

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** October 12, 2012

Thru: Bridget C. Bohac, Chief Clerk
Zak Covar, Executive Director

From: Steve Hagle, P.E., Deputy Director
Office of Air

Docket No.: 2012-1388-RUL

Subject: Commission Approval for Proposed Rulemaking
Chapter 117, Control of Air Pollution from Nitrogen Compounds
Chapter 117 Stationary Diesel Engine Petition
Rule Project No. 2012-031-117-AI

Background and reason(s) for the rulemaking:

On April 5, 2012, Halliburton Energy Services, Incorporated (Halliburton) submitted a petition for rulemaking requesting a partial exemption from the rules in 30 Texas Administrative Code (TAC) Chapter 117, Subchapter D, Division 2 that limit nitrogen oxides (NO_x) emissions from minor sources in the Dallas-Fort Worth (DFW) 1997 eight-hour ozone nonattainment area. The commission approved the petition for rulemaking on May 30, 2012, and issued an order on June 1, 2012, directing the executive director to examine the issues in the petition and to initiate rulemaking.

The unique service of the Halliburton Drawworks Engine makes ongoing testing to demonstrate compliance with the Chapter 117 NO_x emission limits impractical and comparatively more expensive than the stationary engine testing envisioned at adoption of the rule in 2007. To comply with the Chapter 117 testing requirements, Halliburton must arrange for the use of a dynamometer, which is typically used by engine manufacturers for testing purposes. Preparing the engine for installation of the dynamometer and returning the engine to operational status subsequent to the emissions testing presents significant safety hazards associated with the removal of the drive train and transmission, removal of the torque converter, and the placement and use of non-dedicated hoisting equipment on the rig floor. Performing a compliant emissions test of the Drawworks Engine takes three to four days to complete whereas typical testing on stationary engines only requires approximately a half day.

Additionally, engines used to raise and lower down-hole equipment in actual oil and gas operations in the field, which the Drawworks Engine is designed to simulate, are typically not subject to similar Chapter 117 testing requirements because those engines are typically not installed at a location long enough to trigger the definition of a stationary internal combustion engine in §117.10. The Drawworks Engine is subject to Chapter 117, Subchapter D, Division 2 because the equipment has been made stationary to provide testing and training facilities for sources that are actually not subject to the rule.

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Scope of the rulemaking:

A.) Summary of what the rulemaking will do:

The proposed change would expand the list of exempted sources in §117.2103 to include stationary diesel engines that are used exclusively for product testing and personnel training, operate less than 1,000 hours per year on a rolling 12-month basis, and meet applicable Tier emission standards for non-road engines listed in 40 Code of Federal Regulations (CFR) §89.112(a), Table 1 (October 23, 1998) in effect at the time of installation, modification, reconstruction, or relocation. The proposed exemption is narrow in scope and consistent with the similar existing exemptions for stationary diesel engines located at minor sources, such as stationary engines used in research and testing and stationary engines used for purposes of performance verification and testing. The proposed change would also revise the operating requirements of §117.2130, the monitoring requirements of §117.2135, and the recordkeeping requirements of §117.2145 to reflect the new category of exempt engines. Although not specifically requested in the petition for rulemaking, the proposed rules would require records sufficient to demonstrate the engine meets the applicable emission standard listed in 40 CFR §89.112(a), Table 1 (October 23, 1998) to help ensure compliance with the proposed exemption criteria. Furthermore, the proposed rules would change the petitioner's suggested operating restriction language from "rolling 12-month average" to "rolling 12-month basis" in proposed new §117.2103(10)(B) to make clear that compliance is based on a total of 1,000 hours per year.

Additionally, the existing rule language in §117.2130(c) prohibits a person from starting or operating any stationary diesel or dual-fuel engine in the DFW 1997 eight-hour ozone nonattainment area for testing or maintenance between the hours of 6:00 a.m. and noon, except when a specific manufacturer's recommended test requires a run of over 18 consecutive hours, to verify the reliability of emergency equipment immediately after unforeseen repairs, and to use firewater pumps for emergency response training conducted in the months of April through October. The petitioner requested clarification that this prohibition did not apply to product testing. The commission proposes to amend §117.2130(c)(1) - (3) to distinguish between product testing as used in the proposed new exemption in §117.2103(10) and engine testing as used in the existing rule language in §117.2130(c). The proposed revision clarifies that the prohibition is specific to testing or maintenance of the engine to avoid conflict with the proposed new exemption in §117.2103(10) for stationary engines that are used exclusively for product testing and personnel training and more accurately reflect the intent of the prohibition. If adopted, the proposed amendments to Chapter 117 will be submitted to the United States Environmental Protection Agency (EPA) as a revision to the state implementation plan (SIP).

B.) Scope required by federal regulations or state statutes:

None.

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C.) Additional staff recommendations that are not required by federal rule or state statute:

None.

Statutory authority:

Texas Government Code, §2001.021, establishes the procedures by which an interested person may petition a state agency for the adoption of a rule and 30 TAC §20.15 provides such procedures specific to the commission.

The following provisions authorize the commission to adopt rules necessary to carry out its powers and duties: Texas Government Code, §2001.021, Petition for the Adoption of Rules, which authorizes an interested person to petition a state agency for the adoption of a rule; Texas Water Code (TWC), §5.102, General Powers, §5.103, Rules, and §5.105, General Policy (these provisions authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC); Texas Health and Safety Code (THSC), Texas Clean Air Act (TCAA), §382.017, Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA; THSC, §382.002, Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, General Powers and Duties, which authorizes the commission to control the quality of the state's air; and THSC, §382.012, State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air.

Also, THSC, §382.016, Monitoring Requirements; Examination of Records, authorizes the commission to prescribe requirements for owners or operators of sources to make and maintain records of emissions measurements; §382.021, Sampling Methods and Procedures, authorizes the commission to prescribe the sampling methods and procedures; and §382.051 Permitting Authority of Commission; Rules, authorizes the commission to adopt rules as necessary to comply with changes in federal law or regulations applicable to permits under Chapter 382. The rule amendment would also be proposed under 42 United States Code, §§7401, *et seq.*, which requires states to submit SIP revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

Effect on the:

A.) Regulated community:

The proposed rulemaking would affect owners or operators of stationary diesel engines that are located at minor sources of NO_x in the DFW 1997 eight-hour ozone nonattainment area. If adopted, owners or operators of stationary diesel engines that are used exclusively for product testing and personnel training, operate in limited service, and meet applicable federal emission standards for non-road engines listed in 40 CFR Part 89 would be exempt from emissions testing requirements of Chapter 117.

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B.) Public:

The public benefit anticipated from the changes seen in the proposed rules would be continued protection of the environment and public health and safety combined with efficient and fair administration of NO_x emission standards for the DFW 1997 eight-hour ozone nonattainment area.

C.) Agency programs:

The proposed rulemaking would have no impact on agency programs.

Stakeholder meetings:

No stakeholder meetings occurred.

Potential controversial concerns and legislative interest:

The Chapter 117 rules for minor sources in the DFW area are included in the SIP. If adopted, the proposed amendments to Chapter 117 will be submitted to the EPA as a revision to the SIP. The proposed exemption criteria require compliance with the federal standards in 40 CFR Part 89 from which the NO_x emission limits in §117.2110 were derived. Therefore, the proposed exemption should not result in additional NO_x emissions in the DFW area and should not be considered as backsliding under the Federal Clean Air Act. However, the revisions would still be subject to EPA review and approval as a SIP revision.

Will this rulemaking affect any current policies or require development of new policies?

No

What are the consequences if this rulemaking does not go forward? Are there alternatives to rulemaking?

The affected regulated entity would have to conduct an emissions performance test in accordance with current Chapter 117 requirements for stationary sources. Testing would be required every two years or within 15,000 hours of engine operation after the previous emissions test. In order to run an emissions test, the owner or operator would have to dismantle the transmission in order to install and use the dynamometer. Additionally, these activities would consume three to four days of an owner's or operator's time.

Key points in the proposal rulemaking schedule:

Anticipated proposal date: October 31, 2012

Anticipated *Texas Register* publication date: November 16, 2012

Public hearing date (if any): December 13, 2012 and December 18, 2012

Public comment period: November 16, 2012 - December 19, 2012

Anticipated adoption date: April 10, 2013

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