal or state regulation promulgated or modified after August 29, 2010, is applicable to a facility eligible for coverage under this general permit, the permittee shall comply with the new or modified regulation by the compliance date(s) established therein. The new or modified regulation shall not render a facility ineligible for coverage under this general permit.
- 3. Facilities subject to LAC 33:III.Chapter 59 (Chemical Accident Prevention) or 40 CFR Part 68 (Chemical Accident Prevention Provisions).
- 4. Facilities with equipment specifically excluded as described in Section V Equipment Specifications and Calculation Methodologies.
- 5. Facilities that formerly operated as major sources if Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) controls were installed and are being maintained on an existing emissions unit.
- 6. Facilities located in Calcasieu or Pointe Coupee Parish with equipment subject to the control requirements of LAC 33:III.2115 (Waste Gas Disposal).
- 7. Facilities with glycol dehydration unit process vents subject to the control requirements specified in 40 CFR 63.765(b) or (c) of 40 CFR 63 Subpart HH.
- 8. Facilities using a condenser or a carbon adsorption system to comply with the provisions of 40 CFR 60 Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after August 23, 2011, and on or before September 18, 2015) or 40 CFR 60 Subpart OOOOa (Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015).

CRUDE OIL AND NATURAL GAS PRODUCTION

III. FACILITY-WIDE EMISSIONS LIMITATIONS

Baton Rouge Area

For facilities located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge (i.e., the Baton Rouge Area), potential emissions of criteria pollutants and toxic air pollutants (TAPs) from the facility (or grouping of "contiguous or adjacent" facilities) must be less than the following amounts, in tons per year:

<u>Pollutant</u>	Emissions
PM_{10}	15
SO_2	40
NO_X	20
CO	90
Total VOC	20
Total TAPs	20
Any Individual TAP	8

All Other Areas

For facilities located in any other parish, potential emissions of criteria pollutants and TAPs from the facility (or grouping of "contiguous or adjacent" facilities) must be less than the following amounts, in tons per year:

<u>Pollutant</u>	Emissions
PM_{10}	15
SO ₂	40
NO_X	90
CO	90
Total VOC	90
Total TAPs	20
Any Individual TAP	8

The above limitations shall include aggregate emissions from all sources at the facility, including emissions from all insignificant activities set forth under LAC 33:III.501.B.5; those from activities traditionally classified under General Condition XVII (e.g., sampling); and those from activities that may occur at the facility on an infrequent basis, such as pigging operations at a "midstream" facility.

CRUDE OIL AND NATURAL GAS PRODUCTION

Re-designation of an Attainment Area to a Nonattainment Area

If, during the term of this permit, any parish outside of the Baton Rouge Area is designated as a "serious" or "severe" ozone nonattainment area, the owner or operator of a facility located in any such parish:

- 1. may retain this permit and comply with the limits applicable to facilities located in the Baton Rouge Area as set forth above; or
- 2. if the facility cannot comply or the owner or operator chooses not to comply with the Baton Rouge Area limits, the owner or operator shall apply for a site-specific air permit no later than 90 days after the effective date of the "serious" or "severe" nonattainment designation by the EPA.

IV. CONTIGUOUS OR ADJACENT SURFACE SITES

Groupings of "contiguous or adjacent" oil and gas surface sites (under common control) may be covered under this general permit provided that aggregate emissions from the grouping do not exceed the emissions thresholds listed in Section III. Guidance on evaluating "contiguous or adjacent" facilities can be accessed on LDEQ's website at https://deq.louisiana.gov/page/-contiguous-or-adjacent-properties-in-the-oil-and-natural-gas-sector.

A separate application must be submitted for each facility in a "contiguous or adjacent" grouping. However, it is not necessary for each facility in a "contiguous or adjacent" grouping to seek coverage under this permit.

V. EQUIPMENT SPECIFICATIONS AND CALCULATION METHODOLOGIES

Terms used in Section V are defined in the Statement of Basis (SOB) accompanying this permit.

A. Joule-Thomson (J-T) Equipment and Fugitive Emissions

Facilities using J-T equipment as part of a "forced" process are eligible for coverage under this general permit, provided:

- 1. the operation is a non-fractionating plant that does not have the design capacity to process 10 million standard cubic feet per day or more of field gas;
- 2. if the facility commenced construction, reconstruction, or modification after January 20, 1984, and on or before August 23, 2011, the owner or operator complies with all applicable requirements of 40 CFR 60 Subpart KKK (Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and on or Before August 23, 2011); and
- 3. the owner does not comply with Subpart KKK by routing emissions to a control device.

CRUDE OIL AND NATURAL GAS PRODUCTION

Forced extraction processes include Cryogenic-Joule-Thomson, Refrigerated Absorption and Cryogenic-Joule-Thomson, Refrigeration and Cryogenic-Joule-Thomson, Cryogenic-Joule-Thomson and Expander, and similar processes.

J-T equipment that relies on existing gas pressure and temperature and that does not require additional gas compression to remove condensates from the gas stream or to move hydrocarbon liquids or remaining gas from the process is also allowed. This process does *not* trigger any requirements under 40 CFR 60 Subpart KKK.

B. Amine Sweetening Units

Amine sweetening units eligible to be covered under this permit must have a design capacity less than 2 long tons per day (LT/D) of H₂S expressed as sulfur. Amine sweetening units primarily used to remove CO₂ from a produced gas stream are eligible for coverage under this general permit.

C. Marine Loading Operations

Marine loading operations eligible to be covered under this permit must not employ a control device to restrict VOC emissions from marine loading in order to comply with LAC 33:III.2108.

D. Glycol Dehydration Units

Emissions from the gas-condensate-glycol (GCG) separator (flash tank) on all glycol dehydration units shall be controlled via a combustion device or by recycle/recompression, except where the owner or operator can demonstrate that total uncontrolled VOC emissions from *both* the glycol dehydration unit reboiler vent and the vent from the flash tank, in total, are not in excess of 9 tons per year. Terms are defined in the Statement of Basis.

For triethylene glycol (TEG) dehydration units, the:

- actual annual average flowrate of natural gas to the glycol dehydration unit must be less than 85 thousand standard cubic meters [~ 3 MM scf] per day as determined by the procedures specified in 40 CFR 63.772(b)(1) of 40 CFR 63 Subpart HH; or
- actual average emissions of benzene from the glycol dehydration unit process vent (the glycol dehydration unit reboiler vent and the vent from the GCG separator (flash tank), if present) to the atmosphere must be less than 0.90 megagram per year [~1 TPY] as determined by the procedures specified in 40 CFR 63.772(b)(2) of 40 CFR 63 Subpart HH.

E. Internal Combustion Engines (ICEs)

ICEs must be fueled by natural gas or diesel (or fuel oil no. 2). Stationary ICEs fueled by gasoline or liquefied petroleum gas (LPG) are not eligible for coverage under this permit.

CRUDE OIL AND NATURAL GAS PRODUCTION

ICEs subject to LAC 33:III.2201 are eligible for coverage under this permit provided that a chemical reagent (e.g., ammonia) is **not** used for the reduction of NO_X and the facility does **not** comply with Chapter 22 by means of a ton per day or pound per hour cap as allowed by LAC 33:III.2201.D.4 or a facility-wide averaging plan as described in LAC 33:III.2201.E.1.

F. Storage Vessels

Storage vessels storing a liquid with a maximum true vapor pressure less than 0.5 psia are eligible for coverage under this general permit. Storage vessels storing a liquid with a maximum true vapor pressure of 0.5 psia or greater are subject to the following restrictions:

- 1. Each storage vessel located *prior to* lease custody transfer containing any material other than crude oil, condensate, or produced water shall have a capacity less than or equal to 19,800 gallons; each vessel storing crude oil, condensate, or produced water shall have a capacity less than or equal to 420,000 gallons.
- 2. Each storage vessel located *after* lease custody transfer shall have a capacity less than or equal to 19,800 gallons.

For more information on lease custody transfer, see *Louisiana Guidance for Air Permitting Actions* available at https://deq.louisiana.gov/page/air-permits-division.

G. Flash Gas Emissions

Acceptable flash gas calculation methods are outlined at https://deq.louisiana.gov/page/flash-gas-calculation-methods.

For purposes of this permit, the alternative calculation methods described on the above webpage are acceptable for 1.) new fields or facilities not yet in production for which testing cannot be performed; and 2.) existing vessels that do not meet the definition of "storage vessel with the potential for flash emissions." Calculations should be performed so as to represent the "worst case" (i.e., highest emissions) scenario.

H. Gasoline Dispensing Facilities

Gasoline dispensing facilities (GDFs) eligible to be covered under this permit must have a monthly throughput of less than 10,000 gallons of gasoline.

Monthly throughput means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

Per 40 CFR 63.11111(h), monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a *single* affected GDF. If a facility has two or more GDFs at separate locations, each GDF is treated as a separate affected source.

CRUDE OIL AND NATURAL GAS PRODUCTION

VI. REQUESTING COVERAGE UNDER THIS GENERAL PERMIT

In order to request coverage under this general permit, an applicant should submit a completed "Application for Approval of Emissions of Air Pollutants from Minor Sources," a completed "General Permit Applicability Questionnaire," and the appropriate new permit application fee to the Office of Environmental Services. The application forms available instructions are LDEO's on website https://www.deq.louisiana.gov/page/air-permit-applications; the General **Permit** Applicability Questionnaire is available at https://www.deq.louisiana.gov/page/minorsource-general-permits.

An application to modify a site-specific air permit may also be used to request coverage under this general permit, provided that the "General Permit Applicability Questionnaire" accompanies the application.

Where facility-wide potential emissions of the following pollutants are less than or equal to the thresholds set forth in the table below, an applicant is authorized to construct and operate under the terms and conditions of this permit fourteen (14) days after the date the application is either postmarked or hand-delivered, or upon notification by LDEQ that coverage has been extended, whichever is earlier.

<u>Pollutant</u>	Emissions (TPY)
NO_X	47.1
acrolein	2.1
benzene	1.7
formaldehyde	5.9

Authorization to construct and operate is not automatically granted if the application is materially incomplete (e.g., required information omitted, the application is unsigned, etc.); if the facility in question is not eligible for coverage under this permit; or if the applicant is specifically notified of this fact by LDEQ.

Permit Application Fees

Fee number 0040 shall apply except as follows:

- 1. For those facilities employing J-T equipment as part of a "forced" process as described in Subsection V.A of this general permit, fee number 0050 shall apply.
- 2. Fees for "midstream" facilities classified under SIC Code 1389 shall be as follows:
 - If total facility-wide horsepower¹ is less than 5000, fee number 1710 shall apply, and the fee shall be calculated in accordance with the table below.

In determining facility-wide horsepower, exclude emergency generators and "back-up" units that cannot be operated simultaneously with a primary unit.

CRUDE OIL AND NATURAL GAS PRODUCTION

Fee	Description	Annual	New Permit	Modified Po	ermit Fees
Number	Description	Maintenance Fee	Application	Major	Minor
1710	Negotiated Fee for Minor Sources	291.00	1452.00	872.00	500.00

If total facility-wide horsepower equals or exceeds 5000, fee number 1460 shall apply. It is presumed that if facility-wide horsepower exceeds 20,000, the facility will not qualify for this general permit.

Fee	Description	Annual	New Permit	Modified Permit Fees		
Number	Description	Maintenance Fee	Application	Major	Minor	
1460	Recip. Nat Gas Comp Per 100 H.P.: C) 5,000 to 20,000 H.P.	49.92	249.61	149.73	49.92	

VII. MODIFYING A FACILITY OPERATING UNDER THIS GENERAL PERMIT

As described in Section II, this general permit authorizes modification of crude oil and natural gas production facilities.

A. Modifications: Situations Where Pre-Construction Approval Is Not Required

Where facility-wide potential emissions of the following pollutants (including the planned modifications) are less than or equal to the thresholds set forth in the table below, the owner or operator may modify the facility without prior approval of LDEQ, provided that the facility remains compliant with the established eligibility conditions.

<u>Pollutant</u>	Emissions (TPY)
NO_X	47.1
acrolein	2.1
benzene	1.7
formaldehyde	5.9

Notwithstanding facility-wide potential emissions of the aforementioned pollutants, modifications which do not increase hourly or annual potential emissions of said pollutants may also be effected without prior approval of LDEQ.

Except as specified in Subsections VII.C and VII.D, within ten (10) calendar days after effecting any modification (generally commencement of construction) to a facility authorized to operate under this general permit, the permittee shall submit a completed "Application for Approval of Emissions of Air Pollutants from Minor Sources" and the appropriate modified permit fee to the Air Permits Division. The completed "Application for Approval of Emissions of Air Pollutants from Minor Sources" need only address the modifications effected at the facility.

CRUDE OIL AND NATURAL GAS PRODUCTION

B. Modifications: Situations Where Pre-Construction Approval Is Required

Except as specified in Subsections VII.C or VII.D, **prior to** effecting any modification (generally commencement of construction) *not* described in Subsection VII.A, the permittee shall submit a completed "Application for Approval of Emissions of Air Pollutants from Minor Sources" and the appropriate modified permit fee to the Air Permits Division. The modification shall not be effected until approved by LDEQ.

The completed "Application for Approval of Emissions of Air Pollutants from Minor Sources" need only address the proposed modifications.

C. Special Provisions for Certain Equipment Types

Notwithstanding Subsection VII.B, addition or replacement of line heaters and heater treaters that do not represent a source of flash gas emissions, pneumatic pumps, pneumatic valves, blowcase vessels, fugitive components, and any insignificant activity based on size or emission rate (LAC 33:III.501.B.5, List A) not already listed in the facility's permit application shall not require submittal of a completed "Application for Approval of Emissions of Air Pollutants from Minor Sources" to LDEO, provided:

- 1. such modifications are disclosed in the next "Application for Approval of Emissions of Air Pollutants from Minor Sources" submitted pursuant to Subsection VII.A or VII.B:
- 2. the facility remains compliant with the established eligibility conditions; and
- 3. records of such modifications are retained on site or at another approved location for a minimum of two (2) years and made available for review by the Office of Environmental Compliance, Surveillance Division. Records of the addition or replacement of pneumatic valves and fugitive components shall not be required.

D. "In Kind" Replacement of Equipment

Notwithstanding Subsections VII.A and VII.B, replacement of an existing emissions unit not identified in Subsection VII.C with an "in-kind" unit shall not require submittal of a completed "Application for Approval of Emissions of Air Pollutants from Minor Sources" to LDEQ, provided:

- 1. the new unit does not result in an increase in hourly or annual potential emissions of any regulated pollutant;
- 2. the new unit is not subject to federal or state regulations to which the replaced emissions unit was not subject;
- 3. the new unit is an identical or functionally equivalent unit. A "functionally equivalent unit" means a component that serves the same purpose as the replaced component;
- 4. the replaced emissions unit is permanently removed from the facility or otherwise permanently disabled;
- 5. such modifications are disclosed in the next "Application for Approval of Emissions of Air Pollutants from Minor Sources" submitted pursuant to Subsection VII.A or VII.B; and

CRUDE OIL AND NATURAL GAS PRODUCTION

6. records of such modifications are retained on site or at another approved location for a minimum of two (2) years and made available for review by the Office of Environmental Compliance, Surveillance Division.

VIII. REQUESTING TERMINATION OF COVERAGE UNDER THIS PERMIT

The permittee shall notify the Air Permits Division using the "Application for Approval of Miscellaneous Permitting Actions" if operations at the facility permanently cease during the permit term. The application form and instructions are available on LDEQ's website at https://deq.louisiana.gov/page/air-permit-applications.

If, in accordance with Section II, the permittee seeks permission to effect a modification rendering the facility ineligible for coverage under this general permit, it is *not* necessary to request termination of this general permit once a site-specific air permit is obtained.

IX. RENEWAL OF COVERAGE UNDER THE GENERAL PERMIT

Coverage under the renewed and modified Minor Source Air General Permit for Crude Oil and Natural Gas Production shall automatically be extended to those facilities for which coverage under the general permit has previously been approved. A permit application to renew coverage as described in LAC 33:III.503.C.3 shall not be required.

X. NAME/OWNER/OPERATOR CHANGES

In the event of a name, owner, or operator change, the permittee shall notify the Office of Environmental Services in accordance with LAC 33:I.Chapter 19 using the "Louisiana Notification of Change Form (NOC-1)." The form and instructions are available on LDEQ's website at https://deq.louisiana.gov/page/public-participation-permit-support.

In accordance with LAC 33:I.1903.A, the previous owner retains responsibility for compliance with all permit terms and conditions until the permit has been transferred.

XI. EMISSIONS INVENTORY

Notwithstanding the applicability provisions of LAC 33:III.919, the owner or operator of a facility located in one of the following parishes shall submit an annual Emissions Inventory (EI) as described in LAC 33:III.919 by the date set forth in the rule or as otherwise specified by LDEQ.

Ascension	Iberia	St. Helena	Tangipahoa
Assumption	Iberville	St. James	West Feliciana
East Baton Rouge	Livingston	St. John the Baptist	West Baton Rouge
East Feliciana	Pointe Coupee	St. Martin	

CRUDE OIL AND NATURAL GAS PRODUCTION

Re-designation of an Attainment Area to a Nonattainment Area

Notwithstanding the applicability provisions of LAC 33:III.919, if, during the term of this permit, any parish outside of the Baton Rouge Area is designated as an ozone nonattainment area by EPA, the owner or operator of a facility located in any such parish, or in any parish that adjoins such parish, shall submit an annual EI. In this event, the initial EI will be due in the year following the first *full* year of re-designation. For example, if a parish is designated as an ozone nonattainment area in August 2020 (the effective date as established by EPA), the initial EI shall be submitted in 2022 and disclose actual emissions during calendar year 2021.

Re-designation of a Nonattainment Area to an Attainment Area

If, during the term of this permit, any parish is re-designated as an ozone attainment area or otherwise ceases to adjoin an ozone nonattainment area, the need to submit an annual EI shall be dictated by LAC 33:III.919.

XII. LABORATORY ANALYSES

Laboratory procedures and analyses performed by commercial laboratories shall be conducted in accordance with the requirements set forth under the Laboratory Accreditation procedures established by LAC 33:I.Chapters 45-59. LDEQ will not accept data generated by commercial laboratories that are not accredited under this program for acceptable analytical methods to determine speciated analytes, and retesting will be required by an accredited laboratory. Information on the Environmental Laboratory Accreditation Program and a list of accredited labs is available on the LDEQ's website at https://deq.louisiana.gov/page/la-lab-accreditation.

XIII. GENERAL COVERAGE

Continuation of an Expired General Permit

If this permit is not reissued or replaced prior to the expiration date, it shall be administratively continued and remain in force and effect for permittees that were covered prior to its expiration. Any permittee who was granted coverage prior to the expiration date will automatically remain covered by the continued permit until the earlier of:

- 1. reissuance or replacement of this permit, at which time the permittee must comply with the requirements for obtaining coverage under the new permit;
- 2. issuance of a site-specific air permit to the facility; or
- 3. a formal decision by LDEQ not to reissue this general permit, at which time the permittee must seek coverage under a site-specific air permit. In any such notice not to reissue the general permit, LDEQ will establish a deadline for the submittal of an application for a site-specific air permit. LDEQ may grant additional time to

CRUDE OIL AND NATURAL GAS PRODUCTION

submit the application upon request of the applicant. Coverage under this general permit shall continue until such time as a site-specific air permit is approved. If a permittee fails to submit in a timely manner a site-specific air permit application as required by LDEQ, then the applicability of this permit to the individual permittee will be automatically terminated at the end of the day specified by LDEQ for application submittal.

Requirement for a Site-Specific Permit

Eligibility for this permit does not confer a vested right to coverage under the permit. LDEQ may require any person authorized by this permit to apply for and/or obtain a site-specific air permit. If LDEQ requires a permittee authorized to emit under this permit to apply for a site-specific air permit, LDEQ will notify the permittee in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision, a statement setting a deadline for the permittee to submit the application, and a statement that on the effective date of issuance or denial of the site-specific air permit, coverage under this permit will automatically terminate. LDEQ may grant additional time to submit the application upon request of the applicant. If a permittee fails to submit in a timely manner a site-specific air permit application as required by LDEQ, then the applicability of this permit to the individual permittee will be automatically terminated at the end of the day specified by LDEQ for application submittal.

LDEQ's notification that coverage under a site-specific permit is required does not imply that the facility does not meet the eligibility requirements of this permit.

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.

Modification, Revocation and Reissuance, or Termination of Permit

This permit may be modified, revoked and reissued, or terminated for cause. Upon modification or reissuance of this permit, the permittee shall comply with any new or modified requirements by any compliance dates established in the modified or reissued permit.

If there is evidence indicating that the air emissions authorized by this permit cause or have the reasonable potential to cause or contribute to a violation of a National Ambient Air Quality Standard (NAAQS) or Louisiana Ambient Air Standard (AAS), the facility may be required to obtain a site-specific permit or this permit may be modified to include more stringent limitations and/or requirements.

CRUDE OIL AND NATURAL GAS PRODUCTION

XIV. GENERAL CONDITIONS

The following general conditions from LAC 33:III.537 apply, except as modified below.

General Condition	Applicable	Comments		
I.	Yes.	Maximum facility-wide emissions authorized by this general permit are set forth in Section III of the permit. Site-specific emissions limitations are established by the permittee's application requesting coverage under this general permit. Exceedances of any limitations defined therein are addressed in General Condition III.		
II.	Yes.			
III.	Yes.	This permit does not contain sections entitled "Emission Rates for Criteria Pollutants" and "Emission Rates for TAP/HAP and Other Pollutants." If emissions from an emissions unit are subsequently determined to be greater than those disclosed in a permit application, but facility-wide emissions remain within the limits set forth in Section III of this general permit, the owner or operator shall submit a revised application in accordance with Section VII of this general permit as soon as practicable, but no later than 30 calendar days after discovery of the discrepancy. In such situations, the owner or operator is not required to submit a report pursuant to General Condition XI unless an underlying federal or state standard has been violated. If a facility-wide emission limitation has been exceeded, a report must be submitted pursuant to General Condition XI.		
IV.	Yes.	parameter dental contained 711		
V.	No.			
VI.	Yes.			
VII.	Yes.			
VIII.	No.	Testing and reporting deadlines are established by the Specific Requirements of this permit.		
IX.	No.	See Section VII of this general permit and General Condition III.		
X.	Yes.			
XI.	Yes.	See comment associated with General Condition III.		
XII.	Yes.			
XIII.	Yes.			
XIV.	Yes.			
XV.	No.			
XVI.	Yes.	See Section X of this general permit.		
XVII.	Yes.	Only General Condition XVII activities disclosed in the permit application are considered authorized discharges.		

CRUDE OIL AND NATURAL GAS PRODUCTION

General Condition	Applicable	Comments
XVIII.	See comment.	General Condition XVIII applies to the master general permit itself, but does extend to the action of granting coverage under this general permit. According to LAC 33:III.513.A.3, LDEQ may "approve an owner or operator's application for authorization to operate under the general permit without repeating the public participation procedures. Such an approval shall not be a final permit action for purposes of judicial review regarding the terms and conditions of the general permit."
XIX.	No.	
XX.	Yes.	

In addition, the following additional general conditions apply:

- XXI. 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 this permit.
- XXII. No person shall knowingly falsify, tamper with, or render inaccurate any monitoring device or method required to be maintained under this permit.
- XXIII. The permittee must take all reasonable steps to minimize or prevent any emissions in violation of this permit which have a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying emissions.
- XXIV. The permittee shall furnish to the Department, within a reasonable time to be specified by the Department of not less than 30 days, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.
- XXV. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable federal or state law or regulation. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

CRUDE OIL AND NATURAL GAS PRODUCTION

XV. MODIFICATIONS TO MASTER GENERAL PERMIT

With this action, LDEQ proposes to modify the general permit to:

- revise several Specific Requirements to reflect the current wording of the referenced federal regulation; and
- add the provisions of LAC 33:III.2201.K (Start-up and Shutdown).

Previous modifications to this general permit are addressed in Section VI of the SOB.

XVI. PUBLIC NOTICE

Request for public comment on this renewal and modification of the Minor Source Air General Permit for Crude Oil and Natural Gas Production was published on the department's website on February 19, 2020. On February 18, 2020, copies of the public notice were mailed to the individuals who have requested to be placed on the mailing list maintained by the Office of Environmental Services (OES). No comments were received.

As specified in LAC 33:III.513.A.3, the permitting authority may approve an owner or operator's application for authorization to operate under this general permit without repeating the public participation procedures.

Modifications to this general permit made solely to reflect new or revised federal and/or state regulations to which eleigible facilities may be subject do not require public notice.

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities
Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Comments	Operating Time
Afforted E	acilities Subject to NSPS 0000					
					- ·	(None Specified)
EMS 0002						(None Specified)
EQT 0041	- Centrifugal Compressors Subject to NSPS OOOO					(None Specified)
	- Reciprocating Compressors Subject to NSPS OOOO			<u> </u>		(None Specified)
EQT 0043						(None Specified)
EQT 0045	- Storage Vessels Subject to NSPS OOOO		<u> </u>			(Notice Specified)
Affected Fa	acilities Subject to NSPS OOOOa			<u> </u>		
EMS 0003	- Wells Subject to NSPS OOOOa					(None Specified)
EQT 0047	- Centrifugal Compressors Subject to NSPS OOOOa					(None Specified)
EQT 0048	- Reciprocating Compressors Subject to NSPS OOOOa					(None Specified)
EQT 0049	- Pneumatic Controllers Subject to NSPS OOOOa		<u> </u>			(None Specified)
EQT 0050	- Pneumatic Pumps Subject to NSPS OOOOa					(None Specified)
EQT 0051	- Storage Vessels Subject to NSPS OOOOa					(None Specified)
FUG 0004	- Fugitive Emissions Subject to NSPS OOOOa					(None Specified)
Amine Swe	petening Units					
EQT 0008	- Amine Sweetening Units - Regenerator Vents		İ		<u></u>	(None Specified)
EQT 0013	- Amine Reboilers		<u> </u>			(None Specified)
Diesel Inte	rnal Combustion Engines					
EQT 0002	- Diesel ICEs - Engines Subject to NSPS IIII	1.				(None Specified)
EQT 0017					-	(None Specified)
EQT 0029	- All Diesel ICEs for Which Construction or Reconstruction Commenced On or After June 12, 2006				· ·	(None Specified)
EQT 0032	- Diesel ICEs for Which Construction or Reconstruction		<u> </u>	<u> </u>		(None Specified)
Lu: VV	Commenced Before June 12, 2006					
Flares						•
EQT 0007	- Flares Controlling Offgas from Amine Regenerator Vents					(None Specified)
EQT 0024	- All Flares					(None Specified)
Fugitive En	nissions					
FUG 0001	- Fugitive Emissions - All Facilities					(None Specified)
FUG 0002	- Fugitive Emissions - Facilities Extracting Natural Gas Liquids from Field Gas by a "Forced" J-T Process and Subject to NSPS KKK					(None Specified)

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Comments	Operating Time
Glycol De	hydration Units	_			 -	
EQT 0003	- Glycol Dehydration Unit Process Vents Constructed Prior to October 20, 1994 Subject to LAC 33:III.2116	,				(None Specified)
EQT 0014	- Glycol Reboilers					(None Specified)
EQT 0021	- Glycol Dehydration Unit Process Vents Constructed On or After October 20, 1994, Subject to LAC 33:III.2116					(None Specified)
EQT 0023	- Glycol Dehydration Unit Process Vents - Exempt from LAC 33:III.2116				 _	(None Specified)
EQT 0026	- All Glycol Dehydration Unit Process Vents	_				(None Specified)
Miscelland	eous Fuel Burning Equipment			·		
EQT 0011	- Heater Treaters					(None Specified)
EQT 0012	- Line Heaters	_				(None Specified)
Natural Ga	as Internal Combustion Engines					
EQT 0001	- Natural Gas ICEs - Engines Subject to Chapter 22					(None Specified)
EQT 0015						(None Specified)
EQT 0016	- Natural Gas ICEs >= 500 hp & Operating > 720 Hours in Any 6-Month Period and Not Subject to NSPS JJJJ or Chapter 22				,_	(None Specified)
EQT 0019	- Ali Natural Gas ICEs	 .	 -		<u> </u>	(None Specified)
EQT 0031	- All Natural Gas ICEs for Which Construction or Reconstruction Commenced On or After June 12, 2006				-	(None Specified)
EQT 0036	- Natural Gas ICEs for Which Construction or Reconstruction Commenced Before June 12, 2006		•			(None Specified)
Storage V	essels and Flash Gas Emissions			÷—		
EQT 0022	V	_				(None Specified)
EQT 0046	- Gasoline Dispensing Facilities					(None Specified)
RLP 0001	- Flash Gas Emissions Subject to LAC 33:III.2104		_	i		(None Specified)

Stack Information:

ID	Description	Velocity	Flow Rate	Diameter	Discharge Area	Height	Temperature
		(ft/sec)	(cubic ft/min-actual)	(feet)	(square feet)	(feet)	(oF)

Relationships:

Subject Item Groups:

ID	Group Type	Group Description
CRG 0001	Common Requirements Group	- General Requirements under NSPS OOOO
CRG 0002	Common Requirements Group	- Storage Vessels and Centrifugal Compressors Subject to NSPS OOOO
CRG 0003	Common Requirements Group	- Reciprocating Compressors and Centrifugal Compressors Subject to NSPS OOOO

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Subject Item Groups:

ID	Group Type	Group Description
CRG 0004	Common Requirements Group	- General Requirements under NSPS 0000a
CRG 0005	Common Requirements Group	- Storage Vessels and Centrifugal Compressors Subject to NSPS OOOOa
CRG 0006	Common Requirements Group	- Reciprocating Compressors, Centrifugal Compressors, and Pneumatic Pumps Subject to NSPS OOOOa
PCS 0001	Process Group	- Fugitive Emissions
PCS 0002	Process Group	- Miscellaneous Fuel Burning Equipment
PCS 0003	Process Group	- Amine Sweetening Units
PCS 0004	Process Group	- Glycol Dehydration Units
PCS 0005	Process Group	- Natural Gas Internal Combustion Engines
PCS 0006	Process Group	- Diesel Internal Combustion Engines
PCS 0007	Process Group	- Flares
PCS 0008	Process Group	- Storage Vessels and Flash Gas Emissions
PCS 0009	Process Group	- Affected Facilities Subject to NSPS 0000
PCS 0010	Process Group	- Affected Facilities Subject to NSPS OOOOa
UNF 0001	Unit or Facility Wide	- Entire Facility

Group Membership:

ID	Description	Member of Groups
CRG 0001	- General Requirements under NSPS 0000	PCS0000000009
CRG 0002	- Storage Vessels and Centrifugal Compressors Subject to NSPS OOOO	PCS0000000009
CRG 0003	- Reciprocating Compressors and Centrifugal Compressors Subject to NSPS OOOO	PCS0000000009
CRG 0004	- General Requirements under NSPS OOO0a	PCS000000010
CRG 0005	- Storage Vessels and Centrifugal Compressors Subject to NSPS OOOOa	PCS000000010
CRG 0006	- Reciprocating Compressors, Centrifugal Compressors, and Pneumatic Pumps Subject to NSPS OOOOa	PCS0000000010
EMS 0002	- Gas Wells Subject to NSPS OOOO	CRG000000001, PCS0000000009
EMS 0003	- Wells Subject to NSPS OOO0a	CRG000000004, PCS000000010
EQT 0001	- Natural Gas ICEs - Engines Subject to Chapter 22	PCS0000000005
EQT 0002	- Diesel ICEs - Engines Subject to NSPS IIII	PCS0000000006
EQT 0003	- Glycol Dehydration Unit Process Vents Constructed Prior to October 20, 1994 Subject to LAC 33:III.2116	PCS0000000004
EQT 0007	- Flares Controlling Offgas from Amine Regenerator Vents	PCS0000000007
EQT 0008	- Amine Sweetening Units - Regenerator Vents	PCS0000000003
EQT 0011	- Heater Treaters	PCS0000000002
EQT 0012	- Line Heaters	PCS0000000002
EQT 0013	- Amine Reboilers	PCS0000000003
EQT 0014	- Glycol Reboilers	PCS0000000004
EQT 0015	- Natural Gas ICEs - Engines Subject to NSPS JJJJ	PCS0000000005
EQT 0016	- Natural Gas ICEs >= 500 hp & Operating > 720 Hours in Any 6-Month Period and Not Subject to NSPS JJJJ or Chapter 22	PCS0000000005

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001
Permit Number: MSOG Master Gen Permit
Air - Minor Gen Permit-Oil and Gas Renewal

Group Membership:

ID	Description	Member of Groups
EQT 0017	- All Diesel ICEs	PCS000000006
EQT 0019	- All Natural Gas ICEs	PCS0000000005
EQT 0021	- Glycol Dehydration Unit Process Vents Constructed On or After October 20, 1994, Subject to LAC 33:III.2116	PCS0000000004
EQT 0022	- Storage Vessels	PCS0000000008
EQT 0023	- Glycol Dehydration Unit Process Vents - Exempt from LAC 33:III.2116	PCS0000000004
EQT 0024	- All Flares	PCS000000007
EQT 0026	- All Glycol Dehydration Unit Process Vents	PCS0000000004
EQT 0029	- All Diesel ICEs for Which Construction or Reconstruction Commenced On or After June 12, 2006	PCS000000006
EQT 0031	- All Natural Gas ICEs for Which Construction or Reconstruction Commenced On or After June 12, 2006	PCS0000000005
EQT 0032	- Diesel ICEs for Which Construction or Reconstruction Commenced Before June 12, 2006	PCS0000000006
EQT 0036	- Natural Gas ICEs for Which Construction or Reconstruction Commenced Before June 12, 2006	PCS0000000005
EQT 0041	- Centrifugal Compressors Subject to NSPS OOOO	CRG000000001, CRG000000002, CRG000000003, PCS0000000009
EQT 0042	- Reciprocating Compressors Subject to NSPS OOOO	CRG000000001, CRG0000000003, PCS0000000009
EQT 0043	- Pneumatic Controllers Subject to NSPS OOOO	CRG000000001, PCS0000000009
EQT 0045	- Storage Vessels Subject to NSPS OOOO	CRG000000001, CRG000000002, PCS00000000009
EQT 0046	- Gasoline Dispensing Facilities	PCS000000008
EQT 0047	- Centrifugal Compressors Subject to NSPS OOOOa	CRG000000004, CRG000000005, CRG000000006, PCS0000000010
EQT 0048	- Reciprocating Compressors Subject to NSPS OOOOa	CRG000000004, CRG000000006, PCS0000000010
EQT 0049	- Pneumatic Controllers Subject to NSPS OOOOa	CRG000000004, PCS000000010
EQT 0050	- Pneumatic Pumps Subject to NSPS OOOOa	CRG000000004, CRG0000000006, PCS0000000010
EQT 0051	- Storage Vessels Subject to NSPS OOOOa	CRG000000004, CRG000000005, PCS0000000010
FUG 0001	- Fugitive Emissions - All Facilities	PCS000000001
FUG 0002	- Fugitive Emissions - Facilities Extracting Natural Gas Liquids from Field Gas by a "Forced" J-T Process and Subject to NSPS KKK	PCS0000000001
FUG 0004	- Fugitive Emissions Subject to NSPS OOOOa	CRG000000004, PCS0000000010
RLP 0001	- Flash Gas Emissions Subject to LAC 33:III.2104	PCS0000000008

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group

Annual	Mai	inten	ance	Fee:
--------	-----	-------	------	------

SIC Codes:

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001
Permit Number: MSOG Master Gen Permit

Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0009 Affected Facilities Subject to NSPS 0000

Group Members: CRG CRG CRG EMS 0002 EQT 0041 EQT 0042 EQT 0043 EQT 0045

0001 0002 0003

CRG 0001 - General Requirements under NSPS 0000

Group Members: EQT 0041 EQT 0042 EQT 0043 EQT 0045 EMS 0002

1 [40 CFR 60.5420(a)] Submit the notifications according to 40 CFR 60.5420(a)(1) and (2) if you own or operate one or more of the affected facilities specified in 40

CFR 60.5365 that was constructed, modified, or reconstructed during the reporting period. [40 CFR 60.5420(a)]

2 [40 CFR 60.5420(b)] Submit annual reports containing the information specified in 40 CFR 60.5420(b)(1)-(6) and performance test reports as specified in 40 CFR

60.5420(b)(7) or (8). [40 CFR 60.5420(b)]

3 [40 CFR 60.5420(c)] Maintain the records identified as specified in 40 CFR 60.7(f) and in 40 CFR 60.5420(c)(1)-(13). All records required by this subpart must be

maintained either onsite or at the nearest local field office for at least 5 years. [40 CFR 60.5420(c)]

CRG 0002 - Storage Vessels and Centrifugal Compressors Subject to NSPS OOOO

Group Members: EOT 0041 EOT 0045

4 [40 CFR 60.5411(b)] Cover requirements for storage vessels and centrifugal compressor wet seal degassing systems:

(1) The cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief valves and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the liquid in the storage vessel or wet seal fluid degassing system.

(2) Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except during those times when it is necessary to use an opening as described in 40 CFR 60.5411(b)(2)(i)-(iv).

(3) Each storage vessel thief hatch shall be equipped, maintained and operated with a weighted mechanism or equivalent, to ensure that the lid remains properly seated. Select gasket material for the hatch based on composition of the fluid in the storage vessel and weather conditions. [40 CFR 60.5411(b)]

5 [40 CFR 60.5413(e)]

Continuous compliance for combustion control devices tested by the manufacturer in accordance with 40 CFR 60.5413(d): Demonstrate that a control device achieves the performance requirements in 40 CFR 60.5413(d)(11) by installing a device tested under 40 CFR 60.5413(d) and complying with the criteria specified in 40 CFR 60.5413(e)(1)-(7). [40 CFR 60.5413(e)]

CRG 0003 - Reciprocating Compressors and Centrifugal Compressors Subject to NSPS OOOO

Group Members: EQT 0041 EQT 0042

6 [40 CFR 60.5411(a)] Closed vent system requirements for reciprocating compressors and for centrifugal compressor wet seal degassing systems:

- (1) Design the closed vent system to route all gases, vapors, and fumes emitted from the material in the reciprocating compressor rod packing emissions collection system or the wet seal fluid degassing system to a control device or to a process that meets the requirements specified in 40 CFR 60.5412(a)-(c).
- (2) Design and operate the closed vent system with no detectable emissions as demonstrated by 40 CFR 60.5416(b).
- (3) Meet the requirements specified in 40 CFR 60.5411(a)(3)(i) and (ii) if the closed vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device. [40 CFR 60.5411(a)]

Page 1 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities
Activity Number: PER20190001
Permit Number: MSOG Master Gen Permit

Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0009 Affected Facilities Subject to NSPS 0000

CRG 0003 - Reciprocating Compressors and Centrifugal Compressors Subject to NSPS OOOO

7	[40 CFR 60.5416(a)]	Inspections for closed vent systems and covers installed on each centrifugal compressor or reciprocating compressor affected facility: Except as provided in 40 CFR 60.5416(b)(11) and (12), inspect each closed vent system according to the procedures and schedule specified in 40 CFR 60.5416(a)(1) and (2), inspect each cover according to the procedures and schedule specified in 40 CFR 60.5416(a)(3), and inspect each bypass device according to the procedures of 40 CFR 60.5416(a)(4). [40 CFR 60.5416(a)]
8	[40 CFR 60.5416(b)]	No detectable emissions test methods and procedures: If you are required to conduct an inspection of a closed vent system or cover at your centrifugal compressor or reciprocating compressor affected facility as specified in 40 CFR 60.5416(a)(1), (2), or (3), meet the requirements of 40 CFR 60.5416(b)(1)-(13). [40 CFR 60.5416(b)]

EMS 0002 - Gas Wells Subject to NSPS OOOO

9	[40 CFR 60.5375(a)(1)(i)]	During the initial flowback stage, route the flowback into one or more well completion vessels or storage vessels and commence operation of a separator unless it is technically infeasible for a separator to function. Any gas present in the initial flowback stage is not subject to control under 40 CFR 60.5375. [40 CFR 60.5375(a)(1)(i)]
10	[40 CFR 60.5375(a)(1)(ii)]	During the separation flowback stage, route all recovered liquids from the separator to one or more well completion vessels or storage vessels, re-inject the liquids into the well or another well or route the recovered liquids to a collection system. Route the recovered gas from the separator into a gas flow line or collection system, re-inject the recovered gas into the well or another well, use the recovered gas as an on-site fuel source, or use the recovered gas for another useful purpose that a purchased fuel or raw material would serve. If it is infeasible to route the recovered gas as required above, follow the requirements in 40 CFR 60.5375(a)(3). If, at any time during the separation flowback stage, it is not technically feasible for a separator to function, comply with 40 CFR 60.5375(a)(1)(i). [40 CFR 60.5375(a)(1)(ii)]
11	[40 CFR 60.5375(a)(2) and (3)]	All salable quality recovered gas must be routed to the gas flow line as soon as practicable. In cases where salable quality gas cannot be directed to the flow line, capture and direct recovered gas to a completion combustion device, except in conditions that may result in a fire hazard or explosion, or where high heat emissions from a completion combustion device may negatively impact waterways. Completion combustion devices must be equipped with a reliable continuous ignition source. [40 CFR 60.5375(a)(2) and (3)]
12	[40 CFR 60.5375(a)(4)]	You have a general duty to safely maximize resource recovery and minimize releases to the atmosphere during flowback and subsequent recovery. [40 CFR 60.5375(a)(4)]
13	[40 CFR 60.5375(b)]	Maintain a log for each well completion operation at each gas well affected facility. The log must be completed on a daily basis for the duration of the well completion operation and must contain the records specified in 40 CFR 60.5420(c)(1)(iii). [40 CFR 60.5375(b)]
14	[40 CFR 60.5375(c)]	Demonstrate initial compliance with the standards that apply to gas well affected facilities as required by 40 CFR 60.5410. [40 CFR 60.5375(c)]
15	[40 CFR 60.5375(d)]	Demonstrate continuous compliance with the standards that apply to gas well affected facilities as required by 40 CFR 60.5415. [40 CFR 60.5375(d)]
16	[40 CFR 60.5375(e)]	Perform the required notification, recordkeeping and reporting as required by 40 CFR 60.5420. [40 CFR 60.5375(e)]

Page 2 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0009 Affected Facilities Subject to NSPS 0000

EMS 0002 - Gas Wells Subject to NSPS 0000

	[40 CFR 60.5375(f)]	For each well completion operation with hydraulic fracturing at a wildcat or delineation well and for each well completion operation with hydraulic fracturing at a non-wildcat low pressure gas well or non-delineation low pressure gas well, route the flowback into one or more well completion vessels and commence operation of a separator unless it is technically infeasible for a separator to function. Any gas present in the flowback before the separator can function is not subject to control under 40 CFR 60.5375. Capture and direct recovered gas to a completion combustion device, except in conditions that may result in a fire hazard or explosion, or where high heat emissions from a completion combustion device may negatively impact waterways. Completion combustion devices must be equipped with a reliable continuous ignition source. Comply with 40 CFR 60.5375(a)(4) and (b)-(e). Maintain records specified in 40 CFR 60.5420(c)(1)(iii) for wildcat, delineation and low pressure gas wells. [40 CFR 60.5375(f)] Comply with 40 CFR 60.5410(a)(1)-(4). [40 CFR 60.5410(a)]
19	[40 CFR 60.5415(a)]	Demonstrate continuous compliance by submitting the reports required by 40 CFR 60.5420(b) and maintaining the records for each completion operation specified in 40 CFR 60.5420(c)(1). [40 CFR 60.5415(a)]

EQT 0041 - Centrifugal Compressors Subject to NSPS OOOO

20	[40 CFR 60.5380(a)]	Reduce VOC emissions from each centrifugal compressor wet seal fluid degassing system by 95.0 percent or greater. If you use a control device to reduce emissions, equip the wet seal fluid degassing system with a cover that meets the requirements of 40 CFR 60.5411(b), that is connected through a closed vent system that meets the requirements of 40 CFR 60.5411(a) and routed to a control device that meets the conditions specified in 40 CFR 60.5412(a), (b) and (c). As an alternative to routing the closed vent system to a control device, you may route the closed vent system to a process. [40 CFR 60.5380(a)]
21	[40 CFR 60.5380(b)]	Demonstrate initial compliance with the standards that apply to centrifugal compressor affected facilities as required by 40 CFR 60.5410(b). [40 CFR 60.5380(b)]
22	[40 CFR 60.5380(c)]	Demonstrate continuous compliance with the standards that apply to centrifugal compressor affected facilities as required by 40 CFR 60.5415(b). [40 CFR 60.5380(c)]
23	[40 CFR 60.5380(d)]	Perform the required notification, recordkeeping, and reporting as required by 40 CFR 60.5420. [40 CFR 60.5380(d)]
24	[40 CFR 60.5410(b)]	Comply with 40 CFR 60.5410(b)(1)-(8), as applicable. [40 CFR 60.5410(b)]
25	[40 CFR 60.5412(a)]	Each control device used to meet the emission reduction standard in 40 CFR 60.5380(a)(1) for your centrifugal compressor affected facility must be installed according to 40 CFR 60.5412(a)(1)-(3). As an alternative, you may install a control device model tested under 40 CFR 60.5413(d), which meets the criteria in 40 CFR 60.5413(d)(11) and 40 CFR 60.5413(e). [40 CFR 60.5412(a)]
26	[40 CFR 60.5412(b)]	Operate each control device installed on your centrifugal compressor affected facility in accordance with the requirements specified in 40 CFR 60.5412(b)(1) and (2). [40 CFR 60.5412(b)]
27	[40 CFR 60.5413(b)]	Use the test methods and procedures specified in 40 CFR 60.5413(b)(1)-(5), as applicable, for each performance test conducted to demonstrate that a control device meets the requirements of 40 CFR 60.5412(a). Conduct the initial and periodic performance tests according to the schedule specified in 40 CFR 60.5413(b)(5). [40 CFR 60.5413(b)]

Page 3 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0009 Affected Facilities Subject to NSPS 0000

EQT 0041 - Centrifugal Compressors Subject to NSPS 0000

28	[40 CFR 60.5413]	Demonstrate that a control device achieves the performance requirements of 40 CFR 60.5412(a) using the performance test methods and procedures specified in 40 CFR 60.5413. You are exempt from the requirement to conduct performance tests if you use any of the control devices described in 40 CFR 60.5413(a)(1)-(7).
29	[40 CFR 60.5415(b)]	Demonstrate continuous compliance according to 40 CFR 60.5415(b)(1)-(3). [40 CFR 60.5415(b)]
30	[40 CFR 60.5417(a) and (b)]	For each control device used to comply with the emission reduction standard for centrifugal compressor affected facilities in 40 CFR 60.5380, install and operate a continuous parameter monitoring system for each control device as specified in 40 CFR 60.5417(c)-(g). If you install and operate a flare in accordance with 40 CFR 60.5412(a)(3), you are exempt from the requirements of 40 CFR 60.5417(e) and (f). You are exempt from the monitoring requirements specified in 40 CFR 60.5417(c)-(g) for the control devices listed in 40 CFR 60.5417(b)(1) and (2). [40 CFR 60.5417(a) and (b)]
31	[40 CFR 60.5417(c)]	If you are required to install a continuous parameter monitoring system, meet the specifications and requirements in 40 CFR 60.5417(c)(1)-(4). [40 CFR 60.5417(c)]
32	[40 CFR 60.5417(d)]	Install, calibrate, operate, and maintain a device equipped with a continuous recorder to measure the values of operating parameters appropriate for the control device as specified in either 40 CFR 60.5417(d)(1), (2), or (3). [40 CFR 60.5417(d)]
33	[40 CFR 60.5417(e)]	Calculate the daily average value for each monitored operating parameter for each operating day, using the data recorded by the monitoring system, except for inlet gas flow rate. If the emissions unit operation is continuous, the operating day is a 24-hour period. If the emissions unit operation is not continuous, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points must be available for 75 percent of the operating hours in an operating day to compute the daily average. [40 CFR 60.5417(e)]
34	[40 CFR 60.5417(f)]	For each operating parameter monitor installed in accordance with the requirements of 40 CFR 60.5417(d), comply with 40 CFR 60.5417(f)(1) for all control devices. [40 CFR 60.5417(f)]
35	[40 CFR 60.5417(g)]	A deviation for a given control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified in 40 CFR 60.5417(g)(1)-(6) being met. If you monitor multiple operating parameters for the same control device during the same operating day and more than one of these operating parameters meets a deviation criterion specified in 40 CFR 60.5417(g)(1)-(6), then a single excursion is determined to have occurred for the control device for that operating day. [40 CFR 60.5417(g)]

EQT 0042 - Reciprocating Compressors Subject to NSPS OOOO

36 [40 CFR 60.5385(a)]

 ` / *	2.1. Land 1.1. L
	(1) Before the compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning upon
	(1) Parata and assurptions and about the name of the n
	initial startup of your reciprocating compressor affected facility or October 15, 2012, or the data of the most recent reciprocating compressor rod

initial startup of your reciprocating compressor affected facility, or October 15, 2012, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.

Replace the reciprocating compressor rod packing according to either 40 CFR 60.5385(a)(1) or (2) or comply with 40 CFR 60.5385(a)(3).

(2) Prior to 36 months from the date of the most recent rod packing replacement, or 36 months from the date of startup for a new reciprocating compressor for which the rod packing has not yet been replaced.

(3) Collect the emissions from the rod packing using a rod packing emissions collection system which operates under negative pressure and route the rod packing emissions to a process through a closed vent system that meets the requirements of 40 CFR 60.5411(a). [40 CFR 60.5385(a)]

Page 4 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0009 Affected Facilities Subject to NSPS 0000

EQT 0042 - Reciprocating Compressors Subject to NSPS OOOO		
37	[40 CFR 60.5385(b)]	Demonstrate initial compliance with standards that apply to reciprocating compressor affected facilities as required by 40 CFR 60.5410. [40 CFR 60.5385(b)]
38	[40 CFR 60.5385(c)]	Demonstrate continuous compliance with standards that apply to reciprocating compressor affected facilities as required by 40 CFR 60.5415. [40 CFR 60.5385(c)]
39	[40 CFR 60.5385(d)]	Perform the required notification, recordkeeping, and reporting as required by 40 CFR 60.5420. [40 CFR 60.5385(d)]
40	[40 CFR 60.5410(c)]	Comply with 40 CFR 60.5410(c)(1)-(4). [40 CFR 60.5410(c)]
41	[40 CFR 60.5415(c)]	For each reciprocating compressor affected facility complying with 40 CFR 60.5385(a)(1) or (2), demonstrate continuous compliance according

to 40 CFR 60.5415(c)(1)-(3). For each reciprocating compressor affected facility complying with 40 CFR 60.5385(a)(3), demonstrate

continuous compliance according to 40 CFR 60.5415(c)(4). [40 CFR 60.5415(c)]

EQT 0043 - Pneumatic Controllers Subject to NSPS OOOO

42	[40 CFR 60.5390(a)]	Compliance with 40 CFR 60.5390(c)(1) is not required if you determine that the use of a pneumatic controller affected facility with a bleed rate greater than the applicable standard is required based on functional needs, including but not limited to response time, safety and positive actuation. However, you must tag such pneumatic controller with the month and year of installation, reconstruction or modification, and identification information that allows traceability to the records for that pneumatic controller, as required in 40 CFR 60.5420(c)(4)(ii). [40 CFR 60.5390(a)]
43	[40 CFR 60.5390(c)]	Each pneumatic controller affected facility constructed, modified or reconstructed on or after October 15, 2013, at a location between the wellhead and a natural gas processing plant or the point of custody transfer to an oil pipeline must have a bleed rate less than or equal to 6 standard cubic feet per hour and be tagged with the month and year of installation, reconstruction or modification, and identification information that allows traceability to the records for that controller as required in 40 CFR 60.5420(c)(4)(iii). [40 CFR 60.5390(c)]
44	[40 CFR 60.5390(d)]	Demonstrate initial compliance with standards that apply to pneumatic controller affected facilities as required by 40 CFR 60.5410. [40 CFR 60.5390(d)]
45	[40 CFR 60.5390(e)]	Demonstrate continuous compliance with standards that apply to pneumatic controller affected facilities as required by 40 CFR 60.5415. [40 CFR 60.5390(e)]
46	[40 CFR 60.5390(f)]	Perform the required notification, recordkeeping, and reporting as required by 40 CFR 60.5420, except that you are not required to submit the notifications specified in 40 CFR 60.5420(a). [40 CFR 60.5390(f)]
47	[40 CFR 60.5410(d)]	Comply with the requirements specified in 40 CFR 60.5410(d)(1)-(6), as applicable. [40 CFR 60.5410(d)]
48	[40 CFR 60.5415(d)]	Demonstrate continuous compliance according to 40 CFR 60.5415(d)(1)-(3). [40 CFR 60.5415(d)]

EQT 0045 - Storage Vessels Subject to NSPS OOOO

49 [40 CFR 60.5395(b)]	Group 1 storage vessel affected facilities: Submit a notification identifying each Group 1 storage vessel affected facility, including its location,
	with your initial annual report as specified in 40 CFR 60.5420(b)(6)(iv). Comply with 40 CFR 60.5395(d)-(g). [40 CFR 60.5395(b)]
50 [40 CFR 60.5395(c)]	Group 2 storage vessel affected facilities: Comply with 40 CFR 60.5395(d)-(g), [40 CFR 60.5395(c)]

Page 5 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit

Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0009 Affected Facilities Subject to NSPS 0000

EQT 0045 - Storage Vessels Subject to NSPS 0000

EUI	<u> </u>	Subject to NSPS OCCO
51	[40 CFR 60.5395(d)(1)]	Reduce VOC emissions by 95.0 percent unless you meet the conditions specified in 40 CFR 60.5395(d)(2). For Group 2 storage vessel affected facilities, achieve the required emissions reductions within 60 days after startup. For Group 2 storage vessel affected facilities receiving liquids pursuant to the standards for gas well affected facilities in 40 CFR 60.5375, achieve the required emissions reductions within 60 days after startup of production as defined in 40 CFR 60.5430. [40 CFR 60.5395(d)(1)]
52	[40 CFR 60.5395(d)(2)(i)]	If a well feeding the storage vessel affected facility undergoes fracturing or refracturing, comply with 40 CFR 60.5395(d)(1) as soon as liquids from the well following fracturing or refracturing are routed to the storage vessel affected facility. [40 CFR 60.5395(d)(2)(i)]
53	[40 CFR 60.5395(d)(2)(ii)]	If the monthly emissions determination required in 40 CFR 60.5395 indicates that VOC emissions from your storage vessel affected facility increase to 4 tpy or greater and the increase is not associated with fracturing or refracturing of a well feeding the storage vessel affected facility, comply with 40 CFR 60.5395(d)(1) within 30 days of the monthly calculation. [40 CFR 60.5395(d)(2)(ii)]
54	[40 CFR 60.5395(d)(2)]	Maintain the uncontrolled actual VOC emissions from the storage vessel affected facility at less than 4 tpy without considering control. Prior to using the uncontrolled actual VOC emission rate for compliance purposes, demonstrate that the uncontrolled actual VOC emissions have remained less than 4 tpy as determined monthly for 12 consecutive months. After such demonstration, determine the uncontrolled actual VOC emission rate each month. The uncontrolled actual VOC emissions must be calculated using a generally accepted model or calculation methodology. Monthly calculations must be based on the average throughput for the month. Monthly calculations must be separated by at least 14 days. [40 CFR 60.5395(d)(2)]
55	[40 CFR 60.5395(e)(1)]	If you use a control device (other than a floating roof) to reduce emissions from your storage vessel affected facility, equip the storage vessel with a cover that meets the requirements of 40 CFR 60.5411(b) and is connected through a closed vent system that meets the requirements of 40 CFR 60.5411(c), and route emissions to a control device that meets the conditions specified in 40 CFR 60.5412(c) and (d). As an alternative to routing the closed vent system to a control device, you may route the closed vent system to a process. [40 CFR 60.5395(e)(1)]
56	[40 CFR 60.5395(e)(2)]	If you use a floating roof to reduce emissions, meet the requirements of 40 CFR 60.112b(a)(1) or (2) and the relevant monitoring, inspection, recordkeeping, and reporting requirements in 40 CFR 60 Subpart Kb. [40 CFR 60.5395(e)(2)]
57	[40 CFR 60.5395(f)(1)]	If you remove a Group 1 or Group 2 storage vessel affected facility from service, completely empty and degas the storage vessel, such that the storage vessel no longer contains crude oil, condensate, produced water or intermediate hydrocarbon liquids. A storage vessel where liquid is left on walls, as bottom clingage or in pools due to floor irregularity is considered to be completely empty. Submit a notification as required in 40 CFR 60.5420(b)(6)(vi) in your next annual report, identifying each storage vessel affected facility removed from service during the reporting period and the date of its removal from service. A Group 1 or Group 2 storage vessel is not an affected facility under Subpart OOOO for the period that it is removed from service. [40 CFR 60.5395(f)(1)]
58	[40 CFR 60.5395(f)(2) and (3)]	If a storage vessel is returned to service, determine its affected facility status as provided in 40 CFR 60.5365(e). For each storage vessel affected facility returned to service during the reporting period, submit a notification in your next annual report as required in 40 CFR 60.5420(b)(6)(vii), identifying each storage vessel affected facility and the date of its return to service. [40 CFR 60.5395(f)(2) and (3)]
59	[40 CFR 60.5395(g)]	Demonstrate initial compliance with standards as required by 40 CFR 60.5410(h) and (i). Demonstrate continuous compliance with standards as required by 40 CFR 60.5415(e)(3). Perform the required notification, recordkeeping and reporting as required by 40 CFR 60.5420. [40 CFR 60.5395(g)]
60	[40 CFR 60.5410(h)]	Comply with 40 CFR 60.5410(h)(1)-(5). For a Group 2 storage vessel affected facility, you must demonstrate initial compliance within 60 days after startup. [40 CFR 60.5410(h)]

Page 6 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0009 Affected Facilities Subject to NSPS 0000

EQT 0045 - Storage Vessels Subject to NSPS OOOO

61	[40 CFR 60.5410(i)]	For each Group 1 storage vessel affected facility, submit the notification specified in 40 CFR 60.5395(b)(2) with the initial annual report specified in 40 CFR 60.5420(b)(6). [40 CFR 60.5410(i)]
62	[40 CFR 60.5411(c)]	Closed vent system requirements for storage vessel affected facilities using a control device or routing emissions to a process: (1) Design the closed vent system to route all gases, vapors, and fumes emitted from the material in the storage vessel to a control device that meets the requirements specified in 40 CFR 60.5412(c) and (d), or to a process.
		(2) Design and operate a closed vent system with no detectable emissions, as determined using olfactory, visual and auditory inspections. Each closed vent system that routes emissions to a process must be operational 95 percent of the year or greater. (3) Meet the requirements specified in 40 CFR 60.5411(c)(3)(i) and (ii) if the closed vent system contains one or more bypass devices that could
		be used to divert all or a portion of the gases, vapors, or fumes from entering the control device or to a process. [40 CFR 60.5411(c)]
63	[40 CFR 60.5412(d)]	Each control device used to meet the emission reduction standard in 40 CFR 60.5395(d) for your storage vessel affected facility must be installed according to 40 CFR 60.5412(d)(1)-(3), as applicable. As an alternative to 40 CFR 60.5412(d)(1), you may install a control device model tested under 40 CFR 60.5413(d), which meets the criteria in 40 CFR 60.5413(d)(11) and 40 CFR 60.5413(e). [40 CFR 60.5412(d)]
64	[40 CFR 60.5415(e)]	Demonstrate continuous compliance according to 40 CFR 60.5415(e)(3) for each storage vessel affected facility, for which you are using a control device or routing emissions to a process to meet the requirement of 40 CFR 60.5395(d)(1). [40 CFR 60.5415(e)]
65	[40 CFR 60.5416(c)]	Cover and closed vent system inspections for storage vessel affected facilities: If you install a control device or route emissions to a process, inspect each closed vent system according to the procedures and schedule specified in 40 CFR 60.5416(c)(1), inspect each cover according to the procedures and schedule specified in 40 CFR 60.5416(c)(2), and inspect each bypass device according to the procedures of 40 CFR 60.5416(c)(3). Also comply with the requirements of 40 CFR 60.5416(c)(4)-(7). [40 CFR 60.5416(c)]
66	[40 CFR 60.5417(h)]	For each control device used to comply with the emission reduction standard in 40 CFR 60.5395(d)(1) for your storage vessel affected facility, demonstrate continuous compliance according to 40 CFR 60.5417(h)(1)-(3). You are exempt from the requirements of 40 CFR 60.5417(h) if you install a control device model tested in accordance with 40 CFR 60.5413(d)(2)-(10), which meets the criteria in 40 CFR 60.5413(d)(11), the reporting requirement in 40 CFR 60.5413(d)(12), and meet the continuous compliance requirement in 40 CFR 60.5413(e). [40 CFR 60.5417(h)]

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

Group Members: CRG CRG CRG EMS 0003 EQT 0047 EQT 0048 EQT 0049 EQT 0050 EQT 0051 FUG 0004 0004 0005 0006

CRG 0004 - General Requirements under NSPS OOOOa

Group Members: EMS 0003 EQT 0047 EQT 0048 EQT 0049 EQT 0050 EQT 0051 FUG 0004

67 [40 CFR 60.5370a(a)] Be in compliance with the standards of 40 CFR 60 Subpart OOOOa no later than August 2, 2016, or upon startup, whichever is later. [40 CFR 60.5370a(a)]

[40 CFR 60.5370a(b)] At all times, including periods of startup, shutdown, and malfunction, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The provisions for exemption from compliance during periods of startup, shutdown and malfunctions provided for in 40 CFR 60.8(c) do not apply. [40 CFR 60.5370a(b)]

Page 7 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

CRG 0004 - General Requirements under NSPS OOOOa

	- Concrat (toquitothicities chico) (to)	
	·	

Submit annual reports containing the information specified in 40 CFR 60.5420a(b)(1)-(8) and (12) and performance test reports as specified in 40 CFR 60.5420a(b)(9) or (10), if applicable. Submit annual reports following the procedure specified in 40 CFR 60.5420a(b)(11). The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to 40 CFR 60.5410a.

Subsequent annual reports are due no later than same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in 40

CFR 60.5420a(b)(1)-(8). [40 CFR 60.5420a(b)]

70 [40 CFR 60.5420a(c)] Maintain the records identified as specified in 40 CFR 60.7(f) and in 40 CFR 60.5420a(c)(1)-(16). All records required by Subpart OOOOa

must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by Subpart

OOOOa that are submitted electronically via the EPA's CDX may be maintained in electronic format. [40 CFR 60.5420a(c)]

71 [40 CFR 60.5425a] Table 3 to Subpart OOOOa shows which parts of the General Provisions in 40 CFR 60.1 through 60.19 apply to you.

<u>CRG 0005</u> - Storage Vessels and Centrifugal Compressors Subject to NSPS OOOOa

Group Members: EQT 0047 EQT 0051

69 [40 CFR 60.5420a(b)]

72 [40 CFR 60.5411a(b)] Cover requirements for storage vessels and centrifugal compressor wet seal fluid degassing systems:

- (1) The cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief devices and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the liquid in the storage vessel or wet seal fluid degassing system.
- (2) Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except during those times when it is necessary to use an opening as follows:
- (i) To add material to, or remove material from the unit (this includes openings necessary to equalize or balance the internal pressure of the unit following changes in the level of the material in the unit);
- (ii) To inspect or sample the material in the unit;
- (iii) To inspect, maintain, repair, or replace equipment located inside the unit; or
- (iv) To vent liquids, gases, or fumes from the unit through a closed vent system designed and operated in accordance with the requirements of 40 CFR 60.5411a(a) or (c), and (d), to a control device or to a process.
- (3) Each storage vessel thief hatch shall be equipped, maintained and operated with a weighted mechanism or equivalent, to ensure that the lid remains properly seated and sealed under normal operating conditions, including such times when working, standing/breathing, and flash emissions may be generated. Select gasket material for the hatch based on composition of the fluid in the storage vessel and weather conditions. [40 CFR 60.5411a(b)]
- 73 [40 CFR 60.5413a(a) and (b)]

Use the test methods and procedures specified in 40 CFR 60.5413a(b)(1)-(5), as applicable, for each performance test conducted to demonstrate that a control device meets the requirements of 40 CFR 60.5412a(a)(1) or (2) or (d)(1) or (2). Conduct the initial and periodic performance tests according to the schedule specified in 40 CFR 60.5413a(b)(5). Each performance test must consist of a minimum of 3 test runs. Each run must be at least 1 hour long. You are exempt from the requirements to conduct performance tests if you use any of the control devices described in 40 CFR 60.5413a(a)(1)-(7). [40 CFR 60.5413a(a) and (b)]

Page 8 of 48

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

<u>CRG 0005</u> - Storage Vessels and Centrifugal Compressors Subject to NSPS OOOOa

74 [40 CFR 60.5413a(e)]

Continuous compliance for combustion control devices tested by the manufacturer in accordance with 40 CFR 60.5413a(d): Demonstrate that a control device achieves the performance criteria in 40 CFR 60.5413a(d)(11) by installing a device tested under 40 CFR 60.5413a(d), complying with the criteria specified in 40 CFR 60.5413a(e)(1)-(8), maintaining the records specified in 40 CFR 60.5420a(c)(2) or (c)(5)(vi), and submitting the report specified in 40 CFR 60.5420a(b)(10). [40 CFR 60.5413a(e)]

CRG 0006 - Reciprocating Compressors, Centrifugal Compressors, and Pneumatic Pumps Subject to NSPS OOO0a

Group Members: EQT 0047 EQT 0048 EQT 0050

75 [40 CFR 60.5411a(a)] Closed vent system requirements for reciprocating compressors, centrifugal compressor wet seal degassing systems, and pneumatic pumps:

- (1) Design the closed vent system to route all gases, vapors, and fumes emitted from the reciprocating compressor rod packing emissions collection system, the wet seal fluid degassing system or pneumatic pump to a control device or to a process. For reciprocating and centrifugal compressors, the closed vent system must route all gases, vapors, and fumes to a control device that meets the requirements specified in 40 CFR 60.5412a(a)-(c).
- (2) Design and operate the closed vent system with no detectable emissions as demonstrated by 40 CFR 60.5416a(b).
- (3) Meet the requirements specified in 40 CFR 60.5411a(a)(3)(i) and (ii) if the closed vent system contains one or more bypass devices that
- could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device. [40 CFR 60.5411a(a)]

 [10] The provided HTML of the gases of the gas
 - Inspections for closed vent systems and covers installed on each centrifugal compressor, reciprocating compressor, or pneumatic pump: Except as provided in 40 CFR 60.5416a(b)(11) and (12), inspect each closed vent system according to the procedures and schedule specified in 40 CFR 60.5416a(a)(1) and (2), inspect each cover according to the procedures and schedule specified in 40 CFR 60.5416a(a)(3), and inspect each bypass device according to the procedures of 40 CFR 60.5416a(a)(4). [40 CFR 60.5416a(a)]
- No detectable emissions test methods and procedures: If you are required to conduct an inspection of a closed vent system or cover at your centrifugal compressor, reciprocating compressor, or pneumatic pump as specified in 40 CFR 60.5416a(a)(1), (2), or (3), meet the requirements of 40 CFR 60.5416a(b)(1)-(13). [40 CFR 60.5416a(b)]

EMS 0003 - Wells Subject to NSPS OOOOa

78 [40 CFR 60.5375a(a)(1)(i)] During the initial flowback stage, route the flowback into one or more well completion vessels or storage vessels and commence operation of a separator unless it is technically infeasible for a separator to function. Any gas present in the initial flowback stage is not subject to control under 40 CFR 60.5375a. [40 CFR 60.5375a(a)(1)(i)]

During the separation flowback stage, route all recovered liquids from the separator to one or more well completion vessels or storage vessels, re-inject the recovered liquids into the well or another well, or route the recovered liquids to a collection system. Route the recovered gas from the separator into a gas flow line or collection system, re-inject the recovered gas into the well or another well, use the recovered gas as an onsite fuel source, or use the recovered gas for another useful purpose that a purchased fuel or raw material would serve. If it is technically infeasible to route the recovered gas as required above, follow the requirements in 40 CFR 60.5375a(a)(3). If, at any time during the separation flowback

stage, it is technically infeasible for a separator to function, comply with 40 CFR 60.5375a (a)(1)(i). [40 CFR 60.5375a(a)(1)(ii)]

Page 9 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

EMS 0003 - Wells Subject to NSPS OOOOa

====	<u> </u>	
80	[40 CFR 60.5375a(a)(1)(iii)(C)	The owner or operator of a well that meets the criteria of 40 CFR 60.5375a(a)(1)(iii)(A) or (B) must submit the report in 40 CFR 60.5420a(b)(2) and maintain the records in 40 CFR 60.5420a(c)(1)(iii). [40 CFR 60.5375a(a)(1)(iii)(C)]
81	[40 CFR 60.5375a(a)(1)(iii)]	Have a separator onsite during the entirety of the flowback period, except as provided in 40 CFR 60.5375a(a)(1)(iii)(A)-(C). [40 CFR 60.5375a(a)(1)(iii)]
82	[40 CFR 60.5375a(a)(3)]	If it is technically infeasible to route the recovered gas as required in 40 CFR 60.5375a(a)(1)(ii), capture and direct recovered gas to a completion combustion device, except in conditions that may result in a fire hazard or explosion, or where high heat emissions from a completion combustion device may negatively impact waterways. Completion combustion devices must be equipped with a reliable continuous pilot flame. [40 CFR 60.5375a(a)(3)]
83	[40 CFR 60.5375a(a)(4)]	You have a general duty to safely maximize resource recovery and minimize releases to the atmosphere during flowback and subsequent recovery. [40 CFR 60.5375a(a)(4)]
84	[40 CFR 60.5375a(a)]	Except as provided in 40 CFR 60.5375a(f) and (g), for each well completion operation with hydraulic fracturing, comply with the requirements in 40 CFR 60.5375a(a)(1)-(4). Maintain a log as specified in 40 CFR 60.5375a(b). [40 CFR 60.5375a(a)]
85	[40 CFR 60.5375a(b)]	Maintain a log for each well completion operation at each well. The log must be completed on a daily basis for the duration of the well completion operation and must contain the records specified in 40 CFR 60.5420a(c)(1)(iii). [40 CFR 60.5375a(b)]
86	[40 CFR 60.5375a(c)]	Demonstrate initial compliance with the standards that apply to wells as required by 40 CFR 60.5410a(a). [40 CFR 60.5375a(c)]
87	[40 CFR 60.5375a(d)]	Demonstrate continuous compliance with the standards that apply to wells as required by 40 CFR 60.5415a(a). [40 CFR 60.5375a(d)]
88	[40 CFR 60.5375a(e)]	Perform the required notification, recordkeeping and reporting as required by 40 CFR 60.5420a(a)(2), (b)(1) and (2), and (c)(1). [40 CFR 60.5375a(e)]
89	[40 CFR 60.5375a(f)(1)-(3)]	For each well completion operation with hydraulic fracturing at a wildcat or delineation well or at a non-wildcat low pressure well or non-delineation low pressure well, comply with either 40 CFR 60.5375a(f)(3)(i) or (ii), unless you meet the requirements in 40 CFR 60.5375a(g). Also comply with 40 CFR 60.5375a(b). [40 CFR 60.5375a(f)(1)-(3)]
90	[40 CFR 60.5375a(f)(4)]	Submit the notification as specified in 40 CFR 60.5420a(a)(2), submit annual reports as specified in 40 CFR 60.5420a(b)(1) and (2), and maintain records specified in 40 CFR 60.5420a(c)(1)(iii) for each wildcat and delineation well. Submit the notification as specified in 40 CFR 60.5420a(a)(2), submit annual reports as specified in 40 CFR 60.5420a(b)(1) and (2), and maintain records as specified in 40 CFR 60.5420a(c)(1)(iii) and (vii) for each low pressure well. [40 CFR 60.5375a(f)(4)]
91	[40 CFR 60.5375a(g)]	For each well with less than 300 scf of gas per stock tank barrel of oil produced, maintain records specified in 40 CFR 60.5420a(c)(1)(vi) and submit reports specified in 40 CFR 60.5420a(b)(1) and (2). [40 CFR 60.5375a(g)]
92	[40 CFR 60.5375a]	If you are the owner or operator of a well as described in 40 CFR 60.5365a(a) that also meets the criteria for a well affected facility in 40 CFR 60.5365(a) of 40 CFR 60 Subpart OOOO, comply with 40 CFR 60.5375a(a)-(g). If you own or operate a well as described in 40 CFR 60.5365a(a) that does not meet the criteria for a well affected facility in 40 CFR 60.5365a(a) of Subpart OOOO, comply with 40 CFR 60.5375a(f)(3), (f)(4) or (g) for each well completion operation with hydraulic fracturing prior to November 30, 2016, and comply with 40 CFR 60.5375a(a)-(g) for each well completion operation with hydraulic fracturing on or after November 30, 2016.
93	[40 CFR 60.5410a(a)]	To achieve initial compliance with the methane and VOC standards for each well completion operation conducted at your well, comply with 40 CFR 60.5410a(a)(1)-(4). [40 CFR 60.5410a(a)]

Page 10 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

EMS 0003 - Wells Subject to NSPS OOOOa

95 [40 CFR 60.5420a(a)(2)(i)]

94 [40 CFR 60.5415a(a)]	For each well, demonstrate continuous compliance by submitting the reports required by 40 CFR 60.5420a(b)(1) and (2) and maintaining the
	records for each completion operation specified in 40 CFR 60.5420a(c)(1). [40 CFR 60.5415a(a)]

Submit a notification to the Administrator no later than 2 days prior to the commencement of each well completion operation listing the anticipated date of the well completion operation. The notification shall include contact information for the owner or operator; the United States Well Number; the latitude and longitude coordinates for each well in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983; and the planned date of the beginning of flowback. You may submit the notification in writing or in electronic format. [40 CFR 60.5420a(a)(2)(i)]

EQT 0047 - Centrifugal Compressors Subject to NSPS OOOOa

96	[40 CFR 60.5380a(a)]	Reduce methane and VOC emissions from each centrifugal compressor wet seal fluid degassing system by 95.0 percent. If you use a control device to reduce emissions, equip the wet seal fluid degassing system with a cover that meets the requirements of 40 CFR 60.5411a(b). The cover must be connected through a closed vent system that meets the requirements of 40 CFR 60.5411a(a) and (d), and the closed vent system must be routed to a control device that meets the conditions specified in 40 CFR 60.5412a(a), (b) and (c). As an alternative to routing the closed vent system to a control device, you may route the closed vent system to a process. [40 CFR 60.5380a(a)]
97	[40 CFR 60.5380a(b)]	Demonstrate initial compliance with the standards that apply to centrifugal compressors as required by 40 CFR 60.5410a(b). [40 CFR 60.5380a(b)]
98	[40 CFR 60.5380a(c)]	Demonstrate continuous compliance with the standards that apply to centrifugal compressors as required by 40 CFR 60.5415a(b). [40 CFR 60.5380a(c)]
99	[40 CFR 60.5380a(d)]	Perform the reporting as required by 40 CFR 60.5420a(b)(1) and (3), and the recordkeeping as required by 40 CFR 60.5420a(c)(2), (6)-(11), and (17), as applicable. [40 CFR 60.5380a(d)]
100	[40 CFR 60.5410a(b)]	60.5410a(b)

- (1) To achieve initial compliance with standards for your centrifugal compressor, reduce methane and VOC emissions from each centrifugal compressor wet seal fluid degassing system by 95.0 percent or greater as required by 40 CFR 60.5380a(a) and as demonstrated by the requirements of 40 CFR 60.5413a.
- (2) If you use a control device to reduce emissions, equip the wet seal fluid degassing system with a cover that meets the requirements of 40 CFR 60.5411a(b) that is connected through a closed vent system that meets the requirements of 40 CFR 60.5411a(a) and (d) and is routed to a control device that meets the conditions specified in 40 CFR 60.5412a(a), (b) and (c). As an alternative to routing the closed vent system to a control device, you may route the closed vent system to a process.
- (3) Conduct an initial performance test as required in 40 CFR 60.5413a within 180 days after initial startup or by August 2, 2016, whichever is later, and you must comply with the continuous compliance requirements in 40 CFR 60.5415a(b).
- (4) Conduct the initial inspections required in 40 CFR 60.5416a(a) and (b).
- (5) Install and operate the continuous parameter monitoring systems in accordance with 40 CFR 60.5417a(a)-(g), as applicable.
- (7) Submit the initial annual report for your centrifugal compressor as required in 40 CFR 60.5420a(b)(1) and (3).
- (8) Maintain the records as specified in 40 CFR 60.5420a(c)(2), (6)-(11), and (17), as applicable. [40 CFR 60.5410a(b)]

Page 11 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

EQT 0047 - Centrifugal Compressors Subject to NSPS 0000a

EWI	0047 - Centritugal Con	npressors subject to NSFS 0000a
101	[40 CFR 60.5411a(d)]	Closed vent systems requirements for centrifugal compressor wet seal fluid degassing systems using a control device or routing emissions to a process: Conduct an assessment that the closed vent system is of sufficient design and capacity to ensure that all emissions from the centrifugal compressor wet seal fluid degassing system are routed to the control device and that the control device is of sufficient design and capacity to accommodate all emissions from the centrifugal compressor wet seal fluid degassing system and have it certified by a qualified professional engineer in accordance with 40 CFR 60.5411a(d)(1)(i) and (ii). [40 CFR 60.5411a(d)]
102	[40 CFR 60.5412a(a)]	Each control device used to meet the emission reduction standard in 40 CFR 60.5380a(a)(1) for your centrifugal compressor must be installed according to 40 CFR 60.5412a(a)(1)-(3). As an alternative, you may install a control device model tested under 40 CFR 60.5413a(d), which meets the criteria in 40 CFR 60.5413a(d)(11) and meet the continuous compliance requirements in 40 CFR 60.5413a(e). [40 CFR 60.5412a(a)]
103	[40 CFR 60.5412a(b)]	Operate each control device installed on your centrifugal compressor in accordance with the requirements specified in 40 CFR 60.5412a(b)(1) and (2). [40 CFR 60.5412a(b)]
104	[40 CFR 60.5415a(b)]	For each centrifugal compressor affected facility and each pneumatic pump affected facility, demonstrate continuous compliance according to 40 CFR 60.5415a(b)(3) except as provided in 40 CFR 60.5415a(b)(4). For each centrifugal compressor affected facility, also demonstrate continuous compliance according to 40 CFR 60.5415a(b)(1) and (2). [40 CFR 60.5415a(b)]
105	[40 CFR 60.5417a(a)]	For each control device used to comply with the emission reduction standard for centrifugal compressors in 40 CFR 60.5380a(a)(1), install and operate a continuous parameter monitoring system for each control device as specified in 40 CFR 60.5417a(c)-(g), except as provided for in 40 CFR 60.5417a(b). If you install and operate a flare in accordance with 40 CFR 60.5412a(a)(3), you are exempt from the requirements of 40 CFR 60.5417a(e) and (f). If you install and operate an enclosed combustion device which is not specifically listed in 40 CFR 60.5417a(d), demonstrate continuous compliance according to 40 CFR 60.5417a(h)(1)-(4). [40 CFR 60.5417a(a)]
106	[40 CFR 60.5417a(c)]	If you are required to install a continuous parameter monitoring system, meet the specifications and requirements in 40 CFR 60.5417a(c)(1)-(4). [40 CFR 60.5417a(c)]
107	[40 CFR 60.5417a(d)]	Install, calibrate, operate, and maintain a device equipped with a continuous recorder to measure the values of operating parameters appropriate for the control device as specified in 40 CFR 60.5417a(d)(1), (2), or (3). [40 CFR 60.5417a(d)]
108	[40 CFR 60.5417a(e)]	Calculate the daily average value for each monitored operating parameter for each operating day, using the data recorded by the monitoring system, except for inlet gas flow rate and data from the heat sensing devices that indicate the presence of a pilot flame. If the emissions unit operation is continuous, the operating day is a 24-hour period. If the emissions unit operation is not continuous, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points must be available for 75 percent of the operating hours in an operating day to compute the daily average. [40 CFR 60.5417a(e)]
109	[40 CFR 60.5417a(f)]	For each operating parameter monitor installed in accordance with the requirements of 40 CFR 60.5417a(d), comply with 40 CFR 60.5417a(f)(1) for all control devices. [40 CFR 60.5417a(f)]
110	[40 CFR 60.5417a(g)]	A deviation for a given control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified in 40 CFR 60.5417a(g)(1)-(6) being met. If you monitor multiple operating parameters for the same control device during the same operating day and more than one of these operating parameters meets a deviation criterion specified in 40 CFR 60.5417a(g)(1)-(6), then a single excursion is determined to have occurred for the control device for that operating day. [40 CFR 60.5417a(g)]

EQT 0048 - Reciprocating Compressors Subject to NSPS OOOOa

Page 12 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

EQT 0048 - Reciprocating Compressors Subject to NSPS OOOOa

	tooibioogius oo	
111	[40 CFR 60.5385a(a)(1) and (2	Replace the reciprocating compressor rod packing according to either (1) or (2) below. (1) On or before the compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning upon initial startup of your reciprocating compressor, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later. (2) Prior to 36 months from the date of the most recent rod packing replacement, or 36 months from the date of startup for a new reciprocating
		compressor for which the rod packing has not yet been replaced. [40 CFR 60.5385a(a)(1) and (2)]
112	[40 CFR 60.5385a(a)(3)]	As an alternative to replacing the rod packing, collect the methane and VOC emissions from the rod packing using a rod packing emissions collection system that operates under negative pressure and route the rod packing emissions to a process through a closed vent system that meets the requirements of 40 CFR 60.5411a(a) and (d). [40 CFR 60.5385a(a)(3)]
113	[40 CFR 60.5385a(b)]	Demonstrate initial compliance with standards that apply to reciprocating compressors as required by 40 CFR 60.5410a(c). [40 CFR 60.5385a(b)]
114	[40 CFR 60.5385a(c)]	Demonstrate continuous compliance with standards that apply to reciprocating compressors as required by 40 CFR 60.5415a(c). [40 CFR 60.5385a(c)]
115	[40 CFR 60.5385a(d)]	Perform the reporting as required by 40 CFR 60.5420a(b)(1) and (4) and the recordkeeping as required by 40 CFR 60.5420a(c)(3), (6)-(9), and (17), as applicable. [40 CFR 60.5385a(d)]
116	[40 CFR 60.5410a(c)]	To achieve initial compliance with the standards for each reciprocating compressor, comply with 40 CFR 60.5410a(c)(1)-(4). [40 CFR 60.5410a(c)]
117	[40 CFR 60.5411a(d)]	Closed vent systems requirements for reciprocating compressors using a control device or routing emissions to a process: Conduct an assessment that the closed vent system is of sufficient design and capacity to ensure that all emissions from the reciprocating compressor are routed to the control device and that the control device is of sufficient design and capacity to accommodate all emissions from the reciprocating compressor and have it certified by a qualified professional engineer in accordance with 40 CFR 60.5411a(d)(1)(i) and (ii). [40 CFR 60.5411a(d)]
118	[40 CFR 60.5415a(c)]	For each reciprocating compressor complying with 40 CFR 60.5385a(a)(1) or (2), demonstrate continuous compliance according to 40 CFR 60.5415a(c)(1)-(3). For each reciprocating compressor complying with 40 CFR 60.5385a(a)(3), demonstrate continuous compliance according to 40 CFR 60.5415a(c)(4). [40 CFR 60.5415a(c)]

EQT 0049 - Pneumatic Controllers Subject to NSPS OOOOa

119 [40 CFR 60.5390a(c)]	Each pneumatic controller must have a bleed rate less than or equal to 6 standard cubic feet per hour and be tagged with the month and year of installation, reconstruction or modification, and identification information that allows traceability to the records for that controller as required in
	40 CFR 60.5420a(c)(4)(iii). This requirement is not applicable if you determine that the use of a pneumatic controller with a bleed rate greater than the applicable standard is required based on functional needs, including but not limited to response time, safety and positive actuation. However, you must tag such pneumatic controller with the month and year of installation, reconstruction or modification, and identification
120 [40 CFR 60.5390a(d)]	information that allows traceability to the records for that pneumatic controller, as required in 40 CFR 60.5420a(c)(4)(ii). [40 CFR 60.5390a(c)] Demonstrate initial compliance with standards that apply to pneumatic controllers as required by 40 CFR 60.5410a(d). [40 CFR 60.5390a(d)]

Page 13 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities
Activity Number: PER20190001
Permit Number: MSOG Master Gen Permit

Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

<u>EQT</u>	0049 - Pneumatic Contro	ollers Subject to NSPS OOOOa
121	[40 CFR 60.5390a(e)]	Demonstrate continuous compliance with standards that apply to pneumatic controllers as required by 40 CFR 60.5415a(d). [40 CFR 60.5390a(e)]
122	[40 CFR 60.5390a(f)]	Perform the reporting as required by 40 CFR 60.5420a(b)(1) and (5) and the recordkeeping as required by 40 CFR 60.5420a(c)(4). [40 CFR 60.5390a(f)]
123	[40 CFR 60.5410a(d)]	To achieve initial compliance with methane and VOC emission standards for your pneumatic controller, comply with the requirements specified in 40 CFR 60.5410a(d)(1)-(6), as applicable. [40 CFR 60.5410a(d)]
124	[40 CFR 60.5415a(d)]	For each pneumatic controller, demonstrate continuous compliance according to 40 CFR 60.5415a(d)(1)-(3). [40 CFR 60.5415a(d)]
EQT	0050 - Pneumatic Pump	s Subject to NSPS OOOOa
125	[40 CFR 60.5393a(b)(1)]	On or after November 30, 2016, if the pneumatic pump is located at a greenfield site as defined in 40 CFR 60.5430a, reduce natural gas emissions by 95.0 percent, except as provided in 40 CFR 60.5393a(b)(3) and (4). [40 CFR 60.5393a(b)(1)]
126	[40 CFR 60.5393a(b)(2)]	On or after November 30, 2016, if the pneumatic pump is not located at a greenfield site as defined in 40 CFR 60.5430a, reduce natural gas emissions by 95.0 percent, except as provided in 40 CFR 60.5393a(b)(3), (4) and (5). [40 CFR 60.5393a(b)(2)]
127	[40 CFR 60.5393a(b)(3)]	You are not required to install a control device solely for the purpose of complying with the 95.0 percent reduction requirement of 40 CFR 60.5393a(b)(1) or (2). If you do not have a control device installed on site by the compliance date and you do not have the ability to route to a process, submit a certification in accordance with 40 CFR 60.5420a(b)(8)(i)(A) in your next annual report, certifying that there is no available control device or process on site and maintain the records in 40 CFR 60.5420a(c)(16)(i) and (ii). If you subsequently install a control device or have the ability to route to a process, you are no longer required to comply with 40 CFR 60.5393a(b)(2)(i) and must submit the information in 40 CFR 60.5420a(b)(8)(ii) in your next annual report and maintain the records in 40 CFR 60.5420a(c)(16)(i), (ii), and (iii). Be in compliance with the requirements of 40 CFR 60.5393a(b)(2) within 30 days of startup of the control device or within 30 days of the ability to route to a process. [40 CFR 60.5393a(b)(3)]
128	[40 CFR 60.5393a(b)(4)]	If the control device available on site is unable to achieve a 95 percent reduction and there is no ability to route the emissions to a process, you must still route the pneumatic pump's emissions to that existing control device. If you route the pneumatic pump to a control device installed on site that is designed to achieve less than a 95 percent reduction, submit the information specified in 40 CFR 60.5420a(b)(8)(i)(C) in your next annual report and maintain the records in 40 CFR 60.5420a(c)(16)(iii). [40 CFR 60.5393a(b)(4)]
129	[40 CFR 60.5393a(b)(5)]	If an owner or operator at a non-greenfield site determines, through an engineering assessment, that routing a pneumatic pump to a control device or a process is technically infeasible, the requirements specified in 40 CFR 60.5393a(b)(5)(i)-(iv) must be met. Conduct the assessment of technical infeasibility in accordance with the criteria in 40 CFR 60.5393a(b)(5)(iii) and have it certified by a qualified professional engineer in accordance with 40 CFR 60.5393a(b)(5)(ii). Maintain the records in 40 CFR 60.5420a(c)(16)(iv). [40 CFR 60.5393a(b)(5)]
130	[40 CFR 60.5393a(b)(6)]	If the pneumatic pump is routed to a control device or a process and the control device or process is subsequently removed from the location or is no longer available, you are no longer required to be in compliance with the requirements of 40 CFR 60.5393a(b)(1) or (2), and instead must comply with 40 CFR 60.5393a(b)(3) and report the change in next annual report in accordance with 40 CFR 60.5420a(b)(8)(ii). [40 CFR 60.5393a(b)(6)]

Page 14 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

EQT 0050	- Pneumatic Pumps	Subject to	NSPS 0000a
EWI UUSU	- Fileumanc Fumps	Subject to	NOPO COCO

121	[40 CED 40 5202 (c)]	If you are a control design or work to a control to a control the mountain many through a closed year quetom that make the
131	[40 CFR 60.5393a(c)]	If you use a control device or route to a process to reduce emissions, connect the pneumatic pump through a closed vent system that meets the requirements of 40 CFR 60.5411a(a) and (d). [40 CFR 60.5393a(c)]
132	[40 CFR 60.5393a(d)]	Demonstrate initial compliance with standards that apply to pneumatic pumps as required by 40 CFR 60.5410a(e). [40 CFR 60.5393a(d)]
133	[40 CFR 60.5393a(e)]	Perform the reporting as required by 40 CFR 60.5420a(b)(1) and (8) and the recordkeeping as required by 40 CFR 60.5420a(c)(6)-(10), (16), and (17), as applicable. [40 CFR 60.5393a(e)]
134	[40 CFR 60.5410a(e)]	To achieve initial compliance with emission standards for your pneumatic pump, comply with the requirements specified in 40 CFR 60.5410a(e)(2)-(7), as applicable.
		(1) If you own or operate a pneumatic pump not located at a natural gas processing plant, reduce emissions in accordance 40 CFR
		60.5393a(b)(1) or (2), and collect the pneumatic pump emissions through a closed vent system that meets the requirements of 40 CFR 60.5411a(a) and (d).
		(2) If you own or operate a pneumatic pump not located at a natural gas processing plant and there is no control device or process available on site, submit the certification in 40 CFR 60.5420a(b)(8)(i)(A).
		(3) If you own or operate a pneumatic pump not located at a natural gas processing plant or a greenfield site, and you are unable to route to an existing control device due to technical infeasibility, and you are unable to route to a process, submit the certification in 40 CFR 60.5420a(b)(8)(i)(B).
		(4) If you own or operate a pneumatic pump not located other than at a natural gas processing plant and you reduce emissions in accordance with 40 CFR 60.5393a(b)(4), collect the pneumatic pump emissions through a closed vent system that meets the requirements of 40 CFR 60.5411a(c) and (d).
		(5) Submit the initial annual report for your pneumatic pump required in 40 CFR 60.5420a(b)(1) and (8).
		(6) Maintain the records as specified in 40 CFR 60.5420a(c)(6), (8)-(10), (16), and (17), as applicable, for each pneumatic pump. [40 CFR 60.5410a(e)]
135	[40 CFR 60.5411a(d)]	Closed vent systems requirements for pneumatic pumps using a control device or routing emissions to a process: Conduct an assessment that the closed vent system is of sufficient design and capacity to ensure that all emissions from the pneumatic pump are routed to the control device and that the control device is of sufficient design and capacity to accommodate all emissions from the pneumatic pump and have it certified by a qualified professional engineer in accordance with 40 CFR 60.5411a(d)(1)(i) and (ii). [40 CFR 60.5411a(d)]
126	[40 CFR 60.5415a(b)]	For each pneumatic pump, demonstrate continuous compliance according to 40 CFR 60.5415a(b)(3). [40 CFR 60.5415a(b)]

EQT 0051 - Storage Vessels Subject to NSPS OOOOa

		·
137	[40 CFR 60.5395a(a)(1)]	Determine the potential for VOC emissions in accordance with 40 CFR 60.5365a(e). [40 CFR 60.5395a(a)(1)]
138	[40 CFR 60.5395a(a)(2)]	Reduce VOC emissions by 95.0 percent within 60 days after startup. For storage vessels receiving liquids pursuant to the standards for wells in
		40 CFR 60.5375a(a)(1)(i) or (ii), achieve the required emissions reductions within 60 days after startup of production as defined in 40 CFR
		60.5430a. [40 CFR 60.5395a(a)(2)]
139	[40 CFR 60.5395a(a)(3)(i)]	If a well feeding the storage vessel undergoes fracturing or refracturing, comply with 40 CFR 60.5395a(a)(2) as soon as liquids from the well
		following fracturing or refracturing are routed to the storage vessel. [40 CFR 60.5395a(a)(3)(i)]

Page 15 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities
Activity Number: PER20190001
Permit Number: MSOG Master Gen Permit

Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

EQT 0051 - Storage Vessels Subject to NSPS OOOOa

<u> </u>	- otorage ressens t	oubject to No. 0 0000a
140	[40 CFR 60.5395a(a)(3)(ii)]	If the monthly emissions determination required in 40 CFR 60.5395a indicates that VOC emissions from your storage vessel increase to 4 tpy or greater and the increase is not associated with fracturing or refracturing of a well feeding the storage vessel, comply with 40 CFR 60.5395a(a)(2) within 30 days of the monthly determination. [40 CFR 60.5395a(a)(3)(ii)]
141	[40 CFR 60.5395a(a)(3)]	Maintain the uncontrolled actual VOC emissions from the storage vessel at less than 4 tpy without considering control. Prior to using the uncontrolled actual VOC emission rate for compliance purposes, demonstrate that the uncontrolled actual VOC emissions have remained less than 4 tpy as determined monthly for 12 consecutive months. After such demonstration, you must determine the uncontrolled actual VOC emission rate each month. The uncontrolled actual VOC emissions must be calculated using a generally accepted model or calculation methodology, and the calculations must be based on the average throughput for the month. [40 CFR 60.5395a(a)(3)]
142	[40 CFR 60.5395a(a)]	Comply with the requirements of 40 CFR 60.5395a(a)(1) and (2). After 12 consecutive months of compliance with 40 CFR 60.5395a(a)(2), you may continue to comply with 40 CFR 60.5395a(a)(2), or you may comply with 40 CFR 60.5395a(a)(3), if applicable. [40 CFR 60.5395a(a)]
143	[40 CFR 60.5395a(b)(1)]	If you use a control device (other than a floating roof) to reduce VOC emissions from your storage vessel, equip the storage vessel with a cover that meets the requirements of 40 CFR 60.5411a(b) and is connected through a closed vent system that meets the requirements of 40 CFR 60.5411a(c) and (d), and route emissions to a control device that meets the conditions specified in 40 CFR 60.5412a(c) or (d). As an alternative to routing the closed vent system to a control device, you may route the closed vent system to a process. [40 CFR 60.5395a(b)(1)]
144	[40 CFR 60.5395a(b)(2)]	If you use a floating roof to reduce emissions, meet the requirements of 40 CFR 60.112b(a)(1) or (2) and the relevant monitoring, inspection, recordkeeping, and reporting requirements in 40 CFR 60 Subpart Kb. [40 CFR 60.5395a(b)(2)]
145	[40 CFR 60.5395a(c)(1)]	If you remove a storage vessel from service, completely empty and degas the storage vessel, such that the storage vessel no longer contains crude oil, condensate, produced water or intermediate hydrocarbon liquids. A storage vessel where liquid is left on walls, as bottom clingage or in pools due to floor irregularity is considered to be completely empty. Submit a notification as required in 40 CFR 60.5420a(b)(6)(v) in your next annual report, identifying each storage vessel removed from service during the reporting period and the date of its removal from service. [40 CFR 60.5395a(c)(1)]
146	[40 CFR 60.5395a(c)(2) and (3	If a storage vessel is returned to service, determine its affected facility status as provided in 40 CFR 60.5365a(e). Submit a notification in your next annual report as required in 40 CFR 60.5420a(b)(6)(vi), identifying each storage vessel and the date of its return to service. [40 CFR 60.5395a(c)(2) and (3)]
147	[40 CFR 60.5410a(d)]	Demonstrate initial compliance with standards as required by 40 CFR 60.5410a(h) and (i). Demonstrate continuous compliance with standards as required by 40 CFR 60.5415a(e)(3). Perform the required reporting as required by 40 CFR 60.5420a(b)(1) and (6) and the recordkeeping as required by 40 CFR 60.5420a(c)(5)-(8), (12)-(14), and (17), as applicable. [40 CFR 60.5410a(d)]

Page 16 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

EQT 0051 - Storage Vessels Subject to NSPS OOOOa

	ororago rocos	
148	[40 CFR 60.5410a(h)]	For each storage vessel, comply with 40 CFR 60.5410a(h)(1)-(6). Demonstrate initial compliance by August 2, 2016, or within 60 days after startup, whichever is later.
		(1) Determine the potential VOC emission rate as specified in 40 CFR 60.5365a(e).
		(2) Reduce VOC emissions in accordance with 40 CFR 60.5395a(a).
		(3) If you use a control device to reduce emissions, equip the storage vessel with a cover that meets the requirements of 40 CFR 60.5411a(b) and
		is connected through a closed vent system that meets the requirements of 40 CFR 60.5411a(c) and (d) to a control device that meets the conditions specified in 40 CFR 60.5412a(d) within 60 days after startup for storage vessels constructed, modified or reconstructed at well sites
		with no other wells in production, or upon startup for storage vessels constructed, modified or reconstructed at well sites with one or more wells already in production.
		(4) Conduct an initial performance test as required in 40 CFR 60.5413a within 180 days after initial startup or within 180 days of August 2, 2016, whichever is later, and you must comply with the continuous compliance requirements in 40 CFR 60.5415a(e).
		(5) Submit the information required for your storage vessel in your initial annual report as specified in 40 CFR 60.5420a(b)(1) and (6).
		(6) Maintain the records required for your storage vessel, as specified in 40 CFR 60.5420a(c)(5)-(8), (12)-(14), and (17), as applicable, for each
		storage vessel. [40 CFR 60.5410a(h)]
149	[40 CFR 60.5410a(i)]	For each storage vessel that complies by using a floating roof, submit a statement that you are complying with 40 CFR 60.112(b)(a)(1) or (2) in
• • •	(accordance with 40 CFR 60.5395a(b)(2) with the initial annual report specified in 40 CFR 60.5420a(b). [40 CFR 60.5410a(i)]
150	[40 CFR 60.5411a(c)]	Closed vent system requirements for storage vessels using a control device or routing emissions to a process:
		(1) Design the closed vent system to route all gases, vapors, and fumes emitted from the material in the storage vessel to a control device that
		meets the requirements specified in 40 CFR 60.5412a(c) and (d), or to a process.
		(2) Design and operate a closed vent system with no detectable emissions, as determined using olfactory, visual and auditory inspections.
		(3) Meet the requirements specified in 40 CFR 60.5411a(c)(3)(i) and (ii) if the closed vent system contains one or more bypass devices that
		could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device or to a process. [40 CFR 60.5411a(c)]
151	[40 CFR 60.5411a(d)]	Closed vent systems requirements for storage vessels using a control device or routing emissions to a process: Conduct an assessment that the
		closed vent system is of sufficient design and capacity to ensure that all emissions from the storage vessel are routed to the control device and
		that the control device is of sufficient design and capacity to accommodate all emissions from the storage vessel and have it certified by a
		qualified professional engineer in accordance with 40 CFR 60.5411a(d)(1)(i) and (ii). [40 CFR 60.5411a(d)]
152	[40 CFR 60.5412a(d)]	Each control device used to meet the emission reduction standard in 40 CFR 60.5395a(a)(2) for your storage vessel must be installed according
		to 40 CFR 60.5412a(d)(1)-(4), as applicable. As an alternative to 40 CFR 60.5412a(d)(1), you may install a control device model tested under
		40 CFR 60.5413a(d), which meets the criteria in 40 CFR 60.5413a(d)(11) and meet the continuous compliance requirements in 40 CFR
		60.5413a(e). [40 CFR 60.5412a(d)]
153	[40 CFR 60.5415a(e)]	Demonstrate continuous compliance according to 40 CFR 60.5415a(e)(3) for each storage vessel, for which you are using a control device or
		routing emissions to a process to meet the requirement of 40 CFR 60.5395a(a)(2). [40 CFR 60.5415a(e)]

Page 17 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities
Activity Number: PER20190001
Permit Number: MSOG Master Gen Permit
Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

EQT 0051 - Storage Vessels Subject to NSPS OOOOa

[40 CFR 60.5416a(c)]	Cover and closed vent system inspections for storage vessels: If you install a control device or route emissions to a process, inspect each closed
	vent system according to the procedures and schedule specified in 40 CFR 60.5416a(c)(1), inspect each cover according to the procedures and
	schedule specified in 40 CFR 60.5416a(c)(2), and inspect each bypass device according to the procedures of 40 CFR 60.5416a(c)(3). Also
	comply with the requirements of 40 CFR 60.5416a(c)(4)-(7). [40 CFR 60.5416a(c)]
[40 CFR 60.5417a(h)]	For each control device used to comply with the emission reduction standard in 40 CFR 60.5395a(a)(2) for your storage vessel, demonstrate continuous compliance according to 40 CFR 60.5417a(h)(1)-(4). You are exempt from the requirements of this 40 CFR 60.5417a(h) if you
	install a control device model tested in accordance with 40 CFR 60.5413a(d)(2)-(10), which meets the criteria in 40 CFR 60.5413a(d)(11), the reporting requirement in 40 CFR 60.5413a(d)(12), and meet the continuous compliance requirement in 40 CFR 60.5413a(e). [40 CFR 60.5417a(h)]

FUG 0004 - Fugitive Emissions Subject to NSPS OOOOa

		·
156	[40 CFR 60.5397a(a)]	Monitor all fugitive emission components, as defined in 40 CFR 60.5430a, in accordance with 40 CFR 60.5397a(b)-(g). Repair all sources of fugitive emissions in accordance with 40 CFR 60.5397a(i) and report in accordance with 40 CFR 60.5397a(j). For purposes of 40 CFR 60.5397a, fugitive emissions are defined as: any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppm or greater using Method 21. [40 CFR 60.5397a(a)]
157	[40 CFR 60.5397a(b)]	Develop an emissions monitoring plan that covers the collection of fugitive emissions components at well sites and compressor stations within each company-defined area in accordance with 40 CFR 60.5397a(c) and (d). [40 CFR 60.5397a(b)]
158	[40 CFR 60.5397a(c)]	Fugitive emissions monitoring plans must include the elements specified in 40 CFR 60.5397a(c)(1)-(8). [40 CFR 60.5397a(c)]
159	[40 CFR 60.5397a(d)]	Each fugitive emissions monitoring plan must include the information described in 40 CFR 60.5397a(d)(1)-(4). [40 CFR 60.5397a(d)]
160	[40 CFR 60.5397a(e)]	Each monitoring survey shall observe each fugitive emissions component, as defined in 40 CFR 60.5430a, for fugitive emissions. [40 CFR 60.5397a(e)]
161	[40 CFR 60.5397a(f)(1)]	Conduct an initial monitoring survey within 60 days of the startup of production, as defined in 40 CFR 60.5430a, for each collection of fugitive emissions components at a new well site or by June 3, 2017, whichever is later. For a modified collection of fugitive emissions components at a well site, the initial monitoring survey must be conducted within 60 days of the first day of production for each collection of fugitive emission components after the modification or by June 3, 2017, whichever is later. [40 CFR 60.5397a(f)(1)]
162	[40 CFR 60.5397a(f)(2)]	Conduct an initial monitoring survey within 60 days of the startup of a new compressor station for each new collection of fugitive emissions components at the new compressor station or by June 3, 2017, whichever is later. For a modified collection of fugitive components at a compressor station, the initial monitoring survey must be conducted within 60 days of the modification or by June 3, 2017, whichever is later. [40 CFR 60.5397a(f)(2)]
163	[40 CFR 60.5397a(g)]	A monitoring survey of each collection of fugitive emissions components at a well site or at a compressor station must be performed at the frequencies specified in 40 CFR 60.5397a(g)(1) and (2), with the exceptions noted in 40 CFR 60.5397a(g)(3) and (4). [40 CFR 60.5397a(g)]

Page 18 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0010 Affected Facilities Subject to NSPS 0000a

FUG 0004 - Fugitive Emissions Subject to NSPS OOOOa

164	[40 CFR 60.5397a(h)(3)]	Each repaired or replaced fugitive emissions component must be resurveyed as soon as practicable, but no later than 30 days after being repaired, to ensure that there are no fugitive emissions. For repairs that cannot be made during the monitoring survey when the fugitive emissions are initially found, the operator may resurvey the repaired fugitive emissions components using either Method 21 or optical gas imaging within 30 days of finding such fugitive emissions. For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph must be taken of that component or the component must be tagged for identification purposes. The digital photograph must include the date that the photograph was taken, must clearly identify the component by location within the site (e.g., the latitude and longitude of the component or by other descriptive landmarks visible in the picture). Operators that use Method 21 to resurvey the repaired fugitive emissions components are subject to the resurvey provisions specified in 40 CFR 60.5397a(h)(3)(iii)(A) and (B). Operators that use optical gas imaging to resurvey the repaired fugitive emissions components, are subject to the resurvey provisions specified in 40 CFR
165	[40 CFR 60.5397a(h)]	60.5397a(h)(3)(iv)(A) and (B). [40 CFR 60.5397a(h)(3)] Each identified source of fugitive emissions shall be repaired or replaced in accordance with 40 CFR 60.5397a(h)(1) and (2). For fugitive emissions components also subject to the repair provisions of 40 CFR 60.5416a(b)(9)-(12) and (c)(4)-(7), those provisions apply instead to those closed vent systems and covers, and the repair provisions of 40 CFR 60.5397a(h)(1) and (2) do not apply to those closed vent systems and covers. [40 CFR 60.5397a(h)]
166	[40 CFR 60.5397a(i)]	Maintain records for each monitoring survey as specified 40 CFR 60.5420a(c)(15). [40 CFR 60.5397a(i)]
167	[40 CFR 60.5397a(j)]	Annual reports shall be submitted for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station that include the information specified in 40 CFR 60.5420a(b)(7). Multiple collections of fugitive emissions components at a well site or at a compressor station may be included in a single annual report. [40 CFR 60.5397a(j)]
168	[40 CFR 60.5410a(j)]	To achieve initial compliance with the fugitive emission standards for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station, comply with 40 CFR 60.5410a(j)(1)-(5). (1) Develop a fugitive emissions monitoring plan as required in 40 CFR 60.5397a(b), (c), and (d). (2) Conduct an initial monitoring survey as required in 40 CFR 60.5397a(f). (3) Maintain the records specified in 40 CFR 60.5420a(c)(15). (4) Repair each identified source of fugitive emissions for each affected facility as required in 40 CFR 60.5397a(h). (5) Submit the initial annual report for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station compressor station as required in 40 CFR 60.5420a(b)(1) and (7). [40 CFR 60.5410a(j)]
169	[40 CFR 60.5415a(h)]	For each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station, demonstrate continuous compliance with the fugitive emission standards specified in 40 CFR 60.5397a according to 40 CFR 60.5415a(h)(1)-(4). [40 CFR 60.5415a(h)]

Group: PCS 0003 Amine Sweetening Units

Group Members: EQT 0008 EQT 0013

EQT 0008 - Amine Sweetening Units - Regenerator Vents

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0003 Amine Sweetening Units

EQT 0008 - Amine Sweetening Units - Regenerator Vents

170 [40 CFR 60.647(c)] Constructed, Reconstructed, or Modified After January 20, 1984, and on or Before August 23, 2011: To certify that a facility is exempt from the control requirements of Subpart LLL, each owner or operator of a facility with a design capacity less that 2 LT/D of H2S in the acid gas (expressed as sulfur) shall keep, for the life of the facility, an analysis demonstrating that the facility's design capacity is less than 2 LT/D of H2S expressed as sulfur. [40 CFR 60.647(c)]

171 [LAC 33:III.1513.C] Record and retain at the site sufficient data to show annual potential sulfur dioxide emissions.

172 [LAC 33:III.2115.K] Facilities located in Pointe Coupee or Calcasieu Parish: Maintain records to demonstrate that the criteria are being met for any exemption claimed. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana

Department of Environmental Quality upon request. This requirement shall be applicable even if potential VOC emissions are less than 50 tons

per year.

EQT 0013 - Amine Reboilers

177 [40 CFR 60.4204(c)(1)]

173 [LAC 33:III.1313.C] Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: None specified

Group: PCS 0006 Diesel Internal Combustion Engines

Group Members: EQT 0002 EQT 0017 EQT 0029 EQT 0032

EQT 0002 - Diesel ICEs - Engines Subject to NSPS IIII

174	[40 CFR 60.4204(a)]	Pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30
		liters per cylinder: Comply with the emission standards in 40 CFR 94.8(a)(1). [40 CFR 60.4204(a)]
175	[40 CFR 60.4204(a)]	Pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder: Comply with the emission
		standards in table 1 to Subpart IIII. [40 CFR 60.4204(a)]
176	[40 CFR 60.4204(b)]	Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must
		complements the amining standard for many CL aminon in 40 CED CO 4001 for their 2007 and delegant the contribution of ICE and the

comply with the emission standards for new CI engines in 40 CFR 60.4201 for their 2007 model year and later stationary CI ICE, as applicable. [40 CFR 60.4204(b)]

Non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder: For engines installed prior to January 1, 2012, limit the emissions of NOx in the stationary CI internal combustion engine exhaust to the following:

(i) 12.7 grams per horsepower-hr (g/HP-hr) when maximum engine speed is less than 130 revolutions per minute (rpm);

(ii) 34 x n^-0.2 g/HP-hr when maximum engine speed is 130 or more but less than 2000 rpm, where n is maximum engine speed; and

(iii) 7.3 g/HP-hr when maximum engine speed is 2000 rpm or more. [40 CFR 60.4204(c)(1)]

Page 20 of 48 **TPOR0147**

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0006 Diesel Internal Combustion Engines

EQT 0002 - Diesel ICEs - Engines Subject to NSPS IIII

<u> </u>	OUDE DIESELICES - EL	ignies dubject to Not o mi
178	[40 CFR 60.4204(c)(2)]	Non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder: For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NOx in the stationary CI internal combustion engine exhaust to the following: (i) 10.7 g/HP-hr when maximum engine speed is less than 130 rpm;
		(ii) 33 x n^-0.23 g/HP-hr when maximum engine speed is greater than or equal to 130 but less than 2000 rpm and where n is maximum engine speed; and
		(iii) 5.7 g/HP-hr when maximum engine speed is greater than or equal to 2000 rpm. [40 CFR 60.4204(c)(2)]
179	[40 CFR 60.4204(c)(3)]	Non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder: For engines installed on or after January 1, 2016, limit the emissions of NOx in the stationary CI internal combustion engine exhaust to the following:
		(i) 2.5 g/HP-hr when maximum engine speed is less than 130 rpm;
		(ii) 6.7 x n^-0.20 g/HP-hr where n (maximum engine speed) is 130 or more but less than 2000 rpm; and
		(iii) 1.5 g/HP-hr where maximum engine speed is greater than or equal to 2000 rpm. [40 CFR 60.4204(c)(3)]
180	[40 CFR 60.4204(c)(4)]	Non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder: Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.11 g/HP-hr. [40 CFR 60.4204(c)(4)]
181	[40 CFR 60.4204(d)]	Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests
.01	[10 011 001120 1(2)]	in-use must meet the not-to-exceed (NTE) standards as indicated in 40 CFR 60.4212. [40 CFR 60.4204(d)]
182	[40 CFR 60.4204(e)]	Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to Subpart IIII must meet the emission
102	[.0 0.11 00.120 (0)]	standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in 40 CFR 60.4204(a)-(d). [40 CFR 60.4204(e)]
183	[40 CFR 60.4204(f)]	Owners and operators of stationary CI ICE certified to the standards in 40 CFR 1039 and equipped with auxiliary emission control devices
103	[10 0111001120 ((0)]	(AECDs) as specified in 40 CFR 1039.665 must meet the Tier 1 certification emission standards for new nonroad CI engines in 40 CFR 89.112 while the AECD is activated during a qualified emergency situation. A qualified emergency situation is defined in 40 CFR 1039.665. When the qualified emergency situation has ended and the AECD is deactivated, the engine must resume meeting the otherwise applicable emission standard specified in 40 CFR 60.4204. [40 CFR 60.4204(f)]
184	[40 CFR 60.4205(a)]	Pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines: Comply with the emission standards in 40 CFR 94.8(a)(1). [40 CFR 60.4205(a)]
185	[40 CFR 60.4205(a)]	Pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines: Comply with the emission standards in Table 1 to Subpart IIII. [40 CFR 60.4205(a)]
186	[40 CFR 60.4205(b)]	2007 model year and later emergency stationary Cl ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines: Comply with the emission standards for new nonroad Cl engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for the 2007 model year and later emergency stationary Cl ICE. [40 CFR 60.4205(b)]
187	[40 CFR 60.4205(c)]	Fire pump engines with a displacement of less than 30 liters per cylinder: Comply with the emission standards in table 4 to Subpart IIII, for all pollutants. [40 CFR 60.4205(c)]

Page 21 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0006 Diesel Internal Combustion Engines

197 [40 CFR 60.4208(a)]

[40 CFR 60.4208(b)]

[40 CFR 60.4208(c)]

EQT 0002 - Diesel ICEs - Engines Subject to NSPS IIII 188 [40 CFR 60.4205(d)(1)] Emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder: For engines installed prior to January 1. 2012, limit the emissions of NOx in the stationary CI internal combustion engine exhaust to the following: (i) 12.7 g/HP-hr when maximum engine speed is less than 130 rpm: (ii) 34 x n^-0.2 g/HP-hr when maximum engine speed is 130 or more but less than 2000 rpm, where n is maximum engine speed; and (iii) 7.3 g/HP-hr when maximum engine speed is 2000 rpm or more. [40 CFR 60.4205(d)(1)] [40 CFR 60.4205(d)(2)] Emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder: For engines installed on or after January 1, 2012, limit the emissions of NOx in the stationary CI internal combustion engine exhaust to the following: (i) 10.7 g/HP-hr when maximum engine speed is less than 130 rpm; (ii) 33 x n^-0.23 g/HP-hr when maximum engine speed is greater than or equal to 130 but less than 2000 rpm and where n is maximum engine speed: and (iii) 5.7 g/HP-hr when maximum engine speed is greater than or equal to 2000 rpm. [40 CFR 60.4205(d)(2)] 190 [40 CFR 60.4205(d)(3)] Emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder; Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.30 g/HP-hr. [40 CFR 60.4205(d)(3)] [40 CFR 60.4205(e)] Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests inuse must meet the NTE standards as indicated in 40 CFR 60.4212. [40 CFR 60.4205(e)] [40 CFR 60.4205(f)] Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to Subpart IIII must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in 40 CFR 60.4205(a)-(e). [40 CFR 60.4205(f)] [40 CFR 60.4206] Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 60.4205 over the entire life of the engine. [40 CFR 60.4207(a)] Beginning October 1, 2007, owners and operators of stationary CI ICE subject to Subpart IIII that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a). [40 CFR 60.4207(a)] [40 CFR 60.4207(b)] Beginning October 1, 2010, owners and operators of stationary CI ICE subject to Subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [40 CFR 60.4207(b)] 196 [40 CFR 60.4207(d)] Beginning June 1, 2012, owners and operators of stationary CI ICE subject to Subpart IIII with a displacement of greater than or equal to 30 liters per cylinder are no longer subject to the requirements of 40 CFR 60.4207(a), and must use fuel that meets a maximum per-gallon sulfur

Page 22 of 48 **TPOR0147**

fire pump engines) that do not meet the applicable requirements for 2008 model year engines. [40 CFR 60.4208(b)]

After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable

After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 25 HP (excluding

After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 25 HP and less than 75 HP that do not meet the applicable requirements for 2013 model year non-emergency engines. [40 CFR

content of 1000 parts per million (ppm). [40 CFR 60.4207(d)]

60.4208(c)]

requirements for 2007 model year engines. [40 CFR 60.4208(a)]

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0006 Diesel Internal Combustion Engines

<u>EQT</u>	0002 - Diesel ICEs - Eng	gines Subject to NSPS IIII
200	[40 CFR 60.4208(d)]	After December 31, 2013, owners and operators may not install non-emergency stationary Cl ICE with a maximum engine power of greater than or equal to 75 HP and less than 175 HP that do not meet the applicable requirements for 2012 model year non-emergency engines. [40 CFR 60.4208(d)]
201	[40 CFR 60.4208(e)]	After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 175 HP, including those above 750 HP, that do not meet the applicable requirements for 2011 model year non-emergency engines. [40 CFR 60.4208(e)]
202	[40 CFR 60.4208(f)]	After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 750 HP that do not meet the applicable requirements for 2015 model year non-emergency engines. [40 CFR 60.4208(f)]
203	[40 CFR 60.4208(g)]	After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 804 HP and less than 2680 HP and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines. [40 CFR 60.4208(g)]
204	[40 CFR 60.4208(h)]	In addition to the requirements specified in 40 CFR 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in 40 CFR 60.4208(a)-(g) after the dates specified in 40 CFR 60.4208(a)-(g). [40 CFR 60.4208(h)]
205	[40 CFR 60.4208(i)]	The requirements of 40 CFR 60.4208 do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location. [40 CFR 60.4208(i)]
206	[40 CFR 60.4209(a)]	Emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines: Install a non-resettable hour meter prior to startup of the engine. In addition, meet the monitoring requirements specified in 40 CFR 60.4211. [40 CFR 60.4209(a)]
207	[40 CFR 60.4209(b)]	Stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204: The diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. In addition, meet the monitoring requirements specified in 40 CFR 60.4211. [40 CFR 60.4209(b)]
208	[40 CFR 60.4211(a)]	If you are an owner or operator and must comply with the emission standards specified in Subpart IIII, you must do all of the following, except as permitted under 40 CFR 60.4211(g): (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related
209	[40 CFR 60.4211(b)]	written instructions; (2) Change only those emission-related settings that are permitted by the manufacturer; and (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you. [40 CFR 60.4211(a)] If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to Subpart IIII and must comply with the emission standards specified in 40 CFR 60.4205(c), you must demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(b)[1)-(5). [40 CFR 60.4211(b)]

Page 23 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0006 Diesel Internal Combustion Engines

EQT 0002 - Diesel ICEs - Engines Subject to NSPS IIII

If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.42016(p) or 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine the pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to Subpart IIII and must comply with the emission standards specified in 40 CFR 60.42016(p) or 040 CFR 60.42116(p) [40 CFR 60.42116(p)]	-		igines Subject to NSPS IIII
demonstrate compliance according to the requirements specified in 40 CFR 60.4211(d)[1)-(3). [40 CFR 60.4211(d)] If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(e) or 60.4205(f), you must demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(e)[1] over or operator of a modified or reconstructed stationary ICE according to one of the methods specified in 40 CFR 60.4211(f)[1] If you own or operate an emergency stationary ICE, operate the emergency stationary ICE under Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, is prohibited. If you do not operate the engine according to these requirements, the engine will not be considered an emergency engine under Subpart IIII and must meet all requirements for non-emergency engines. (1) There is no time limit on the use of emergency stationary ICE in emergency situations. (2) Emergency stationary ICE may be operated for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. (3) Emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. [40 CFR 60.4211(g)] If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer, sow must demonstrate compliance as described in 40 CFR 60.4211(210		standards specified in 40 CFR 60.4204(b) or 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to Subpart IIII and must comply with the emission standards specified in 40 CFR 60.4205(c), you must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b), or 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR
standards specified in 40 CFR 60.4201(e) or 60.4205(f), you must demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(e)[1] If you own or operate an emergency stationary ICE, operate the emergency stationary ICE under Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, is prohibited. If you do not operate the engine according to these requirements, the engine will not be considered an emergency engine under Subpart IIII, any operation operate the engine according to these requirements, the engine will not be considered an emergency engine under Subpart IIII and must meet all requirements for non-emergency engines. (1) There is no time limit on the use of emergency stationary ICE in emergency situations. (2) Emergency stationary ICE may be operated for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. [40 CFR 60.4211(f)] If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate complianc	211	[40 CFR 60.4211(d)]	
60.4211(f)(1), (f)(2)(i), and (f)(3). In order for the engine to be considered an emergency stationary ICE under Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, is prohibited. If you do not operate the engine according to these requirements, the engine will not be considered an emergency engine under Subpart IIII and must meet all requirements for non-emergency engines. (1) There is no time limit on the use of emergency stationary ICE in emergency situations. (2) Emergency stationary ICE may be operated for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year. (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. [40 CFR 60.4211(f)] If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as described in 40 CFR 60.4211(g)[1)-(3). [40 CFR 60.4211(g)] The requirements for operators and prohibited acts specified in 40 CFR 1039.665 apply to owners or operators of stationary CI I	212	[40 CFR 60.4211(e)]	If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(e) or 60.4205(f), you must demonstrate compliance according to one of the methods specified in 40 CFR
non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. [40 CFR 60.4211(f)] If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as described in 40 CFR 60.4211(g)(1)-(3). [40 CFR 60.4211(g)] The requirements for operators and prohibited acts specified in 40 CFR 1039.665 apply to owners or operators of stationary CI ICE equipped with AECDs for qualified emergency situations as allowed by 40 CFR 1039.665. [40 CFR 60.4211(h)] Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to Subpart IIII must do so according to 40 CFR 60.4212(a)-(e). Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests	213	[40 CFR 60.4211(f)]	60.4211(f)(1), (f)(2)(i), and (f)(3). In order for the engine to be considered an emergency stationary ICE under Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, is prohibited. If you do not operate the engine according to these requirements, the engine will not be considered an emergency engine under Subpart IIII and must meet all requirements for non-emergency engines. (1) There is no time limit on the use of emergency stationary ICE in emergency situations. (2) Emergency stationary ICE may be operated for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local
instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as described in 40 CFR 60.4211(g)(1)-(3). [40 CFR 60.4211(g)] The requirements for operators and prohibited acts specified in 40 CFR 1039.665 apply to owners or operators of stationary CI ICE equipped with AECDs for qualified emergency situations as allowed by 40 CFR 1039.665. [40 CFR 60.4211(h)] Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to Subpart IIII must do so according to 40 CFR 60.4212(a)-(e). Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests			non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. [40 CFR 60.4211(f)]
with AECDs for qualified emergency situations as allowed by 40 CFR 1039.665. [40 CFR 60.4211(h)] 216 [40 CFR 60.4212] Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to Subpart IIII must do so according to 40 CFR 60.4212(a)-(e). 217 [40 CFR 60.4213] Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests	214	[40 CFR 60.4211(g)]	instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as
Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to Subpart IIII must do so according to 40 CFR 60.4212(a)-(e). Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests	215	[40 CFR 60.4211(h)]	
217 [40 CFR 60.4213] Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests	216	[40 CFR 60.4212]	Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to
	217	[40 CFR 60.4213]	Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests

Page 24 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0006 Diesel Internal Combustion Engines

225 [40 CFR 63.6590(c)(1)]

EQT 0002 - Diesel ICEs -	Engines Subject to NSPS IIII
218 [40 CFR 60.4214(a)]	Owners and operators of non-emergency stationary CI ICE that are greater than 3000 HP, or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 175 HP and not certified, must meet the requirements of 40 CFR 60.4214(a)(1) and (2). [40 CFR 60.4214(a)]
219 [40 CFR 60.4214(b)]	If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]
220 [40 CFR 60.4214(c)]	If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [40 CFR 60.4214(c)]
221 [40 CFR 60.4214(e)]	Owners or operators of stationary CI ICE equipped with AECDs pursuant to the requirements of 40 CFR 1039.665 must report the use of AECDs as required by 40 CFR 1039.665(e). [40 CFR 60.4214(e)]
222 [40 CFR 60.4218]	Table 8 to Subpart IIII shows which parts of the General Provisions in 40 CFR 60.1 through 60.19 apply to you.
EQT 0017 - All Diesel ICI	Es established to the second of the second o
223 [LAC 33:III.1101.B]	Opacity <= 20 percent, except that such emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. Which Months: All Year Statistical Basis: Six-minute average
224 [LAC 33:III.1311.C]	Opacity <= 20 percent, except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. Which Months: All Year Statistical Basis: Six-minute average

EQT 0032 - Diesel ICEs for Which Construction or Reconstruction Commenced Before June 12, 2006

EQT 0029 - All Diesel ICEs for Which Construction or Reconstruction Commenced On or After June 12, 2006

under 40 CFR 63. Subpart ZZZZ. [40 CFR 63.6590(c)(1)]

226 [40 CFR 63.6595(a)(1)]	If you have an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission
	limitations, operating limitations, and other requirements no later than May 3, 2013. [40 CFR 63.6595(a)(1)]
227 [40 CFR 63.6595(c)]	If you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR part 63,
	subpart A. [40 CFR 63.6595(c)]

Meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60 Subpart IIII. No further requirements apply to such engines

Page 25 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0006 Diesel Internal Combustion Engines

EQT	0032 - Diesel ICEs for	r Which Construction or Reconstruction Commenced Before June 12, 2006
228	[40 CFR 63.6603(a)]	Comply with the requirements in Table 2d to Subpart ZZZZ and the operating limitations in Table 2b to Subpart ZZZZ that apply to you. [40 CFR 63.6603(a)]
229	[40 CFR 63.6603(e)]	If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under 40 CFR 63 by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR 60 Subpart IIII instead of the emission limitations and other requirements that would otherwise apply under 40 CFR 63 for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions. [40 CFR 63.6603(e)]
230	[40 CFR 63.6604]	If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.
231	[40 CFR 63.6605]	You must be in compliance with the emission limitations, operating limitations, and other requirements in Subpart ZZZZ that apply to you at all times. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
232	[40 CFR 63.6612]	You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to Subpart ZZZZ that apply to you within 180 days after the compliance date that is specified for your stationary RICE in 40 CFR 63.6595 and according to the provisions in 40 CFR 63.7(a)(2). An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in 40 CFR 63.6612(b)(1)-(4).
233	[40 CFR 63.6615]	If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of Subpart ZZZZ.
234	[40 CFR 63.6620(a)]	You must conduct each performance test in Tables 3 and 4 of Subpart ZZZZ that applies to you. [40 CFR 63.6620(a)]
235	[40 CFR 63.6620(b)]	Each performance test must be conducted according to the requirements that Subpart ZZZZ specifies in Table 4. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. [40 CFR 63.6620(b)]
236	[40 CFR 63.6620(d)]	Conduct three separate test runs for each performance test required in 40 CFR 63.6620, as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in Subpart ZZZZ. [40 CFR 63.6620(d)]
237	[40 CFR 63.6620(e)]	Use Equation 1 of 40 CFR 63.6620 to determine compliance with the percent reduction requirement. Normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO2 concentration is measured in lieu of oxygen concentration measurement, a CO2 correction factor is needed. Calculate the CO2 correction factor as described in 40 CFR 63.6620(e)(2)(i)-(iii). [40 CFR 63.6620(e)]

Page 26 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001
Permit Number: MSOG Master Gen Permit
Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0006 Diesel Internal Combustion Engines

EQT 0032 - Diesel ICEs for Which Construction or Reconstruction Commenced Before June 12, 2006

238	[40 CFR 63.6620(f)]	If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in
		the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations
		to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator. [40 CFR 63.6620(f)]
239	[40 CFR 63.6620(g)]	If you petition the Administrator for approval of operating limitations, your petition must include the information described in 40 CFR
		63.6620(g)(1)-(5). [40 CFR 63.6620(g)]
240	[40 CFR 63.6620(h)]	If you petition the Administrator for approval of no operating limitations, your petition must include the information described in 40 CFR 63.6620(h)(1)-(7). [40 CFR 63.6620(h)]
241	[40 CFR 63.6620(i)]	The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number,
		the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided. [40 CFR 63.6620(i)]
242	[40 CFR 63.6625(a)]	If you elect to install a CEMS as specified in Table 5 of Subpart ZZZZ, install, operate, and maintain a CEMS to monitor CO and either O2 or CO2 according to the requirements in 40 CFR 63.6625(a)(1)-(4). If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device. [40 CFR 63.6625(a)]
243	[40 CFR 63.6625(b)]	If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of Subpart ZZZZ, install, operate, and maintain each CPMS according to the requirements in 40 CFR 63.6625(b)(1)-(6). [40 CFR 63.6625(b)]
244	[40 CFR 63.6625(e)]	If you own or operate any of the following stationary RICE, operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:
		(1) An existing emergency stationary RICE located at an area source of HAP emissions; or (2) An existing non-emergency stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions. [40 CFR 63.6625(e)]
245	[40 CFR 63.6625(f)]	If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

Page 27 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001
Permit Number: MSOG Master Gen Permit
Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0006 Diesel Internal Combustion Engines

EQT 0032 - Diesel ICEs for Which Construction or Reconstruction Commenced Before June 12, 2006

	[40 CFR 63.6625(g)]	If you own or apprets an existing non-amorphory, non-block start Clausing amortan than on agual to 200 HD that is not assigned with a placed
240	[40 CFR 05.0025(g)]	If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust
		stream to remove oil mist, particulates and metals. Owners and operators must follow the manufacturer's specified maintenance requirements for
		operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator
		to approve different maintenance requirements that are as protective as manufacturer requirements. [40 CFR 63.6625(g)]
247	[40 CFR 63.6625(h)]	Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading
		of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d to Subpart
2.10	540 CDD (0.6(0.6(0.1))	ZZZZ apply. [40 CFR 63.6625(h)]
248	[40 CFR 63.6625(i)]	If you own or operate a stationary CI engine that is subject to the work, operation or management practices in in items 1 or 4 of Table 2d to
		Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d. The analysis program must at a
		minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these
		parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has
		changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these
		condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine
		owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the
		results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation,
		whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the
249	[40 CFR 63.6630(a)]	analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)] Demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table
247	[10 01 10 05.0050(a)]	5 of Subpart ZZZZ. [40 CFR 63.6630(a)]
250	[40 CFR 63.6630(b)]	During the initial performance test, establish each operating limitation in Table 2b of Subpart ZZZZ that applies to you. [40 CFR 63.6630(b)]
251	[40 CFR 63.6630(c)]	Submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40
		CFR 63.6645. [40 CFR 63.6630(c)]
252	[40 CFR 63.6635]	If you must comply with emission and operating limitations, you must monitor and collect data according to 40 CFR 63.6635. Except for
		monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must
		monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably
		preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or
		control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data
		collected during all other periods.
253	[40 CFR 63.6640(a)]	Demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 2b and 2d to Subpart
		ZZZZ that apply to you according to methods specified in Table 6 to Subpart ZZZZ. [40 CFR 63.6640(a)]

Page 28 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001
Permit Number: MSOG Master Gen Permit
Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0006 Diesel Internal Combustion Engines

EQT 0032 - Diesel ICEs for Which Construction or Reconstruction Commenced Before June 12, 2006

254	[40 CFR 63.6640(b)]	Report each instance in which you did not meet each emission limitation or operating limitation in Tables 2b and 2d to Subpart ZZZZ that apply
		to you. These instances are deviations from the emission and operating limitations in Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, also conduct a performance test to
255	[40 CFR 63.6640(e)]	demonstrate that you are meeting the required emission limitation applicable to your stationary RICE. [40 CFR 63.6640(b)] Report each instance in which you did not meet the requirements in Table 8 to Subpart ZZZZ that apply to you. [40 CFR 63.6640(e)]
256		If you own or operate an emergency stationary RICE, operate the emergency stationary RICE according to the requirements in 40 CFR
230	[40 C1 K 05.0040(1)]	63.6640(f)(1), (f)(2)(i), and (f)(4). In order for the engine to be considered an emergency stationary RICE under Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, is prohibited. If you do not operate the engine according to these requirements, the engine will not be considered an emergency engine under Subpart ZZZZ and must meet all requirements for non-emergency engines.
		(1) There is no time limit on the use of emergency stationary RICE in emergency situations.
		(2) Emergency stationary RICE may be operated for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company
		associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
		(3) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency
		situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. [40 CFR 63.6640(f)]
257	[40 CFR 63.6645(a)]	You must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b)-(e), and (g) and (h) that apply to you by the dates specified. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards. [40 CFR 63.6645(a)]
258	[40 CFR 63.6645(g)]	If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). [40 CFR 63.6645(g)]
259	[40 CFR 63.6645(h)]	If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to Subpart ZZZZ, you must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For each initial compliance demonstration required in
		Table 5 to Subpart ZZZZ that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. For each initial compliance demonstration required
		in Table 5 to Subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 to Subpart ZZZZ, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the
		completion of the performance test according to 40 CFR 63.10(d)(2). [40 CFR 63.6645(h)]
260	[40 CFR 63.6650(a)]	You must submit each report in Table 7 of Subpart ZZZZ that applies to you. [40 CFR 63.6650(a)]
261	[40 CFR 63.6650(b)]	Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1)-(9). [40 CFR 63.6650(b)]

Page 29 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0006 Diesel Internal Combustion Engines

<u>EQT</u>	<u>0032</u> - Diesel	ICEs for Which Construction or Reconstruction Commenced Before June 12, 2006
262	[40 CFR 63.6650(The Compliance report must contain the information in 40 CFR 63.6650(c)(1)-(6). [40 CFR 63.6650(c)]
263	[40 CFR 63.6650(For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in Subpart ZZZZ, the Compliance report must contain the information in 40 CFR 63.6650(c)(1)-(4) and the information in 40 CFR 63.6650(d)(1) and (2). [40 CFR 63.6650(d)]
264	[40 CFR 63.6650(For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in Subpart ZZZZ, you must include information in 40 CFR 63.6650(c)(1)-(4) and (e)(1)-(12). [40 CFR 63.6650(e)]
265	[40 CFR 63.6655(If you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1)-(5) and (b)(1)-(3). [40 CFR 63.6655(a)]
266	[40 CFR 63.6655(b)] For each CEMS or CPMS, you must keep the records listed in 40 CFR 63.6655(b)(1)-(3). [40 CFR 63.6655(b)]
267	[40 CFR 63.6655(You must keep the records required in Table 6 of Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you. [40 CFR 63.6655(d)]
268	[40 CFR 63.6655(You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary emergency RICE or an existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to Subpart ZZZZ. [40 CFR 63.6655(e)]
269	[40 CFR 63.6655(
270	[40 CFR 63.6660]	
271	[40 CFR 63,6665]	

Group: PCS 0007 Flares Group Members: EQT 0007 EQT 0024

EQT 0007 - Flares Controlling Offgas from Amine Regenerator Vents

272 [LAC 33:III.501.C.6]	Flare gas: Heat content > 300 BTU/scf to ensure destruction of emissions to the flare stack.
	Which Months: All Year Statistical Basis: None specified
273 [LAC 33:III.501.C.6]	Flare gas: Heat content monitored by gas analysis annually to ensure the heat content is above 300 BTU/scf.
	Which Months: All Year Statistical Basis: None specified

Page 30 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0007 Flares

EQT	0007 - Flares Controllin	g Offgas from Amine Regenerator Vents
274	[LAC 33:III.501.C.6]	Flare gas: Heat content recordkeeping by electronic or hard copy annually.
EQT	0024 - All Flares	
275	[LAC 33:III.1105]	Opacity <= 20 percent, except for a combined total of six hours in any 10 consecutive day period, for burning in connection with pressure valve releases for control over process upsets. Which Months: All Year Statistical Basis: None specified
276	[LAC 33:III.1105]	Submit notification: Due to SPOC as soon as possible after the start of burning of pressure valve releases for control over process upsets. Notify in accordance with LAC 33:1.3923. Notification is required only if the upset cannot be controlled in six hours.
277	[LAC 33:III.501.C.6]	Develop a corrective action plan for re-lighting the flare. Plan must be kept readily available for immediate implementation in the event the flare needs to be re-lit.
278	[LAC 33:III.501.C.6]	Flare gas: Heat content > 300 BTU/scf to ensure destruction of emissions to the flare stack. Which Months: All Year Statistical Basis: None specified
279	[LAC 33:III.501.C.6]	Flare gas: Heat content monitored by gas analysis annually to ensure the heat content is above 300 BTU/scf. For flares that do not control offgas from amine regenerator vents (see EQT 0007), LDEQ will allow use of a sales gas analysis to satisfy the requirement that the heat content of flare gas is above 300 Btu/scf, provided:
		 the gas streams to the flare are sampled once to prove that they have a higher Btu value than the sales gas stream; and streams to the flare are resampled after any change in process conditions that is expected to alter the heat content of the flare gas. Which Months: All Year Statistical Basis: None specified
280	[LAC 33:III.501.C.6]	Flare gas: Heat content recordkeeping by electronic or hard copy annually.
281	[LAC 33:III.501.C.6]	Option 1: Ensure the continuous presence of a flame by installing, maintaining, and operating according to manufacturer's specifications a heat sensing device to detect the continuous presence of a flame. Alternate devices may be used with the prior approval. Keep these records on site and available for inspection. An alternate site to store records may be used with prior approval.
282	[LAC 33:III.501.C.6]	Option 2: Ensure the continuous presence of a flame by documenting daily visual observation of the continuous presence of a flame. Keep these records on site and available for inspection. An alternate site to store records may be used with prior approval.

Group: PCS 0001 Fugitive Emissions

Group Members: FUG 0001 FUG 0002

FUG 0001	- Fugitive Emissions - All Facilities

283	[LAC 33:III.1305]	Prevent particulate matter from becoming airborne by taking all reasonable precautions. These precautions shall include, but not be limited to,
284	[LAC 33:HI.2111]	those specified in LAC 33:III.1305.A.1-7. Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling
		conditions with mechanical seals or other equivalent equipment.

Page 31 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0001 Fugitive Emissions

FUG 0002 - Fugitive Er	nissions - Facilities Extracting Natural Gas Liquids from Field Gas by a "Forced" J-T Process and Subject to NSPS KKK
285 [40 CFR 60.632(a)]	Comply with the requirements specified in 40 CFR 60.482-1(a), (b), and (d) and 40 CFR 60.482-2 through 60.482-10, except as provided in 40 CFR 60.633, as soon as practicable, but no later than 180 days after initial startup. Subpart KKK. [40 CFR 60.632(a)]
286 [40 CFR 60.632(d)]	Comply with the provisions of 40 CFR 60.485 except as provided in 40 CFR 60.632(f) and 60.633(h). Subpart KKK. [40 CFR 60.632(d)]
287 [40 CFR 60.632(e)]	Comply with the provisions of 40 CFR 60.486 and 60.487 except as provided in 40 CFR 60.633, 60.635, and 60.636. Subpart KKK. [40 CFR 60.632(e)]
288 [40 CFR 60.632(f)]	Demonstrate that a piece of equipment is not in VOC service or in wet gas service by using the specified methods. Subpart KKK. [40 CFR 60.632(f)]
289 [40 CFR 60.635(c)]	Compressors: Equipment/operational data recordkeeping by logbook at the approved frequency. Record and keep information and data used to demonstrate that a reciprocating compressor is in wet gas service in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.633(f). Subpart KKK. [40 CFR 60.635(c)]

Group: PCS 0004 Glycol Dehydration Units

Group Members: EQT 0003 EQT 0014 EQT 0021 EQT 0023 EQT 0026

EQT 0003	- Glycol Dehydration Unit Process Vents Constructed Prior to October 20, 1994 Subject to LAC 33:III.2116	

290	[LAC 33:III.2116.B.1.a]	VOC, Total >= 70 % reduction. If the control device is a condenser, annually achieve an average final exhaust temperature less than 110 degrees F. Percent reduction shall be demonstrated by using the methods found in LAC 33:III.2116.D.
291	[LAC 33:III.2116.B.3]	Which Months: All Year Statistical Basis: None specified Glycol dehydration units (using a flare to control emissions): Ensure destruction of emissions to the flare stack by maintaining the heat content of the flare gas above 300 BTU/scf and by documenting daily visual observations of the continuous presence of a flame. Perform a gas analysis
	W A C 22 W 241 (D 2)	representative of the flare stream, showing the heat content, annually and make available for inspection.
292	[LAC 33:III.2116.F.3]	Glycol dehydration units (using a condenser to control emissions): Maintain a record of the final exhaust temperature and time observed recorded twice a week on different days during daylight hours; and maintain a record of all temperature exceedances greater than or equal to 120 degrees
		F, the date of each temperature exceedance, and a brief explanation describing the circumstances of the temperature exceedance.
293	[LAC 33:111.2116.F]	Glycol dehydration units: Keep records of the results of any testing conducted in accordance with LAC 33:III.2116.D, and keep records of the
		date of any maintenance and repair of the required control device and the duration of uncontrolled emissions during such activities.
294	[LAC 33:III.501.C.6]	As an alternative to documenting daily visual observations of a flame as described in LAC 33:III.2116.B.3, the permittee may install, maintain, and operate according to manufacturer's specifications a heat sensing device to detect the continuous presence of a flame.

EQT 0014 - Glycol Reboilers

295 [LAC 33:III.1101.B]	Opacity <= 20 percent, except that such emissions may have an average opacity in excess of 20 percent for not more than one six-minute period
	in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

Page 32 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0004 Glycol Dehydration Units

EQT 0014	- Glycol	Reboilers
L W VV 7		INCROMETS

296 [LAC 33:III.1313.C] Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: None specified

EQT 0021 - Glycol Dehydration Unit Process Vents Constructed On or After October 20, 1994, Subject to LAC 33:III.2116

297	[LAC 33:III.2116.B.2]	VOC, Total >= 85 % reduction using a control device. Demonstrate percent reduction using the methods found in LAC 33:III.2116.D.
		Which Months: All Year Statistical Basis: None specified
298	[LAC 33:III.2116.B.3]	Glycol dehydration units (using a flare to control emissions): Ensure destruction of emissions to the flare stack by maintaining the heat content of
		the flare gas above 300 BTU/scf and by documenting daily visual observations of the continuous presence of a flame. Perform a gas analysis
		representative of the flare stream, showing the heat content, annually and make available for inspection.
299	[LAC 33:III.2116.F]	Glycol dehydration units: Keep records of the results of any testing conducted in accordance with LAC 33:III.2116.D, and keep records of the
		date of any maintenance and repair of the required control device and the duration of uncontrolled emissions during such activities.
300	fLAC 33:III.501.C.61	As an alternative to documenting daily visual observations of a flame as described in LAC 33:III.2116.B.3, the permittee may install, maintain.

and operate according to manufacturer's specifications a heat sensing device to detect the continuous presence of a flame.

EQT 0023 - Glycol Dehydration Unit Process Vents - Exempt from LAC 33:III.2116

301 [LAC 33:III.2116.C.2]	Glycol dehydration units (requesting exemption from LAC 33:III.2116): Demonstrate to DEQ, using method or methods found in LAC
	33:III.2116.D, that the total uncontrolled VOC emissions from the glycol dehydrator are not in excess of nine tons per year.
302 [LAC 33:III.2116.F.4]	Glycol dehydration units (requesting exemption from LAC 33:III.2116): Keep records of total hours of operation on an annual basis if claiming
	an exemption from LAC 33:III.2116 under LAC 33:III.2116.C.1; OR keep records of the actual throughput per day and the glycol circulation
	rate if claiming an exemption from LAC 33:III.2116 under LAC 33:III.2116.C.2.

EQT 0026 - All Glycol Dehydration Unit Process Vents

303	[40 CFR 63.774(d)]	Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep records of the information specified in
		40 CFR 63.774(d)(1)(i) or (d)(1)(ii), as applicable. Subpart HH. [40 CFR 63.774(d)]
304	[LAC 33:III.501.C.6]	Glycol dehydration units for which construction commenced after September 15, 2010, ONLY: No later than 180 days after operations
		commence, the owner or operator shall recalculate emissions from the glycol dehydration unit using a site-specific wet gas analysis from a
		sample collected upstream of the dehydration system. These records shall be retained on site and made available for inspection by the Office of
		Environmental Compliance, Surveillance Division. If emissions are in excess of previous estimates, the owner of operator shall follow the
		appropriate procedures described in General Condition III of the general permit.

Group: PCS 0002 Miscellaneous Fuel Burning Equipment

Group Members: EQT 0011 EQT 0012

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0002 Miscellaneous Fuel Burning Equipment

EQT 0011 - Heater Treaters

305 [LAC 33:III.1313.C]

Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: None specified

EQT 0012 - Line Heaters

306 [LAC 33:III.1313.C]

Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: None specified

Group: PCS 0005 Natural Gas Internal Combustion Engines

Group Members: EQT 0001 EQT 0015 EQT 0016 EQT 0019 EQT 0031 EQT 0036

<u>EQT</u>	0001 - Natural Gas ICEs	- Engines Subject to Chapter 22
307	[LAC 33:III.2201.D.1]	Lean burn engines >= 1500 hp: Nitrogen oxides <= 4 g/BHP-hr.
		Which Months: May-Sep Statistical Basis: Thirty-day rolling average
308	[LAC 33:III.2201.D.1]	Rich burn engines >= 300 hp: Nitrogen oxides <= 2 g/BHP-hr.
		Which Months: May-Sep Statistical Basis: Thirty-day rolling average
309	[LAC 33:III.2201.G.2]	Perform NOx emissions testing for all point sources that are subject to the emission limitations of LAC 33:III.2201.D or used in one of the
		alternative plans of LAC 33:III.2201.E, as specified in LAC 33:III.2201.G.2 through G.7. Test results must demonstrate that actual NOx
		emissions are in compliance with the appropriate limits of LAC 33:III.Chapter 22. Also measure CO, SO2, PM10, and VOC if modifications
		could cause an increase in emissions of any of these compounds.
310	[LAC 33:IH.2201.H.10]	Test NOx emissions after each occurrence of catalyst replacement. Maintain documentation on-site, if practical, of the date, the person doing the
		test, and the test results. Make documentation available for inspection upon request.
311	[LAC 33:III.2201.H.4.a]	Option 1: Fuel monitored by totalizer continuously. Monitor fuel usage with a totalizing fuel meter.
		Which Months: May-Sep Statistical Basis: None specified
312	[LAC 33:III.2201.H.4.a]	Option 1: Operate the engine within the fuel limits established during the initial compliance run.
313	[LAC 33:III.2201.H.4.a]	Option 1: Perform annual testing for NOx and CO with an approved portable analyzer.
314	[LAC 33:III.2201.H.4.a]	Option 1: Perform triennial stack testing for NOx and CO in accordance with the methods specified in LAC:III.2201.G.5.
315	[LAC 33:III.2201.H.4.b]	Option 2: Carbon monoxide monitored by the regulation's specified method(s) continuously. Monitor carbon monoxide using a CO monitor.
		Which Months: May-Sep Statistical Basis: None specified
316	[LAC 33:III.2201.H.4.b]	Option 2: Fuel monitored by totalizer continuously. Monitor fuel usage with a totalizing fuel meter.
		Which Months: May-Sep Statistical Basis: None specified
317	[LAC 33:HI.2201.H.4.b]	Option 2: Nitrogen oxides monitored by continuous emission monitor (CEM) continuously.
		Which Months: May-Sep Statistical Basis: None specified

Page 34 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0005 Natural Gas Internal Combustion Engines

EQT 0001 - Natural Gas ICE	s - Engines Subject to Chapter 22
318 [LAC 33:III.2201.H.4.b]	Option 2: Diluent - either Oxygen or Carbon dioxide monitored by the regulation's specified method(s) continuously. Monitor oxygen or carbon dioxide using a diluent monitor in accordance with the requirements of LAC 33:III.2201.H.1.b.ii. Which Months: May-Sep Statistical Basis: None specified
319 [LAC 33:III.2201.H.4.b]	Option 3: Nitrogen oxides monitored by the regulation's specified method(s) continuously. Predict NOx, diluent (O2 or CO2), and CO emissions for each affected point source using a PEMS. Operate PEMS in accordance with the requirements of LAC 33:III.2201.H.1.b.v. Which Months: May-Sep Statistical Basis: None specified
320 [LAC 33:HI.2201.I.1]	Submit Notification: Due at least 30 days prior to any compliance testing conducted under LAC 33:III.2201.G and any CEMS or PEMS performance evaluation conducted under LAC 33:III.2201.H in order to give DEQ an opportunity to conduct a pretest meeting and observe the emission testing.
321 [LAC 33:III.2201.I.1]	Submit test results: Due within 60 days after completing the emission testing required in LAC 33:III.2201.1.1.
322 [LAC 33:III.2201.I.2]	Submit report: Due within 90 days of the end of each quarter for any noncompliance of the applicable emission limitations of LAC 33:III.2201.D or E. Include the information specified in LAC 33:III.2201.L2.a through I.2.d.
323 [LAC 33:III.2201.I]	Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records of the information specified in LAC 33:III.2201.1.3 and I.4 as applicable.
324 [LAC 33:III.2201.J.2]	Complete all initial compliance testing, specified by LAC 33:III.2201.G, for equipment modified with NOx reduction controls or a NOx monitoring system to meet the provisions of LAC 33:III.Chapter 22 within 60 days of achieving normal production rate or after the end of the shake down period, but in no event later than 180 days after initial start-up, except as provided in LAC 33:III.2202.
325 [LAC 33:III.2201.K.1]	Option 1: The owner or operator shall include NOx emitted during periods of start-up and shutdown for purposes of determining compliance with the emission factors set forth in Subsection D.
326 [LAC 33:III.2201.K.3.a]	Option 2: The owner or operator shall operate and maintain each affected point source, including any associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.
327 [LAC 33:III.2201.K.3.d]	Option 2: Minimize the start-up time of stationary internal combustion engines to a period needed for the appropriate and safe loading of the engine, not to exceed 30 minutes.
328 [LAC 33:III.2201.K.3.e]	Option 2: Maintain records of the calendar date, time, and duration of each start-up and shutdown.
329 [LAC 33:III.2201.K.3.f]	Option 2: Maintain records of the type(s) and amount(s) of fuels used during each start-up and shutdown.
330 [LAC 33:III.2201.K.3.g]	Option 2: The records required by Subparagraphs K.3.e and f of this Section shall be kept for a period of at least five years and shall be made available upon request by authorized representatives of the department.

EQT 0015 - Natural Gas ICEs - Engines Subject to NSPS JJJJ

331 [40 CFR 60.4233(a)] Stationary SI ICE with a maximum engine power less than or equal to 25 HP manufactured on or after July 1, 2008: Comply with the emission standards in 40 CFR 60.4231(a) for the stationary SI ICE. [40 CFR 60.4233(a)]

Page 35 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0005 Natural Gas Internal Combustion Engines

(c). [40 CFR 60.4236(d)]

EQT 0015 - Natural Gas ICEs - Engines Subject to NSPS JJJJ 332 [40 CFR 60.4233(d)] Owners and operators of stationary SI ICE with a maximum engine power greater than 25 HP and less than 100 HP must comply with the emission standards for field testing in 40 CFR 1048.101(c) for their non-emergency stationary SI ICE and with the emission standards in Table 1 to Subpart JJJJ for their emergency stationary SI ICE. Owners and operators of stationary SI ICE with a maximum engine power greater than 25 HP and less than 100 HP manufactured prior to January 1, 2011, that were certified to the standards in Table 1 to Subpart JJJJ applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP, may optionally choose to meet those standards. [40 CFR 60.4233(d)] 333 [40 CFR 60.4233(e)] Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP must comply with the emission standards in Table 1 to Subpart JJJJ for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP manufactured prior to January 1, 2011, that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to Subpart JJJJ, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified. [40 CFR 60.4233(e)] 334 [40 CFR 60.4233(f)] Owners and operators of any modified or reconstructed stationary SI ICE subject to Subpart JJJJ must meet the requirements as specified in 40 CFR 60.4233(f)(1)-(5). [40 CFR 60.4233(f)] 335 [40 CFR 60.4233(g)] Owners and operators of stationary SI wellhead gas ICE engines may petition the Administrator for approval on a case-by-case basis to meet emission standards no less stringent than the emission standards that apply to stationary emergency SI engines greater than 25 HP and less than 130 HP due to the presence of high sulfur levels in the fuel, as specified in Table 1 to Subpart JJJJ. The request must, at a minimum, demonstrate that the fuel has high sulfur levels that prevent the use of aftertreatment controls and also that the owner has reasonably made all attempts possible to obtain an engine that will meet the standards without the use of aftertreatment controls. The petition must request the most stringent standards reasonably applicable to the engine using the fuel. [40 CFR 60.4233(g)] 336 [40 CFR 60.4233(h)] Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in 40 CFR 60.4233(e). [40 CFR 60.4233(h)] [40 CFR 60.4234] Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4236(a)] After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in 40 CFR 60.4233. [40 CFR 60.4236(a)] 339 [40 CFR 60.4236(b)] After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in 40 CFR 60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1350 HP that do not meet the applicable requirements in 40 CFR 60.4233 may not be installed after January 1, 2010. [40 CFR 60.4236(b)] [40 CFR 60.4236(c)] For emergency stationary SI ICE with a maximum engine power of greater than 25 HP, owners and operators may not install engines that do not meet the applicable requirements in 40 CFR 60.4233 after January 1, 2011. [40 CFR 60.4236(c)] 341 [40 CFR 60.4236(d)] In addition to the requirements specified in 40 CFR 60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 25 HP that do not meet the applicable requirements specified in 40 CFR 60.4236(a), (b), and (c), after the date specified in 40 CFR 60.4236(a), (b), and

Page 36 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001
Permit Number: MSOG Master Gen Permit

Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0005 Natural Gas Internal Combustion Engines

EQT 0015 - Natural Gas ICEs	s - Engines Subject to NSPS JJJJ
342 [40 CFR 60.4236(e)]	The requirements of 40 CFR 60.4236 do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location. [40 CFR 60.4236(e)]
343 [40 CFR 60.4237(a)]	Starting on July 1, 2010, if the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter. [40 CFR 60.4237(a)]
344 [40 CFR 60.4237(b)]	Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter. [40 CFR 60.4237(b)]
345 [40 CFR 60.4237(c)]	If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine. [40 CFR 60.4237(c)]
346 [40 CFR 60.4243(a)]	If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in 40 CFR 60.4233(a)-(c), you must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4231(a)-(c), as applicable, for the same engine class and maximum engine power. In addition, you must meet one of the requirements specified in 40 CFR 60.4243(a)(1) and (2). [40 CFR 60.4243(a)]
347 [40 CFR 60.4243(b)]	If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in 40 CFR 60.4243(b)(1) and (2). [40 CFR 60.4243(b)]
348 [40 CFR 60.4243(c)]	If you are an owner or operator of a stationary SI internal combustion engine that must comply with the emission standards specified in 40 CFR 60.4233(f), you must demonstrate compliance according to 40 CFR 60.4243(b)(2)(i) or (ii), except that if you comply according to 40 CFR 60.4243(b)(2)(i), you demonstrate that your non-certified engine complies with the emission standards specified in 40 CFR 60.4233(f). [40 CFR 60.4243(c)]
349 [40 CFR 60.4243(d)]	If you own or operate an emergency stationary ICE, operate the emergency stationary ICE according to the requirements in 40 CFR 60.4243(d)(1), (d)(2)(i), and (d)(3). In order for the engine to be considered an emergency stationary ICE under Subpart JJJJ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, is prohibited. If you

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

meet all requirements for non-emergency engines.

(2) Emergency stationary ICE may be operated for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

do not operate the engine according to these requirements, the engine will not be considered an emergency engine under Subpart JJJJ and must

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. [40 CFR 60.4243(d)]

Page 37 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0005 Natural Gas Internal Combustion Engines

EQT	0015 - Natural Gas ICEs	- Engines Subject to NSPS JJJJ
350	[40 CFR 60.4243(e)]	Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233. [40 CFR 60.4243(e)]
351	[40 CFR 60.4243(f)]	If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in 40 CFR 60.4243, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). [40 CFR 60.4243(f)]
352	[40 CFR 60.4243(g)]	It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 CFR 60.4243(g)]
353	[40 CFR 60.4243(h)]	If you are an owner/operator of an stationary SI internal combustion engine with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and must comply with the emission standards specified in 40 CFR 60.4233(b) or (c), you must comply by one of the methods specified in 40 CFR 60/4243(h)(1)-(4). [40 CFR 60.4243(h)]
354	[40 CFR 60.4243(i)]	If you are an owner or operator of a modified or reconstructed stationary SI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4233(f), you must demonstrate compliance according to one of the methods specified in 40 CFR 60.4243(i)(1) or (2). [40 CFR 60.4243(i)]
355	[40 CFR 60.4244]	Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in 40 CFR 60.4244(a)-(f).
356	[40 CFR 60.4245(a)]	Owners and operators of all stationary SI ICE must keep records of the information in 40 CFR 60.4245(a)(1)-(4). [40 CFR 60.4245(a)]
357	[40 CFR 60.4245(b)]	For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 60.4245(b)]
358	[40 CFR 60.4245(c)]	Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231 must submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the information in 40 CFR 60.4245(c)(1)-(5). [40 CFR 60.4245(c)]

Page 38 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0005 Natural Gas Internal Combustion Engines

EQT 0015 - Natural Gas ICEs - Engines Subject to NSPS JJJJ

359	[40 CFR 60.4245(d)]	Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in
		40 CFR 60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM
		D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results
		from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all
		QA/QC procedures in Annexes 1-7. [40 CFR 60.4245(d)]

Table 3 to Subpart JJJJ shows which parts of the General Provisions in 40 CFR 60.1 through 60.19 apply to you.

EQT 0016 - Natural Gas ICEs >= 500 hp & Operating > 720 Hours in Any 6-Month Period and Not Subject to NSPS JJJJ or Chapter 22

provide the opportunity to conduct a pretest meeting and observe the emission testing.

361	[LAC 33:III.501.C.6]	Conduct a performance/emissions test: Due within 180 days after initial startup (or restart-up after modification), or within 60 days after achieving normal production rate or end of the shakedown period, whichever is earliest. The stack test's purpose is to verify potential emissions of the emissions unit. Repeat the test after each major engine overhaul. Test methods and procedures shall be in accordance with New Source Performance Standards, 40 CFR 60, Appendix A, Method 7E - Determination of Nitrogen Oxides Emissions from Stationary Sources and Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources. Use alternate stack test methods only with the prior approval of the Office of Environmental Services. As required by LAC 33:III.913, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
362	[LAC 33:III.501.C.6]	Equipment/operational data recordkeeping by electronic or hard copy semiannually (annually if the ICE is equipped with catalytic controls). Recorded parameters are NOx, CO, and O2 concentrations in the stack gas obtained during semiannual (or annual) testing.
363	[LAC 33:III.501.C.6]	Stack gas concentration: Carbon monoxide monitored by portable analyzer semiannually (six months after the stack test or previous semiannual test, plus or minus 30 days). Maintain concentrations of CO in a range that demonstrates compliance with permit limits. Calibrate portable analyzers before each test using a known reference gas sample. CO may be monitored annually (twelve months after the stack test or previous annual test, plus or minus 30 days) if the ICE is equipped with catalytic controls. Which Months: All Year Statistical Basis: None specified
364	[LAC 33:111.501.C.6]	Stack gas concentration: Nitrogen oxides monitored by portable analyzer semiannually (six months after the stack test or previous semiannual test, plus or minus 30 days). Maintain concentrations of NOx in a range that demonstrates compliance with permit limits. Calibrate portable analyzers before each test using a known reference gas sample. NOx may be monitored annually (twelve months after the stack test or previous annual test, plus or minus 30 days) if the ICE is equipped with catalytic controls. Which Months: All Year Statistical Basis: None specified
365	[LAC 33:HII.501.C.6]	Stack gas concentration: Oxygen monitored by portable analyzer semiannually (six months after the stack test or previous semiannual test, plus or minus 30 days). Maintain concentrations of O2 in the same range as during the initial stack test. Calibrate portable analyzers before each test using a known reference gas sample. O2 may be monitored annually (twelve months after the stack test or previous annual test, plus or minus 30 days) if the ICE is equipped with catalytic controls. Which Months: All Year Statistical Basis: None specified
366	[LAC 33:III.501.C.6]	Submit notification: Due at least 30 days prior to any LDEQ required performance/emissions test to the Office of Environmental Services, to

Page 39 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0005 Natural Gas Internal Combustion Engines

EQT 0016 - Natural Gas ICEs >= 500 hp & Operating > 720 Hours in Any 6-Month Period and Not Subject to NSPS JJJJ or Chapter 22

367 [LAC 33:III.501.C.6]

Submit report: Due within 60 days after performance/emissions test. Submit emissions test results to the Office of Environmental Services. The test results summary shall include any necessary conversion into the units of any applicable standard (e.g., lb/hr, g/hp-hr).

EQT 0019 - All Natural Gas ICEs

368 [LAC 33:III.1311.C]

Opacity <= 20 percent, except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: Six-minute average

EQT 0031 - All Natural Gas ICEs for Which Construction or Reconstruction Commenced On or After June 12, 2006

369 [40 CFR 63.6590(c)(1)]

373 [40 CFR 63.6603(f)]

Meet the requirements of 40 CFR 63 by meeting the requirements 40 CFR Subpart JJJJ. No further requirements apply to such engines under 40 CFR 63. Subpart ZZZZ. [40 CFR 63.6590(c)(1)]

EQT 0036 - Natural Gas ICEs for Which Construction or Reconstruction Commenced Before June 12, 2006

370	[40 CFR 63.6595(a)(1)]	If you have an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission
		limitations, operating limitations, and other requirements no later than October 19, 2013. [40 CFR 63.6595(a)(1)]
371	[40 CFR 63.6595(c)]	If you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR part 63,
		subpart A. [40 CFR 63.6595(c)]
372	[40 CFR 63.6603(a)]	Comply with the requirements in Table 2d to Subpart ZZZZ that apply to you. [40 CFR 63.6603(a)]

An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in 40 CFR 63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under Subpart ZZZZ. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in 40 CFR 63.6675 as of October 19, 2013, must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in 40 CFR 63.6675, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR 63.6603(f)]

Page 40 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001
Permit Number: MSOG Master Gen Permit

Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0005 Natural Gas Internal Combustion Engines

EQT 0036 - Natural Gas ICEs for Which Construction or Reconstruction Commenced Before June 12, 2006

	[40 CFR 63.6605]	Volument has in compliance with the emission limitations, amending limitations, and other requirements in Submert 7777 that apply to you at all
374	[40 CFK 03.0003]	You must be in compliance with the emission limitations, operating limitations, and other requirements in Subpart ZZZZ that apply to you at all times. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
375	[40 CFR 63.6612]	You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to Subpart ZZZZ that apply
	,	to you within 180 days after the compliance date that is specified for your stationary RICE in 40 CFR 63.6595 and according to the provisions in 40 CFR 63.7(a)(2). An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in 40 CFR 63.6612(b)(1)-(4).
376	[40 CFR 63.6615]	If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of Subpart ZZZZ.
377	[40 CFR 63.6620(a)]	You must conduct each performance test in Tables 3 and 4 of Subpart ZZZZ that applies to you. [40 CFR 63.6620(a)]
378	[40 CFR 63.6620(b)]	Each performance test must be conducted according to the requirements that Subpart ZZZZ specifies in Table 4. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. [40 CFR 63.6620(b)]
379	[40 CFR 63.6620(d)]	Conduct three separate test runs for each performance test required in 40 CFR 63.6620, as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in Subpart ZZZZ. [40 CFR 63.6620(d)]
380	[40 CFR 63.6620(e)]	Use Equation 1 of 40 CFR 63.6620 to determine compliance with the percent reduction requirement. Normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO2 concentration is measured in lieu of oxygen concentration measurement, a CO2 correction factor is needed. Calculate the CO2 correction factor as described in 40 CFR 63.6620(e)(2)(i)-(iii). [40 CFR 63.6620(e)]
381	[40 CFR 63.6620(f)]	If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator. [40 CFR 63.6620(f)]
382	[40 CFR 63.6620(g)]	If you petition the Administrator for approval of operating limitations, your petition must include the information described in 40 CFR 63.6620(g)(1)-(5). [40 CFR 63.6620(g)]
383	[40 CFR 63.6620(h)]	If you petition the Administrator for approval of no operating limitations, your petition must include the information described in 40 CFR 63.6620(h)(1)-(7). [40 CFR 63.6620(h)]

Page 41 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities
Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0005 Natural Gas Internal Combustion Engines

EQT 0036 - Natural Gas ICEs for Which Construction or Reconstruction Commenced Before June 12, 2006

ZZZZ apply. [40 CFR 63.6625(h)]

384	[40 CFR 63.6620(i)]	The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided. [40 CFR 63.6620(i)]
385	[40 CFR 63.6625(b)]	If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of Subpart ZZZZ, install, operate, and maintain each CPMS according to the requirements in 40 CFR 63.6625(b)(1)-(6). [40 CFR 63.6625(b)]
386	[40 CFR 63.6625(e)]	If you own or operate any of the following stationary RICE, operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions: (1) An existing emergency stationary RICE located at an area source of HAP emissions; or (2) An existing non-emergency 2SLB stationary RICE located at an area source of HAP emissions; (3) An existing non-emergency 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions; (4) An existing non-emergency 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; or (6) An existing, non-emergency 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is
207	[40 CED 42 44254D]	operated 24 hours or less per calendar year. [40 CFR 63.6625(e)]
387	[40 CFR 63.6625(f)]	If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]
388	[40 CFR 63.6625(h)]	Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d to Subpart

Page 42 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit

Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0005 Natural Gas Internal Combustion Engines

EQT 0036 - Natural Gas ICEs for Which Construction or Reconstruction Commenced Before June 12, 2006

389	[40 CFR 63.6625(j)]	If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 5, 6, 7, 9, or 11 of Table 2d
307	[40 C4 K 05.0025()]	to Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these
		parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid
		Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results
		of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil
		within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the
		maintenance plan for the engine. [40 CFR 63.6625(j)]
390	[40 CFR 63.6630(a)]	Demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of Subpart ZZZZ. [40 CFR 63.6630(a)]
391	[40 CFR 63.6630(c)]	Submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.6645. [40 CFR 63.6630(c)]
392	[40 CFR 63.6630(e)]	The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the requirements in 40 CFR 63.6630(e)(1)-(6). [40 CFR 63.6630(e)]
393	[40 CFR 63.6635]	If you must comply with emission and operating limitations, you must monitor and collect data according to 40 CFR 63.6635. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.
394	[40 CFR 63.6640(a)]	Demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table 2d to Subpart ZZZZ that apply to you according to methods specified in Table 6 to Subpart ZZZZ. [40 CFR 63.6640(a)]
395	[40 CFR 63.6640(b)]	Report each instance in which you did not meet each emission limitation or operating limitation in Table 2d to Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE. [40 CFR 63.6640(b)]

Page 43 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities
Activity Number: PER20190001
Permit Number: MSOG Master Gen Permit

Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0005 Natural Gas Internal Combustion Engines

<u>EQT</u>	0036 - Natural Gas ICEs	s for Which Construction or Reconstruction Commenced Before June 12, 2006
396	[40 CFR 63.6640(c)]	The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the requirements in 40 CFR 63.6640(c)(1)-(7). [40 CFR 63.6640(c)]
397	[40 CFR 63.6640(e)]	Report each instance in which you did not meet the requirements in Table 8 to Subpart ZZZZ that apply to you. [40 CFR 63.6640(e)]
398	[40 CFR 63.6640(f)]	If you own or operate an emergency stationary RICE, operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640(f)(1), (f)(2)(i), and (f)(4). In order for the engine to be considered an emergency stationary RICE under Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, is prohibited. If you do not operate the engine according to these requirements, the engine will not be considered an emergency engine under Subpart ZZZZ and must meet all requirements for non-emergency engines.
		(1) There is no time limit on the use of emergency stationary RICE in emergency situations.
		(2) Emergency stationary RICE may be operated for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
		(3) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. [40 CFR 63.6640(f)]
399	[40 CFR 63.6645(a)]	You must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b)-(e), and (g) and (h) that apply to you by the dates specified. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards. [40 CFR 63.6645(a)]
400	[40 CFR 63.6645(g)]	If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). [40 CFR 63.6645(g)]
401	[40 CFR 63.6645(h)]	If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to Subpart ZZZZ, you must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For each initial compliance demonstration required in Table 5 to Subpart ZZZZ that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. For each initial compliance demonstration required in Table 5 to Subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 to Subpart ZZZZ, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR 63.10(d)(2). [40 CFR 63.6645(h)]
402	[40 CFR 63.6650(a)]	You must submit each report in Table 7 of Subpart ZZZZ that applies to you. [40 CFR 63.6650(a)]
403	[40 CFR 63.6650(b)]	Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1)-(9). [40 CFR 63.6650(b)]
404	[40 CFR 63.6650(c)]	The Compliance report must contain the information in 40 CFR 63.6650(c)(1)-(6). [40 CFR 63.6650(c)]

Page 44 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0005 Natural Gas Internal Combustion Engines

EQT	0036 - Natural Gas ICE	s for Which Construction or Reconstruction Commenced Before June 12, 2006
405	[40 CFR 63.6650(d)]	For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in Subpart ZZZZ, the Compliance report must contain the information in 40 CFR 63.6650(c)(1)-(4) and the information in 40 CFR 63.6650(d)(1) and (2). [40 CFR 63.6650(d)]
406	[40 CFR 63.6650(e)]	For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in Subpart ZZZZ, you must include information in 40 CFR 63.6650(c)(1)-(4) and (e)(1)-(12). [40 CFR 63.6650(e)]
407	[40 CFR 63.6655(a)]	If you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1)-(5) and (b)(1)-(3). [40 CFR 63.6655(a)]
408	[40 CFR 63.6655(b)]	For each CEMS or CPMS, you must keep the records listed in 40 CFR 63.6655(b)(1)-(3). [40 CFR 63.6655(b)]
409	[40 CFR 63.6655(d)]	You must keep the records required in Table 6 of Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you. [40 CFR 63.6655(d)]
410	[40 CFR 63.6655(e)]	You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary emergency RICE or an existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to Subpart ZZZZ. [40 CFR 63.6655(e)]
411	[40 CFR 63.6655(f)]	If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 63.6655(f)]
412	[40 CFR 63.6660]	Your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). As specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).
413	[40 CFR 63.6665]	Table 8 to Subpart ZZZZ shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you.

Group: PCS 0008 Storage Vessels and Flash Gas Emissions

Group Members: EQT 0022 EQT 0046 RLP 0001

EQT 0022 - Storage Vessels

414 [LAC 33:III.2103.A]

Any stationary tank, reservoir, or other container of more than 250 gallons and up to 40,000 gallons nominal capacity shall not store any volatile organic compound having a maximum true vapor pressure of 1.5 psia or greater at storage conditions unless such tank, reservoir, or other container is designed and equipped with a submerged fill pipe or a vapor loss control system as defined in LAC 33:III.2103.E or is a pressure tank capable of maintaining working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit

Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0008 Storage Vessels and Flash Gas Emissions

EQT 0022	- Storage	Vessels
-----------------	-----------	---------

415 [LAC 33:III.2103.I]

Maintain records to verify compliance with or exemption from LAC 33:III.2103. Maintain records for at least five years.

EQT 0046 - Gasoline Dispensing Facilities

416	[40 CFR 63.11111(e)]	An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or reconstructed affected sources, as specified in 40 CFR 63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in 40 CFR 63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to Subpart CCCCCC only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in 40 CFR 63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years. [40 CFR 63.11111(e)]
417	[40 CFR 63.11115(a)]	You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.11115(a)]
418	[40 CFR 63.11116(a)]	You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: (1) Minimize gasoline spills. (2) Clean up spills as expeditiously as practicable. (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. Per 40 CFR 63.11116(d), portable gasoline containers that meet the requirements of 40 CFR 59 Subpart F are considered acceptable for compliance with this provision. (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. [40 CFR 63.11116(a)]
419	[40 CFR 63.11116(b)]	You are not required to submit notifications or reports as specified in 40 CFR 63.11125, 40 CFR 63.11126, or 40 CFR 63 Subpart A, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput. [40 CFR 63.11116(b)]
420	[40 CFR 63.11130]	Table 3 to Subpart CCCCCC shows which parts of the General Provisions apply to you.

RLP 0001 - Flash Gas Emissions Subject to LAC 33:III.2104

421	[LAC 33:111.2104.C.1]	Potential to emit >= 250 tpy of flash gas: Reduce aggregated facility flash gas emissions by a minimum of 95 percent.
422	[LAC 33:III.2104.C.2]	Facilities located in Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge Parish (potential to emit < 250 tpy of flash gas):
		Reduce aggregated facility flash gas emissions by a minimum of 95 percent or to a potential to emit of less than 25 tpy without artificially
		restricting production, hours of operation, capacity utilization, or similar parameter.

Page 46 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities

Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

Group: PCS 0008 Storage Vessels and Flash Gas Emissions

RLP 0001 - Flash Gas Em	issions Subject to LAC 33:III.2104
423 [LAC 33:III.2104.C.3]	Facilities located in Calcasieu Parish (potential to emit < 250 tpy of flash gas): Reduce aggregated facility flash gas emissions by a minimum of 95 percent or to a potential to emit of less than 50 tpy without artificially restricting production, hours of operation, capacity utilization, or similar parameter.
424 [LAC 33:III.2104.C.4]	Facilities located in other parishes (potential to emit < 250 tpy of flash gas): Reduce aggregated facility flash gas emissions by a minimum of 95 percent or to a potential to emit of less than 100 tpy without artificially restricting production, hours of operation, capacity utilization, or similar parameter.
425 [LAC 33:III.2104.C]	Facilities to which LAC 33:III.2104 is applicable: Install a vapor recovery system that directs vapors to a fuel gas system, a sales gas system, an underground gas injection system, or a control device.
426 [LAC 33:HI.2104.G]	Maintain records to verify compliance with or exemption from LAC 33:III.2104 including, but not limited to, those described in LAC 33:III.2104.G.1-5. Keep records on the premises, or at an alternate location approved by DEQ, for at least five years.

<u>UNF</u>	0001 - Entire Facility	
427	[40 CFR 63.760(c)]	Any source that determines it is not a major source but has actual emissions of 5 tons per year or more of a single HAP, or 12.5 tons per year or more of a combination of HAP (i.e., 50 percent of the major source thresholds), shall update its major source determination within 1 year of the prior determination or October 15, 2012, whichever is later, and each year thereafter, using gas composition data measured during the preceding 12 months. [40 CFR 63.760(c)]
428	[LAC 33:III.1103]	Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited.
429	[LAC 33:HI.1109.B]	Outdoor burning of waste material or other combustible material is prohibited.
430	[LAC 33:III.1303.B]	Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.
431	[LAC 33:HI.2113.A]	Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5.
432	[LAC 33:III.219]	Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.
433	[LAC 33:III.501.C.6]	Total volume of crude oil/condensate and natural gas processed by the facility shall be monitored and recorded each month. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.

Page 47 of 48 TPOR0147

Al ID: 158873 - Minor Source Air General Permit for Crude Oil & Natural Gas Production Facilities Activity Number: PER20190001

Permit Number: MSOG Master Gen Permit Air - Minor Gen Permit-Oil and Gas Renewal

<u>UNF</u>	0001	- Entire Facility	
434	[LAC	33:III.5101.B]	Facility-wide (facilities which were a major source of LAC 33:III.Chapter 51-regulated toxic air pollutants (TAP) as of December 20, 1991, but which have achieved minor source status through reduction of emissions and potential to emit): Comply with the provisions of LAC 33:III.5105.A.1, 3, and 4, and 5113. Pursuant to LAC 33:III.905, use and diligently maintain in proper working order control equipment installed to reduce the facility's potential to emit below the major source threshold whenever any emissions are being made which can be controlled by the facilities, even though the ambient air quality standards in affected areas are not exceeded.
435	[LAC	33:III.5611.A]	Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency: Due within 30 days after requested by the administrative authority.
436	[LAC	33:III.5611.B]	During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by the department to enforce these regulations.
437	[LAC :	33:III.919]	When required by Section XI of this general permit, Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 30th of April to the Office of Environmental Services, for the reporting period of the previous calendar year that coincides with period of ownership or operatorship, unless otherwise directed by DEQ. Submit both an emissions inventory and the certification statement required by LAC 33:III.919.F.1.c, separately for each AI, in a format specified by DEQ. Include the information specified in LAC 33:III.919.F.1.a through F.1.d.

Page 48 of 48 TPOR0147