



New Mexico Environment Department Testimony in EIB 21-27 (R)

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Section 20.2.50.113 – Engines and Turbines



Overview of Engines and Turbines

- Engines and Turbines are used throughout the oil and gas sector
 - ▣ Used for compressors that move gas through gathering and transmission pipelines
 - ▣ move the gas from the wellhead to gas processing plants and from the processing plants to transmission pipelines
 - ▣ move the gas along the transmission pipelines to the ultimate user of the processed gas
 - ▣ provide electrical power to sites that are not connected to the grid or used as backup power supply
 - ▣ pumpjack engines are used to mechanically lift liquid out of the well



Control Options for Engines and Turbines

- Control options for engines
 - NO_x = low emissions controls, selective catalytic reduction (SCR), and non-selective catalytic reduction (NSCR)
 - VOC = NSCR and catalytic oxidation
- Control options for turbines
 - NO_x = Water or steam injection, dry low NO_x burners, and SCR
 - VOC = catalytic oxidation



Applicability and Emissions Standards for Engines

- ❑ New engines and turbines are required to meet emission limits upon startup
- ❑ Existing engines must meet the emission limits over a specified deadlines
- ❑ Allows time to come into compliance
 - 30% by Jan 1, 2024; 35% by Jan 1, 2026; 35% by Jan 1, 2028
- ❑ Option to reduce the hours of operation meet limits
 - alternative method of compliance for difficult to retrofit engines while ensuring equivalent reductions



Applicability and Emissions Standards for Turbines

- Existing turbines are required to meet the limits over a specified deadlines
- Allows time to come into compliance
 - 30% by Jan 1, 2025; 35% by Jan 1, 2027; 35% by Jan 1, 2029
- Option to reduce the hours of operation meet limits
 - alternative method of compliance for difficult to retrofit turbines while ensuring equivalent reductions



Basis for Engines and Turbines Requirements

- ❑ Pennsylvania General Permits 5 and 5A for oil and gas operations
- ❑ Colorado – Reg. No. 7 - Control Of Ozone Via Ozone Precursors And Control Of Hydrocarbons Via Oil And Gas Emissions
- ❑ Ohio EPA stack test summaries, 2003 to 2016
- ❑ Ozone Transport Commission Regulatory and Technical Guideline for Control of NO_x Emission from NG Compressor Fuel-Fire Prime Movers (2019)
- ❑ U.S. EPA Alternative Control Technique Guideline Document for Stationary Reciprocating Internal Combustion Engines (1993) and the 2000 update.
- ❑ NESHAP for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ).
- ❑ NSPS for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60, Subpart JJJJ).
- ❑ U.S. EPA Alternative Control Technique Guideline Document – NO_x Emissions from Stationary Combustion Turbines (1993)
- ❑ Final TSD for the Cross State Air Pollution Rule for the 2008 NAAQS – Assessment of Non-EGU NO_x Emission Controls (2016)
- ❑ Interstate Natural Gas Association of America (INGAA) – Report on availability of NO_x emission controls on reciprocating compressor engines (2014)



Estimated Emission Reductions and Cost Estimates

Engines:

- 5,000 tpy NOx emissions reductions
- \$11.4 million/year annual costs for NOx
- 1,600 tpy VOC emissions reductions
- \$1.6 million/year annual costs for VOC

Turbines:

- 1,900 tpy NOx emissions reductions
- \$4.3 million/year annual costs for NOx
- 353 tpy VOC emissions reductions
- \$3.4 million/year annual costs for VOC



Alternative Compliance Plans and Alternative Emission Standards

- ❑ NMED added two alternatives for operators to meet the emission limits with requirements that are critical to implementing the alternative plans
- ❑ First is the Alternative Compliance Plan (ACP)
- ❑ Second is the Alternative Emissions Standard (AES)
- ❑ ACP and AES reviewed by an independent third-party consulting or engineering firm
 - Transferring the initial technical review to an independent firm will help to alleviate some of the Department's constrained resources
- ❑ ACP and AES must be made available for public comment for 30 days.
 - draft will be posted on the department's website. Owner must publish a newspaper notice and provide responses to any comments received
 - include comments for the Department's consideration in reviewing the proposal.
- ❑ This process will ensure transparency and will provide additional confidence that a proposed ACP or AES will result in equivalent or appropriate reductions



Revisions to Requirements for Existing Engines

- NMED made several changes to the horsepower ratings, engine type, and emission limits for existing engines
- Below are the original proposed standards and the revised horsepower ratings, engine types, and emission standards

Table 1 - EMISSION STANDARDS FOR NATURAL GAS-FIRED SPARK-IGNITION ENGINES
CONSTRUCTED OR, RECONSTRUCTED, ~~OR INSTALLED~~ BEFORE THE EFFECTIVE DATE OF 20.2.50
NMAC.

Engine Type	Rated bhp	NO _x	CO	NMNEHC (as propane)
<u>2 Stroke Lean Burn</u>	<u>>1,000</u>	<u>3.0 g/bhp-hr</u>	<u>0.60 g/bhp-hr</u>	<u>0.70 g/bhp-hr</u>
<u>4-Stroke Lean Burn</u>	<u>>1,000 bhp and <1,775 bhp</u>	<u>2.0 g/bhp-hr</u>	<u>0.60 g/bhp-hr</u>	<u>0.70 g/bhp-hr</u>
<u>4-Stroke Lean Burn</u>	<u>>1,775 bhp</u>	<u>0.5 g/bhp-hr</u>	<u>0.60 g/bhp-hr</u>	<u>0.70 g/bhp-hr</u>
<u>Rich Burn</u>	<u>>1,000 bhp</u>	<u>0.5 g/bhp-hr</u>	<u>0.60 g/bhp-hr</u>	<u>0.70 g/bhp-hr</u>
Lean-burn	>1,000	0.50 g/bhp-hr	47 ppmvd @ 15% O₂ or 93% reduction	0.70 g/bhp-hr
Rich-burn	>1,000	0.50 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr



Revisions to Requirements for New Engines

- NMED made several edits to the horsepower ratings and emission limits for new engines
- Below are the original proposed standards and the revised horsepower ratings, engine types, and emission standards

Table 2 - EMISSION STANDARDS FOR NATURAL GAS-FIRED SPARK-IGNITION ENGINES
CONSTRUCTED OR, RECONSTRUCTED, ~~OR INSTALLED~~ AFTER THE EFFECTIVE DATE OF 20.2.50
NMAC.

Engine Type	Rated bhp	NO _x	CO	NMNEHC (as propane)
Lean-burn	>500 <1,000	0.50 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr
Lean-burn	<u>> 500 and >1,000</u> <u>< 1875</u>	0.530 g/bhp-hr uncontrolled or 0.05 g/bhp-hr with control	0.60 g/bhp-hr	0.70 g/bhp-hr
<u>Lean-burn</u>	<u>≥ 1875</u>	<u>0.30 g/bhp-hr</u>	<u>0.60 g/bhp-hr</u>	<u>0.70 g/bhp-hr</u>
Rich-burn	>500	0.50 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr



Revisions to Requirements for Turbines

- NMED made several edits to the horsepower ratings and emission limits for new and existing turbines:

Table 3 - EMISSION STANDARDS FOR STATIONARY COMBUSTION TURBINES

For each <u>applicable</u> natural gas-fired combustion turbine constructed or reconstructed and installed before the effective date of 20.2.50 NMAC, the owner or operator shall ensure the turbine does not exceed the following emission standards no later than two years from the effective date of this Part <u>the schedule set forth in Paragraph (7)(a) of Subsection B of 20.2.50.113 NMAC</u>:			
Turbine Rating (bhp)	NO _x (ppmvd @15% O ₂)	CO (ppmvd @ 15% O ₂)	NMNEHC (as propane, ppmvd @15% O ₂)
≥1,000 and < 45 ,000	<u>150</u>	50	9
≥ 45 ,000 and <15,000	50	50	9
≥15,000	50	50 or 93% reduction	5 or 50% reduction
For each <u>applicable</u> natural gas-fired combustion turbine constructed or reconstructed and installed on or after the effective date of 20.2.50 NMAC, the owner or operator shall ensure the turbine does not exceed the following emission standards upon startup:			
Turbine Rating (bhp)	NO _x (ppmvd @15% O ₂)	CO (ppmvd @ 15% O ₂)	NMNEHC (as propane, ppmvd @15% O ₂)
≥1,000 and < 45 ,000	25 <u>100</u>	25	9
≥ 45 ,000 and <15,900	15	10	9
≥15,900	9.0 Uncontrolled or 2.0 with Control	10 Uncontrolled or 1.8 with Control	5



Revisions to Applicability and Emission Standards Subsections

20.2.50.113 ENGINES AND TURBINES:

A. Applicability: Portable and stationary natural gas-fired spark ignition engines, compression ignition engines, and natural gas-fired combustion turbines located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations, with a rated horsepower greater than the horsepower ratings of ~~t~~Table 1, 2, and 3 of 20.2.50.113 NMAC are subject to the requirements of 20.2.50.113 NMAC. Non-road engines as defined in 40 C.F.R. §§ 1068.30 are not subject to 20.2.50.113 NMAC.

B. Emission standards:

(1) The owner or operator of a portable or stationary natural gas-fired spark-ignition engine, compression ignition engine, or natural gas-fired combustion turbine shall ensure compliance with the emission standards by the dates specified in Subsection B of 20.2.50.113 NMAC, except as otherwise specified under an Alternative Compliance Plan approved pursuant to Paragraph (10) of Subsection B of 20.2.50.113 NMAC or alternative emissions standards approved pursuant to Paragraph (11) of Subsection B of 20.2.50.113 NMAC.

(2) The owner or operator of an existing natural gas-fired spark-ignition engine shall complete an inventory of all existing engines subject to this Part by January 1, 2023, and shall prepare a schedule to ensure that each existing engine does not exceed the emission standards in table 1 of Paragraph (2) of Subsection B of 20.2.50.113 NMAC as follows, except as otherwise specified under an Alternative Compliance Plan (ACP) approved pursuant to Paragraph (10) of Subsection B of 20.2.50.113 NMAC or alternative emissions standards approved pursuant to Paragraph (11) of Subsection B of 20.2.50.113 NMAC: ~~as follows:~~

(a) by January 1, 2025, the owner or operator shall ensure at least thirty percent of the company's existing engines meet the emission standards.

(b) by January 1, 2027, the owner or operator shall ensure at least an additional thirty-five percent of the company's existing engines ~~meets~~ the emission standards.

(c) by January 1, 2029, the owner or operator shall ensure that the remaining thirty-five percent of the company's existing engines ~~meets~~ the emission standards.

(d) in lieu of meeting the emission standards for an existing natural gas-fired spark ignition engine, an owner or operator may reduce the annual hours of operation of an engine such that the annual PTE of NOx and VOC emissions are reduced to achieve an equivalent allowable ton per year emission reduction as set forth in table 1 of Paragraph (2) of Subsection B of 20.2.50.113 NMAC, or by at least ninety-five percent per



Revisions to General Standards for Turbines

(7) of Subsection B of 20.2.50.113 NMAC as follows, except as otherwise specified under an Alternative Compliance Plan approved pursuant to Paragraph (10) of Subsection B of 20.2.50.113 NMAC or alternative emissions standards approved pursuant to Paragraph (11) of Subsection B of 20.2.50.113 NMAC:

(i) by January 1, 2024, the owner or operator shall ensure at least thirty percent of the company's existing turbines meet the emission standards.

(ii) by January 1, 2026, the owner or operator shall ensure at least an additional thirty-five percent of the company's existing turbines meet the emission standards.

(iii) by January 1, 2028, the owner or operator shall ensure that the remaining thirty-five percent of the company's existing turbines meet the emission standards.

(iv) in lieu of meeting the emission standards for an existing stationary natural gas-fired combustion turbine, an owner or operator may reduce the annual hours of operation of a turbine such that the annual PTE of NOx and VOC emissions are reduced to achieve an equivalent allowable ton per year emission reduction as set forth in table 3 of Paragraph (7) of Subsection B of 20.2.50.113 NMAC, or by at least ninety-five percent per year.



Revisions re Option for Alternative Compliance Plan

(10) In lieu of complying with the emission standards for individual engines and turbines established in Subsection B of 20.2.50.113 NMAC, an owner or operator may elect to comply with the emission standards through an Alternative Compliance Plan (ACP) approved by the department. An ACP must include the list of engines or turbines subject to the ACP, and a demonstration that the total allowable emissions for the engines or turbines subject to the ACP will not exceed the total allowable emissions under the emission standards of this Part. Prior to submitting a proposed ACP to the Department, the owner or operator shall comply with the following requirements in the order listed:

(a) The owner or operator shall contract with an independent third-party engineering or consulting firm to conduct a technical and regulatory review of the ACP proposal. The selected firm shall review the proposal to determine if it meets the requirements of this Part, and shall prepare and certify an evaluation of the proposed ACP indicating whether the ACP proposal adheres to the requirements of this Part.

(b) Following the independent third-party review, the owner or operator shall provide the ACP, along with the third-party evaluation and findings, to the department for posting on the department's website. The department shall post the ACP and the third-party review within 15 days of receipt.

(c) Following posting by the department, the owner or operator shall publish a notice in a newspaper of general circulation announcing the ACP proposal, the dates it will be available for review and comment by the public, and information on how and where to submit comments. The dates specified in the public notice must provide for a thirty-day comment period.

(d) Following the close of the thirty-day notice and comment period, the department shall send the comments submitted on the ACP proposal and findings to the owner or operator. The owner or operator shall provide written responses to all comments to the department.

(e) Following receipt of the owner or operator's responses to comments received during the thirty-day comment period, the department shall make a determination whether to approve or deny the ACP proposal within 90 days. The department shall approve an ACP that meets the requirements of this Part, unless the department determines that the total allowable emissions under the ACP exceed the total allowable emissions under the emission standards of 20.2.50.113 NMAC. If approved by the department, the emission reductions and associated emission limits for the affected engines or turbines shall become enforceable terms under this Part.



Revisions re Option for Alternative Emission Standards

(11) The owner or operator may submit a request for alternative emission standards for a specific engine or turbine based on technical impracticability or economic infeasibility. The owner or operator is not required to submit an ACP proposal under Paragraph (10) of Subsection B of 20.2.50.113 NMAC prior to submission of a request for alternative emissions standards under this Paragraph (11), provided that the owner or operator satisfies Subparagraph (b) of Paragraph (11) of Subsection B of 20.2.50.113 NMAC, below. To qualify for an alternative emission standard, an owner or operator must comply with the following requirements:

(a) prepare a reasonable demonstration detailing why it is not technically practicable or economically feasible for the individual engine or turbine to achieve the emissions standards in table 1 of Paragraph (2) of Subsection B of 20.2.50.113 NMAC or table 3 of Paragraph (7) of Subsection B of 20.2.50.113 NMAC, as applicable;

(b) prepare a demonstration detailing why emissions from the individual engine or turbine cannot be addressed through an ACP in a technically practicable or economically feasible manner;

(c) prepare a technical analysis for the affected engine or turbine specifying the emission reductions that can be achieved through other means, such as combustion modifications or capacity limitations. The technical analysis shall include an analysis of any previous modifications of the source and a determination whether such modifications meet the definition of a reconstructed source, such that the source should be considered a new source under federal regulations. The analysis shall include a certification that the modifications to the source are not in violation of any state or federal air quality regulation; and

(d) fulfill the requirements of Subparagraphs (a) through (c) of Paragraph (10) of Subsection B of 20.2.50.113 NMAC.

(e) Following the close of the thirty-day notice and comment period, the department shall send the comments submitted on the alternative emission standards and findings to the owner or operator. The owner or operator shall provide written responses to all comments to the department.



Revisions re Short Term Engine Replacements

(f) Following receipt of the owner or operator's responses to comments received during the thirty-day comment period, the department shall make a determination whether to approve or deny the alternative emission standards within 90 days. If approved by the department, the emission reductions and alternative emission standards for the affected engine or turbine shall become enforceable terms under this Part.

(g) If approved by the department, the emissions reductions and alternative standards for the affected engine or turbine shall become enforceable terms under this Part.

(12) A short-term replacement engine may be substituted for any engine subject to Section 20.2.50.113 NMAC consistent with any applicable air quality permit containing allowances for short term replacement engines, including but not limited to New Source Review and General Construction Permits issued under 20.2.72 NMAC. A short-term engine replacement is not considered a "new" engine for purposes of this Part unless the engine it replaces is a "new" engine within the meaning of this Part. The reinstallation of the existing engine following removal of the short-term replacement engine is not considered a "new" engine under this Part unless the engine was "new" prior to the temporary replacement.



Revisions to Monitoring Requirements

C. Monitoring requirements:

(1) Maintenance and repair for a spark-ignition engine, compression-ignition engine, and stationary combustion turbine shall meet the ~~minimum~~ manufacturer recommended maintenance schedule as defined in 20.2.50.112 NMAC. ~~The following maintenance, adjustment, replacement, or repair events for engines and turbines shall be documented as they occur:~~

~~(a) routine maintenance that takes a unit out of service for more than two hours during any 24-hour period; and~~

~~(b) unscheduled repairs that require a unit to be taken out of service for more than two hours during any 24-hour period.~~

(2) Maintenance conducted consistent with an applicable NSPS or NESHAP requirement shall be deemed to be in compliance with 20.2.50.113(C)1 NMAC.

(32) Catalytic converters (oxidative, selective, and non-selective) and AFR controllers shall be inspected and maintained according to manufacturer specifications as defined in 20.2.50.112 NMAC, and shall include ~~or supplier recommended maintenance schedules, including~~ replacement of oxygen sensors as necessary for oxygen-based controllers. During periods of catalytic converter or AFR controller maintenance, the owner or operator shall shut down the engine or turbine until the catalytic converter or AFR controller can be replaced with a functionally equivalent spare to allow the engine or turbine to return to operation.

(43) For equipment operated for 500 hours per year or more, compliance with the emission standards in Subsection B of 20.2.50.113 ~~NMAC~~ NMAC shall be demonstrated within 180 days of the effective date applicable to the source as defined by Subsection B(2) and (7) or, if installed more than 180 days after the effective date, within 60 days after achieving the maximum production rate at which the source will be operated, but not later than 180 days after initial startup of such source. Compliance with the applicable emission standards shall be demonstrated by performing an initial emission test for NO_x and VOC, as defined in 40 CFR 51.100(s) using U.S. EPA reference methods or ASTM D6348. Periodic monitoring shall be conducted annually to demonstrate compliance with the allowable emission standards and may be demonstrated utilizing a portable analyzer or EPA reference methods. ~~by performing an initial emissions test, followed by annual tests, for NO_x, CO, and non-methane non-ethane hydrocarbons (NMNEHC) using a portable analyzer or U.S. EPA reference method.~~ For units with g/hp-hr emission standards, the engine load shall be calculated using the following equations:



Revisions Monitoring Requirements

$$\text{Load (Hp)} = \frac{\text{Fuel consumption (scf/hr)} \times \text{Measured fuel heating value (LHV btu/scf)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100\% load or best efficiency}}$$

$$\text{Load (Hp)} = \frac{\text{Fuel consumption (gal/hr)} \times \text{Measured fuel heating value (LHV btu/gal)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100\% load or best efficiency}}$$

Where: LVH = lower heating value, btu/scf, or btu/gal, as appropriate; and
BSFC = brake specific fuel consumption

If the manufacturer's rated BSFC is not available, an operator may use an alternative load calculation methodology based on available data.

(a) emissions testing events shall be conducted within 10 percent of 100 percent peak (or the highest achievable) load. ~~at ninety percent or greater of the unit's capacity. If the ninety percent capacity cannot be achieved, the monitoring and testing shall be conducted at the maximum achievable capacity or load under prevailing operating conditions.~~ The load and the parameters used to calculate it shall be recorded to document operating conditions at the time of testing and shall be included with the test report.

(b) emissions testing utilizing a portable analyzer shall be conducted in accordance with the requirements of the current version of ASTM D-6522. If a portable analyzer has met a previously approved department criterion, the analyzer may be operated in accordance with that criterion until it is replaced.

(c) the default time period for a test run shall be at least 20 minutes.

(d) an emissions test shall consist of three separate runs, with the arithmetic mean of the results from the three runs used to determine compliance with the applicable emission standard.

(e) during emissions tests, pollutant and diluent concentration shall be monitored and recorded. Fuel flow rate shall be monitored and recorded if stack gas flow rate is determined utilizing U.S. EPA reference method 19. This information shall be included with the periodic test report.



Revisions to Monitoring Requirements

(f) stack gas flow rate shall be calculated in accordance with U.S. EPA reference method 19 utilizing fuel flow rate (scf) determined by a dedicated fuel flow meter and fuel heating value (Btu/scf). The owner or operator shall provide a contemporaneous fuel gas analysis (preferably on the day of the test, but no earlier than three months before the test date) and a recent fuel flow meter calibration certificate (within the most recent quarter) with the final test report. Alternatively, stack gas flow rate may be determined by using U.S. EPA reference methods 1 through 4 or through the use of manufacturer provided fuel consumption rates.

(g) upon request by the department, an owner or operator shall submit a notification and protocol for an initial or annual emissions test.

(h) emissions testing shall be conducted at least once per calendar year. Emission testing required by Subparts GG, IIII, JJJJ, or KKKK of 40 CFR 60, or Subpart ZZZZ of 40 CFR 63, may be used to satisfy the emissions testing requirements if it meets the requirements of 20.2.50.113 NMAC and is completed at least once per calendar year.

(i) for emissions testing using a portable analyzer, the results of emissions testing demonstrating compliance with the emission standard for CO may be used as a surrogate to demonstrate compliance with the emission standard for NMNEHC.

~~(54)~~ The owner or operator of equipment operated less than 500 hours per year shall monitor the hours of operation using a non-resettable hour meter and shall test the unit at least once per 8760 hours of operation in accordance with the emissions testing requirements in Paragraph ~~(43)~~ of Subsection C of 20.2.50.113 NMAC.

~~(65)~~ An owner or operator of an emergency use engine as defined by 40 C.F.R. §§ 60.4211, 60.4243, or 63.6675 ~~operated for less than 100 hours per year~~ shall monitor the hours of operation by a non-resettable hour meter.

~~(76)~~ An owner or operator limiting the annual operating hours of an engine or turbine to meet the requirements of Paragraph (2) or (7) of Subsection B of 20.2.50.113 NMAC shall monitor the hours of operation by a non-resettable hour meter.



Revisions to Monitoring Requirements

(87) Prior to any monitoring, testing, inspection, or maintenance of an engine or turbine, the owner or operator shall date and time stamp the event~~scan the EMT~~, and the monitoring data entry shall be made in accordance with the requirements of 20.2.50.112 and 113 NMAC~~20.2.50.112 NMAC~~.

D. Recordkeeping requirements:

(1) The owner or operator of a spark ignition engine, compression ignition engine, or stationary combustion turbine shall maintain a record in accordance with 20.2.50.112 NMAC for the engine or turbine. The record shall include:

- (a) the make, model, serial number, and unique identification number~~and EMT~~ for the engine or turbine;
- (b) location of the source (latitude and longitude)
- (c) a copy of the engine, turbine, or control device manufacturer recommended maintenance and repair schedule as defined in 20.2.50.112 NMAC;
- (d) all inspection, maintenance, or repair activity on the engine, turbine, and control device, including:
 - (i) the date and time stamp(s), including GPS of the location, of an inspection, maintenance or repair;
 - (ii) the date a subsequent analysis was performed (if applicable);
 - (iii) the name of the ~~personnel~~ person(s) conducting the inspection, maintenance or repair;
 - (iv) a description of the physical condition of the equipment as found during the inspection;
 - (v) a description of maintenance or repair ~~activity~~ conducted; and
 - (vi) the results of the inspection and any required corrective actions.



Revisions to Recordkeeping Requirements

(2) The owner or operator of a spark ignition engine, compression ignition engine, or stationary combustion turbine shall maintain records of initial and annual emissions testing for the engine or turbine for a period of five years. The records shall include:

- (a) ~~the~~ make, model, and serial number, ~~and EMT~~ for the tested engine or turbine;
- (b) the date and time stamp(s), including GPS of the location, of any monitoring event, including of sampling or measurements;
- (c) ~~the~~ date analyses were performed;
- (d) ~~the~~ name of the personnel person(s) and the qualified entity that performed the analyses;
- (e) ~~the~~ analytical or test methods used;
- (f) ~~the~~ results of analyses or tests;
- (g) calculated emissions of NOx and VOC in lb/hr and tpy; and
- ~~(g) for equipment operated less than 500 hours per year, the total annual hours of operation as recorded by the non-resettable hour meter; and~~
- ~~(h)~~ operating conditions at the time of sampling or measurement.

(3) The owner or operator of an emergency use engine as defined by 40 C.F.R. §§ 60.4211, 60.4243, or 63.6675 ~~operated less than 100 hours per year~~ shall record the total annual hours of operation as recorded by the non-resettable hour meter.

(4) The owner or operator limiting the annual operating hours of an engine or turbine to meet the requirements of Paragraph (2) or (7) of Subsection B of 20.2.50.113 NMAC shall record the hours of operation by a non-resettable hour meter. The owner or operator shall calculate and record the annual NOx and VOC emission calculation, based on the engine or turbine's actual hours of operation, to demonstrate that an equivalent allowable ton per year emission reduction as set forth in table 1 or table 3 of Paragraph (2) or (7) of Subsection B of 20.2.50.113 NMAC, or the ninety-five percent emission reduction requirement is met.

E. Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.
[20.2.50.113 NM-C - N, XX/XX/2021]