

The Texas Commission on Environmental Quality (TCEQ, agency, commission) adopts amendments to §§117.2103, 117.2130, 117.2135, and 117.2145 *without changes* to the proposed text as published in the November 16, 2012 issue of the *Texas Register* (37 TexReg 9060) and the text will not be republished.

The adopted amendments will be submitted to the United States Environmental Protection Agency (EPA) as a revision to the state implementation plan (SIP).

Background and Summary of the Factual Basis for the Adopted Rules

On April 5, 2012, Halliburton Energy Services, Incorporated (Halliburton) submitted a petition for rulemaking requesting a partial exemption from the rules in 30 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 (DFW 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 (Project No. 2012-029-PET-NR).

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 during the adoption of the Chapter 117 rules in 2007. To comply with the Chapter 117 testing

requirements, Halliburton must arrange for both emissions testing equipment (a normal and expected expense) and for the rental, transport, and 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 compliant emissions testing on a typical stationary engine only requires approximately half a 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 they are 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 not subject to the rule.

The adopted change will 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 adopted 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 adopted change will 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.

Demonstrating Noninterference under Federal Clean Air Act, Section 110(l)

The commission provides the following information to demonstrate why the adopted new exemption in §117.2103 will not negatively impact the status of the state's progress towards attainment with the 1997 eight-hour ozone National Ambient Air Quality Standard (NAAQS), will not interfere with control measures, and will not prevent reasonable further progress toward attainment of the ozone NAAQS.

On December 6, 2000, as part of the Houston-Galveston-Brazoria (HGB) attainment demonstration SIP revision, the commission adopted a new control strategy for stationary reciprocating internal combustion engines, boilers, and process heaters located at minor industrial, commercial, and institutional sources of NO_x in the HGB

area. The adopted rulemaking exempted engines used for specific purposes, such as those used in research and testing and those used for the purposes of performance verification and testing.

On May 23, 2007, as part of the DFW 1997 eight-hour ozone attainment demonstration SIP revision, the commission adopted new emission control requirements for stationary reciprocating internal combustion engines located at minor industrial, commercial, and institutional sources of NO_x in the DFW area. The NO_x emission reductions were necessary for the DFW area to attain the 1997 eight-hour ozone NAAQS. Similar to the HGB rulemaking, the DFW rulemaking also adopted exemptions for engines used for specific purposes, such as those used in research and testing and those used for the purposes of performance verification and testing.

The adopted partial exemption is narrowly tailored and will not adversely impact the DFW area's progress in attaining the 1997 eight-hour ozone NAAQS. During the 2000 and 2007 rulemakings, no stationary engines similar in function to the Halliburton Drawworks Engine were identified in the emissions inventory in the counties impacted by the rulemakings, and no such engines were relied upon for creditable reductions for the SIP revision. Therefore, the adopted rulemaking will not result in a loss of any SIP creditable reductions for the DFW 1997 eight-hour ozone nonattainment area.

Additionally, based on February 2012 emissions test results and a limit of no more than

1,000 hours of run time per year, the Drawworks Engine has maximum potential annual NO_x emissions of 0.87 tons per year and is well below the emission standards established in the Chapter 117 minor source NO_x rules. The adopted exemption criteria require compliance with the federal standards in 40 CFR Part 89 to ensure that the adopted exemption will not result in backsliding. Based on the test results, the Drawworks Engine at the Halliburton Carrollton Plant meets Tier 3 emission standards for non-road engines listed in 40 CFR §89.112(a), Table 1 (October 23, 1998). Therefore, the Drawworks Engine will be required to and does meet the applicable federal emission standards in 40 CFR §89.112(a), Table 1 (October 23, 1998) for the engine's size and installation date. The NO_x emission limits for stationary diesel engines in §117.2110 were derived from the Tier standards in 40 CFR Part 89. Therefore, the adopted exemption will not result in additional NO_x emissions in the DFW area.

Based on these factors, the commission has determined that the adopted rule change will not negatively impact the status of the state's attainment demonstration for the 1997 eight-hour ozone NAAQS, will not interfere with control measures, and will not prevent reasonable further progress toward attainment of the ozone NAAQS.

Section by Section Discussion

Section 117.2103, Exemptions

The commission adopts §117.2103(10) to exempt 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 CFR §89.112(a), Table 1 (October 23, 1998) in effect at the time of installation, modification, reconstruction, or relocation. The adopted exemption only applies to an engine that is in dedicated service for product testing and personnel training and does not apply to an engine used for any additional purpose. The adopted amendment will exempt engines in this unique service from ongoing testing to demonstrate compliance with the Chapter 117 NO_x emission limits because the testing requirements are impractical and comparatively more expensive than the stationary engine testing envisioned at adoption of the rule. Requiring compliance with the federal standards in 40 CFR Part 89 ensures that the adopted exemption will not result in additional NO_x emissions in the DFW area because the Chapter 117 NO_x emission limits were derived from these federal standards. Furthermore, the adopted rules change the petitioner's suggested operating restriction language from "rolling 12-month average" to "rolling 12-month basis" in adopted §117.2103(10)(B) to make clear that compliance is based on the total annual hours of operation.

Section 117.2130, Operating Requirements

The commission amends §117.2130(c)(1) - (3) to distinguish between product testing as used in the adopted exemption in §117.2103(10) and engine testing as used in the existing rule language in §117.2130(c). Existing §117.2130(c) prohibits a person from

starting or operating any stationary diesel or dual-fuel engine in the DFW area for testing or maintenance between the hours of 6:00 a.m. and noon, except under specific conditions. The adopted revision clarifies that the prohibition is specific to testing or maintenance of the engine to avoid potential conflict with the adopted 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.

Section 117.2135, Monitoring, Notification, and Testing Requirements

The commission amends §117.2135(e) to reference the adopted exemption in §117.2103(10). Revised §117.2135(e) requires sources claiming the adopted exemption in §117.2103(10) to monitor the operating time with a non-resettable elapsed run time meter in order to demonstrate compliance with the operating restrictions in §117.2103(10). To conform to *Texas Register* formatting standards, the commission is also amending subsection (e) by adding a reference to the title of §117.2103.

Section 117.2145, Recordkeeping and Reporting Requirements

The commission amends §117.2145(b) by reformatting the existing provision and adding new recordkeeping requirements associated with the adopted exemption in §117.2103(10). The commission is reformatting the existing requirements in §117.2145(b) to accommodate the new recordkeeping requirements associated with the adopted exemption in §117.2103(10). The adopted amendment does not alter the intent

of the existing recordkeeping requirements for sources currently complying with §117.2145(b) or impose any new requirements on engines claimed exempt under §117.2103(5), (8), or (9) or §117.2130(b)(3).

The adopted changes to §117.2145(b) reformat the record retention requirement in existing §117.2145(b) to require the records specified in paragraphs (1) - (3) to be maintained for at least five years and must be made available upon request to representatives of the executive director, the EPA, or any local air pollution control agency having jurisdiction.

Adopted §117.2145(b)(1) requires written records of the number of hours of operation for each day's operation to be maintained for each engine claimed exempt under §117.2103(5), (8), (9), or (10) or §117.2130(b)(3). Adopted §117.2145(b)(1) includes the existing requirements in §117.2145(b) for engines claimed exempt under §117.2103(5), (8), or (9) or §117.2130(b)(3) and applies the same requirements to engines claimed exempt under adopted §117.2103(10). The adopted revision requires sources claiming the adopted exemption in §117.2103(10) to maintain written records of the number of hours of operation for each day's operation in order to demonstrate compliance with the operating restrictions included in §117.2103(10).

Adopted §117.2145(b)(2) includes the existing requirements in §117.2145(b) for the

owner or operator of each engine claimed exempt under §117.2103(5) to maintain written records of the purpose of engine operation and, if operation was for an emergency situation, identification of the type of emergency situation and the start and end times and date(s) of the emergency situation.

Adopted §117.2145(b)(3) requires the owner or operator of each engine claimed exempt under §117.2103(10) to maintain records of manufacturer's specifications or test data sufficient to demonstrate compliance with the corresponding emission standard for non-road engines listed in 40 CFR §89.112(a), Table 1 (October 23, 1998) as specified in §117.2103(10)(C). The petition for rulemaking approved by the commission on May 30, 2012 did not include a specific request for this recordkeeping requirement. However, the commission is adopting this recordkeeping requirement to clearly indicate the records required to demonstrate compliance with the adopted exemption criteria in §117.2103(10) and facilitate enforcement of the adopted exemption. Additionally, the adopted recordkeeping provision in subsection (b)(3) clarifies that either engine manufacturer's specifications or actual emission testing are acceptable for demonstrating that the engine meets the exemption criteria.

Final Regulatory Impact Determination

The commission reviewed the adopted rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225 and determined that the adopted

rulemaking does not meet the definition of a major environmental rule. Texas Government Code, §2001.0225 states that a major environmental rule is a rule for which the specific intent is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. Furthermore, while the adopted rulemaking does not constitute a major environmental rule, even if it did, a regulatory impact analysis would not be required because the adopted rulemaking does not meet any of the four applicability criteria for requiring a regulatory impact analysis for a major environmental rule. Texas Government Code, §2001.0225 applies only to a major environmental rule that: 1) exceeds a standard set by federal law, unless the rule is specifically required by state law; 2) exceeds an express requirement of state law, unless the rule is specifically required by federal law; 3) exceeds a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopts a rule solely under the general powers of the agency instead of under a specific state law. Specifically, it does not meet any of the four applicability criteria listed in Texas Government Code, §2001.0225 because: 1) the adopted rulemaking is part of the SIP, and as such is designed to meet, not exceed the relevant standard set by federal law; 2) parts of the adopted rulemaking are directly required by state law; 3) no contract or delegation agreement covers the topic that is the subject of this adopted rulemaking;

and 4) the adopted rulemaking is authorized by specific sections of Texas Health and Safety Code (THSC), Chapter 382 (also known as the Texas Clean Air Act), and the Texas Water Code, which are cited in the Statutory Authority section of this preamble.

The adopted rulemaking implements requirements of the Federal Clean Air Act (FCAA). Under 42 United States Code (USC), §7410, each state is required to adopt and implement a SIP containing adequate provisions to implement, attain, maintain, and enforce the NAAQS within the state. While 42 USC, §7410 generally does not require specific programs, methods, or reductions in order to meet the standard, SIPs must include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter, (meaning 42 USC, Chapter 85, Air Pollution Prevention and Control, otherwise known as the FCAA). The provisions of the FCAA recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public to collaborate on the best methods for attaining the NAAQS for the specific regions in the state. Even though the FCAA allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the requirements of 42 USC, §7410. States are not free to ignore the requirements of 42 USC, §7410, and must

develop programs and control measures to assure that their SIPs provide for implementation, attainment, maintenance, and enforcement of the NAAQS within the state. The specific intent of the adopted rulemaking is to implement changes within the Chapter 117, Subchapter D, Division 2 rules, which will expand the list of exempted sources operating in limited services in §117.2103 to include stationary diesel engines that are used exclusively for product testing and personnel training, and meet applicable Tier emission standards for non-road engines listed in the applicable CFR.

While the adopted rulemaking protects the environment or reduces risks to human health from environmental exposure, it does not constitute a major environmental rule under Texas Government Code, §2001.0225(g) (3) because it does not adversely affect in a material way the economy, a sector of the economy, productivity, competition, or jobs, nor would the rulemaking adversely affect in a material way the environment, or the public health and safety of the state or a sector of the state. The rulemaking as a result is not subject to a regulatory impact analysis under Texas Government Code, §2001.0225 because it is not a major environmental rule.

The requirement to provide a fiscal analysis of regulations in the Texas Government Code was amended by Senate Bill (SB) 633, 75th Legislature, 1997. The intent of SB 633 was to require agencies to conduct a regulatory impact analysis of extraordinary rules. These are identified in the statutory language as major environmental rules that will

have a material adverse impact and will exceed a requirement of state law, federal law, or a delegated federal program; or are adopted solely under the general powers of the TCEQ. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 that concluded: based on an assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal implications for the agency due to its limited application. The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. This conclusion was based, in part, on the criteria set forth in the bill that exempted rules from the full analysis unless the rule was a major environmental rule that exceeded a federal law.

The FCAA does not always require specific programs, methods, or reductions in order to meet the NAAQS; thus, states must develop programs for each nonattainment area to help ensure that those areas will meet the attainment deadlines. Because of the ongoing need to address nonattainment issues and to meet the requirements of 42 USC, §7410, the commission routinely proposes and adopts revisions to the SIP and rules. The legislature is presumed to understand this federal scheme. If each rule proposed for inclusion in the SIP was considered to be a major environmental rule that exceeds federal law, then every revision to the SIP would require the full regulatory impact analysis contemplated by SB 633. This conclusion is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board

(LBB) in its fiscal notes. Since the legislature is presumed to understand the fiscal impacts of the bills it passes and that presumption is based on information provided by state agencies and the LBB, the commission believes that the intent of SB 633 was only to require the full regulatory impact analysis for rules that are extraordinary in nature. While the rules have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of the FCAA. For these reasons, rules adopted for inclusion in the SIP fall under the exception in Texas Government Code, §2001.0225(a), because they are required by federal law.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code but left this provision substantially unamended. It is presumed that, when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation (*Central Power & Light Co. v. Sharp*, 919 S.W.2d 485, 489 (Tex. App. Austin 1995), *writ denied with per curiam opinion respecting another issue*, 960 S.W.2d 617 (Tex. 1997); *Bullock v. Marathon Oil Co.*, 798 S.W.2d 353, 357 (Tex. App. Austin 1990, *no writ*); *superseded by statute on another point of law*, Tax Code §112.108, Other Actions Prohibited, *as recognized in, First State Bank of Dumas v. Sharp*, 863 S.W.2d 81, 83 (Tex. App. Austin 1993, *no writ*); *Cf. Humble Oil & Refining Co. v. Calvert*, 414 S.W.2d 172 (Tex. 1967); *Dudney v. State Farm Mut. Auto Ins. Co.*, 9

S.W.3d 884, 893 (Tex. App. Austin 2000); *Southwestern Life Ins. Co. v. Montemayor*, 24 S.W.3d 581 (Tex. App. Austin 2000, *pet. denied*); and *Coastal Indust. Water Auth. v. Trinity Portland Cement Div.*, 563 S.W.2d 916 (Tex. 1978).

The commission's interpretation of the regulatory impact analysis requirements is also supported by a change made to the Texas Administrative Procedure Act (APA) by the legislature in 1999. In an attempt to limit the number of rule challenges based upon APA requirements, the legislature clarified that state agencies are required to meet these sections of the APA against the standard of substantial compliance as required in Texas Government Code, §2001.035. The legislature specifically identified Texas Government Code, §2001.0225 as falling under this standard. The commission has complied with the requirements of Texas Government Code, §2001.0225.

Even if the adopted rulemaking constitutes a major environmental rule under Texas Government Code, §2001.0225(g)(3), a regulatory impact analysis is not required because this exemption is part of the commission's SIP for making progress toward the attainment and maintenance of the NAAQS. Therefore, the adopted rulemaking does not exceed a standard set by federal law or exceed an express requirement of state law, since they are part of an overall regulatory scheme designed to meet, not exceed the relevant standard set by federal law (NAAQS). The commission is charged with protecting air quality within the state and to design and submit a plan to achieve

attainment and maintenance of the federally mandated NAAQS. The Third District Court of Appeals upheld this interpretation in *Brazoria County v. Texas Comm'n on Env'tl. Quality*, 128 S.W. 3d 728 (Tex. App. - Austin 2004, *no writ*). The specific intent of the adopted rulemaking is to implement changes within the Chapter 117, Subchapter D, Division 2 rules expanding the list of exempted sources listed in §117.2103 to include stationary diesel engines used exclusively for product testing and personnel training and meet applicable Tier emission standards for non-road engines listed in the applicable CFR. This adoption, therefore, does not exceed an express requirement of federal law. The amendments are needed to implement state law but do exceed those new requirements. Finally, this rulemaking was not developed solely under the general powers of the agency but is authorized by specific sections of THSC, Chapter 382, which are cited in the Statutory Authority section of this preamble, including THSC, §382.012 and §382.019. Because this adopted rulemaking does not meet any of the four applicability requirements, Texas Government Code, §2001.0225(b) does not apply and a regulatory impact analysis is not required.

The commission invited public comment regarding the draft regulatory impact analysis determination during the public comment period and received no comments.

Takings Impact Assessment

The commission evaluated the adopted rulemaking and performed an analysis of

whether the adopted rulemaking constitutes a taking under Texas Government Code, Chapter 2007. The commission's preliminary assessment indicates Texas Government Code, Chapter 2007 does not apply.

Under Texas Government Code, §2007.002(5), taking means: "(A) a governmental action that affects private real property, in whole or in part or temporarily or permanently, in a manner that requires the governmental entity to compensate the private real property owner as provided by the Fifth and Fourteenth Amendments to the United States Constitution or Section 17 or 19, Article I, Texas Constitution; or (B) a governmental action that: (i) affects an owner's private real property that is the subject of the governmental action, in whole or in part or temporarily or permanently, in a manner that restricts or limits the owner's right to the property that would otherwise exist in the absence of the governmental action; and (ii) is the producing cause of a reduction of at least 25 percent in the market value of the affected private real property, determined by comparing the market value of the property as if the governmental action is not in effect and the market value of the property determined as if the governmental action is in effect."

Promulgation and enforcement of the rulemaking would be neither a statutory nor a constitutional taking of private real property. The primary purpose of the rulemaking is an update to Chapter 117, Subchapter D, Division 2 expanding the list of exempted

sources listed in §117.2103 to include stationary diesel engines used exclusively for product testing and personnel training and meet applicable Tier emission standards for non-road engines. This rulemaking is not burdensome, restrictive, or limiting of rights to private real property because the rulemaking regulates the use of stationary engines in limited circumstances. Furthermore, the rulemaking benefits the public by providing oil and gas field operators an opportunity for safe simulation without incurring the significant safety hazards typically associated with the current testing requirements of stationary engines.

The rulemaking does not affect a landowner's rights in private real property because this rulemaking does not burden, restrict, or limit the owner's right to property, nor does it reduce the value of any private real property by 25% or more beyond that which would otherwise exist in the absence of the regulations. Therefore, this rulemaking does not constitute a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the adopted rulemaking and found the adoption is a rulemaking identified in the Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2) relating to rules subject to the Coastal Management Program (CMP), and will, therefore, require that goals and policies of the CMP be considered during the rulemaking process.

The commission reviewed this rulemaking for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Advisory Committee and determined that the rulemaking will not affect any coastal natural resource areas because the rules only affect counties outside the CMP area and is, therefore, consistent with CMP goals and policies.

The commission invited public comment regarding the consistency with the CMP during the public comment period. The commission received no comments on the CMP.

Effect on Sites Subject to the Federal Operating Permits Program

Chapter 117 is an applicable requirement under 30 TAC Chapter 122, Federal Operating Permits Program. Owners or operators subject to the federal operating permit program must, consistent with the revision process in Chapter 122, upon the effective date of the rulemaking, revise their operating permit to include the new Chapter 117 requirements.

Public Comment

The commission scheduled a public hearing on the rulemaking in Fort Worth on December 13, 2012 and a second hearing in Austin on December 18, 2012. The commission did not open either hearing as no interested individuals registered to provide comments. The public comment period closed on December 19, 2012. The commission received one comment from the North Central Texas Council of

Governments (NCTCOG) opposing the proposed rule revisions.

Response to Comments

Comment

NCTCOG commented that this and similar training sites should be located outside of all nonattainment areas in the state because approving an exemption could contribute to the exceedance of federal ozone standards in the DFW area. Alternatively, NCTCOG requested that if the commission approves the exemption, it require that all eligible engines be located away from air quality monitors and sensitive groups.

Response

The commission makes no changes to the adopted rules in response to this comment. The intent of this rulemaking is to provide an exemption for stationary diesel engines that are used exclusively for product testing and personnel training, operate less than 1,000 hours per year, and meet applicable emission standards in 40 CFR §89.112(a), Table 1 (October 23, 1998). The commenter's suggested change is outside the scope of this rulemaking. Requiring facilities subject to the exemption to relocate to an attainment county or alternative location within the nonattainment county through this rulemaking would be equivalent to revoking an existing facility's authorization and force consideration of location for new New

Source Review authorizations, which is contrary to the TCEQ's authority under the Texas Clean Air Act. Additionally, the adopted exemption will not result in additional NO_x emissions in the DFW area. The exemption criteria require compliance with the federal standards in 40 CFR Part 89 from which the NO_x emission limits for stationary diesel engines in §117.2110 were derived. Based on February 2012 emissions test results, the Drawworks Engine at the Halliburton Carrollton Plant meets Tier 3 emission standards for non-road engines listed in 40 CFR §89.112(a), Table 1 (October 23, 1998) and is well below the applicable emission standards in §117.2110.

Comment

NCTCOG requested confirmation that the engine referenced in Halliburton's petition for rulemaking is located in Carrollton, Texas. NCTCOG requested the commission confirm that the proposed rulemaking only exempts one engine or alternatively confirm the number of affected engines and the projected increase in annual emissions. NCTCOG also requested the commission provide documentation on the analysis of emission estimates and the impact of the additional emissions from the newly exempted engine on air quality monitors and sensitive populations. NCTCOG asked if the proposed exemption allows additional training sites to be located in the DFW area. NCTCOG also asked if the commission considered the possibility and impact of additional engines

used for this purpose in the DFW area.

Response

The commission is currently aware of only one engine that meets the newly adopted exemption criteria, and that is the Halliburton Drawworks Engine located in Carrollton, Texas. However, other engines that meet the adopted exemption criteria in §117.2103(10) could also qualify for exemption. As discussed in the Background and Summary of the Factual Basis for the Adopted Rules, and Response to Comments sections of this preamble, the adopted exemption will not increase annual NO_x emissions in the DFW area. The exemption in §117.2103(10) requires the engine to meet the applicable Tier emission standards for non-road engines listed in 40 CFR §89.112(a), Table 1 (October 23, 1998). The NO_x emission limits for stationary diesel engines in §117.2110 were derived from the same Tier standards in 40 CFR §89.112(a). Therefore, even if additional units do meet the exemption criteria in §117.2103(10), the NO_x emissions from such units are not expected to exceed the NO_x emissions anticipated if the same new units were required to meet the applicable NO_x emission limits in §117.2110. The commission makes no changes in response to this comment.

Comment

NCTCOG asked why the proposed maximum annual operating hours were 1,000 hours given that the existing exemptions in §117.2103(5), (8), and (9) are limited to 100 hours per year.

Response

The existing exemptions in §117.2103(5), (8), and (9) are intended to apply to sources that operate in very limited service, such as emergency backup generator engines. The hours limitations in §117.2103(5), (8), and (9) are designed for engines that are in emergency or limited service. Other existing rules, such as §117.2103(2) and (3), exempt engines used for specific purposes, such as those used in research and testing and those used for the purposes of performance verification and testing. The Halliburton Drawworks Engine is not an emergency backup engine or limited-use engine. Rather, the Drawworks Engine is a primary service engine and is similar to the engines used for specific purposes that qualify for the exemptions in §117.2103(2) and (3). However, the existing exemptions in §117.2103 do not cover the full operating range of Halliburton's Drawworks Engine due to the unique nature of its service. Instead of granting the full exemption afforded to other engines that operate in specific service, the commission is adding an additional layer of stringency to the exemption by limiting the engine's hours of operation. The commission makes no changes

in response to this comment.

Comment

NCTCOG requested the commission justify why the proposed rule provides an exemption from the operating requirements in §117.2130, which prohibit affected engines from being started between the hours of 6:00 a.m. and noon.

Response

The operating requirement in §117.2130(c) prohibits the operation of any stationary diesel or dual-fuel engine for testing or maintenance between the hours of 6:00 a.m. and noon except under limited circumstances. The commission is amending §117.2130(c)(1) - (3) to distinguish between product testing as used in the adopted exemption in §117.2103(10) and engine testing as used in the existing rule language in §117.2130(c). The commission is not providing an exemption from the operating requirement in §117.2130(c). The adopted revision clarifies that the prohibition is specific to testing or maintenance of the engine to avoid conflict with the adopted 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. The commission's intent for §117.2130(c) has always been that the prohibition applies to testing and

maintenance of the engine itself. These activities can typically be scheduled outside the 6:00 a.m. to noon time-frame without significantly interfering with the daily operations of a facility. Section 117.2130(c) does apply to the Halliburton Drawworks Engine when Halliburton operates the engine as part of the engine's routine testing and maintenance. However, §117.2130(c) does not apply when Halliburton is operating the engine as part of the facility's normal operation of testing drilling equipment and training personnel. The commission makes no changes in response to this comment.

Comment

NCTCOG asked if there are recent time-of-day photochemical model sensitivity runs that indicate how early morning NO_x and volatile organic compound emissions impact afternoon ozone formation.

Response

The commission did not conduct photochemical modeling in support of this rule revision. The DFW attainment demonstration SIP revision for the 1997 eight-hour ozone standard adopted by the commission on December 7, 2011 (Project Number 2010-022-SIP-NR) contains the most recent photochemical modeling analysis for the DFW area. The photochemical modeling for the 2011 DFW attainment demonstration SIP revision used

emissions that were temporally allocated according to emission category but modeling runs were not conducted to determine the sensitivity of the model to changes in emissions by time of day. The commission makes no changes in response to this comment.

Comment

NCTCOG requested the TCEQ examine the benefits and feasibility of requiring independent third-party verification of industry-reported monitoring and compliance data.

Response

The commenter's request is outside the scope of this rulemaking. The intent of this rulemaking is to provide an exemption for stationary diesel engines that are used exclusively for product testing and personnel training, operate less than 1,000 hours per year, and meet applicable emission standards in 40 CFR §89.112(a), Table 1 (October 23, 1998). The commission makes no changes in response to this comment.

Comment

NCTCOG requested the TCEQ require training to include smart operating practices such as no idling, proper engine maintenance, and other emission reducing strategies.

Response

The intent of this rulemaking is to provide an exemption for stationary diesel engines that are used exclusively for product testing and personnel training, operate less than 1,000 hours per year, and meet applicable emission standards in 40 CFR §89.112(a), Table 1 (October 23, 1998). The training suggested by the commenter is not necessary to ensure compliance with the adopted exemption criteria in §117.2103(10). Additionally, applying such training requirements generally under Chapter 117, Subchapter D, Division 2 is outside the scope of this rulemaking. The commission makes no changes in response to this comment.

Comment

NCTCOG requested the TCEQ require Halliburton to identify and implement emission reduction offsets for increased emissions.

Response

As discussed in the Background and Summary of the Factual Basis for the Adopted Rules, and Response to Comments sections of this preamble, the adopted exemption will not increase NO_x emissions in the DFW area. Therefore, emission reduction offsets are not necessary. The adopted

exemption in §117.2103(10) requires the engine to meet the federal Tier standard used to derive the applicable Chapter 117 NO_x emission specification. The federal standard is at least as stringent as the corresponding NO_x emission limit in §117.2110 and therefore the adopted exemption will not result in additional NO_x emissions in the DFW area. In addition, test results indicate the NO_x emissions from Halliburton's Drawworks Engine are below the applicable Chapter 117 NO_x emission specification. The commission makes no changes in response to this comment.

**SUBCHAPTER D: COMBUSTION CONTROL AT MINOR SOURCES IN
OZONE NONATTAINMENT AREAS
DIVISION 2: DALLAS-FORT WORTH EIGHT-HOUR OZONE
NONATTAINMENT AREA MINOR SOURCES**

§§117.2103, 117.2130, 117.2135, and 117.2145

Statutory Authority

This rulemaking is adopted under the authority of the following: 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, which authorize the commission to adopt rules necessary to carry out its powers and duties as well as all general policies under the TWC; Texas Health and Safety Code (THSC), The 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, TCAA, §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. The amendments are also adopted under THSC, §382.016, Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe requirements for owners or operators of sources

to make and maintain records of emissions measurements; THSC, §382.021, Sampling Methods and Procedures, which authorizes the commission to prescribe sampling methods and procedures; and THSC, §382.051(d), Permitting Authority of Commission; Rules, which authorizes the commission to adopt rules as necessary to comply with changes in federal law or regulations applicable to permits under THSC, Chapter 382. Finally, the amendments are also adopted under the Federal Clean Air Act (FCAA), 42 USC, §§7401, *et seq.*, which requires states to submit state implementation plan revisions that specify the manner in which the National Ambient Air Quality Standard will be achieved and maintained within each air quality control region of the state.

The adopted amendments implement TWC, §5.103 and §5.105, THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, 382.021, 382.051; and FCAA, 42 USC, §§7401, *et seq.*

§117.2103. Exemptions.

This division (relating to Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Minor Sources) does not apply to the following stationary engines, except as specified in §§117.2130(c), 117.2135(e), and 117.2145(b) and (c) of this title (relating to Operating Requirements; Monitoring, Notification, and Testing Requirements; and Recordkeeping and Reporting Requirements):

(1) engines with a horsepower (hp) rating of less than 50 hp;

(2) engines used in research and testing;

(3) engines used for purposes of performance verification and testing;

(4) engines used solely to power other engines or gas turbines during startups;

(5) engines operated exclusively in emergency situations, except that operation for testing or maintenance purposes is allowed for up to 100 hours per year, based on a rolling 12-month average. Any new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after June 1, 2007, is ineligible for this exemption. For the purposes of this subparagraph, the terms "modification" and "reconstruction" have the meanings defined in §116.10 of this title (relating to General Definitions) and 40 Code of Federal Regulations (CFR) §60.15 (December 16, 1975), respectively, and the term "relocated" means to newly install at an account, as defined in §101.1 of this title (relating to Definitions), a used engine from anywhere outside that account;

(6) engines used in response to and during the existence of any officially declared disaster or state of emergency;

(7) engines used directly and exclusively by the owner or operator for agricultural operations necessary for the growing of crops or raising of fowl or animals;

(8) diesel engines placed into service before June 1, 2007, that:

(A) operate less than 100 hours per year, based on a rolling 12-month average; and

(B) have not been modified, reconstructed, or relocated on or after June 1, 2007. For the purposes of this clause, the terms "modification" and "reconstruction" have the meanings defined in §116.10 of this title and 40 CFR §60.15 (December 16, 1975), respectively, and the term "relocated" means to newly install at an account, as defined in §101.1 of this title, a used engine from anywhere outside that account;

(9) new, modified, reconstructed, or relocated stationary diesel engines placed into service on or after June 1, 2007, that:

(A) operate less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and

(B) meet the corresponding emission standard for non-road engines listed in 40 CFR §89.112(a), Table 1 (October 23, 1998) and in effect at the time of installation, modification, reconstruction, or relocation. For the purposes of this subparagraph, the terms "modification" and "reconstruction" have the meanings defined in §116.10 of this title and 40 CFR §60.15 (December 16, 1975), respectively, and the term "relocated" means to newly install at an account, as defined in §101.1 of this title, a used engine from anywhere outside that account; and

(10) new, modified, reconstructed, or relocated stationary diesel engines placed into service on or after June 1, 2007, that:

(A) are used solely for product testing and personnel training;

(B) operate less than 1,000 hours per year, on a rolling 12-month basis; and

(C) meet the corresponding emission standard for non-road engines listed in 40 CFR §89.112(a), Table 1 (October 23, 1998) and in effect at the time of

installation, modification, reconstruction, or relocation. For the purposes of this subparagraph, the terms "modification" and "reconstruction" have the meanings defined in §116.10 of this title and 40 CFR §60.15 (December 16, 1975), respectively, and the term "relocated" means to newly install at an account, as defined in §101.1 of this title, a used engine from anywhere outside that account.

§117.2130. Operating Requirements.

(a) The owner or operator shall operate any unit subject to the emission specifications of §117.2110 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) in compliance with those specifications.

(b) All units subject to §117.2110 of this title must be operated so as to minimize nitrogen oxides (NO_x) emissions, consistent with the emission control techniques selected, over the unit's operating or load range during normal operations. Such operational requirements include the following.

(1) Each unit controlled with post-combustion control techniques must be operated such that the reducing agent injection rate is maintained to limit NO_x concentrations to less than or equal to the NO_x concentrations achieved at maximum rated capacity.

(2) Each stationary internal combustion engine controlled with nonselective catalytic reduction must be equipped with an automatic air-fuel ratio (AFR) controller that operates on exhaust O₂ or CO control and maintains AFR in the range required to meet the engine's applicable emission specifications.

(3) Each stationary internal combustion engine must be checked for proper operation according to §117.8140(b) of the title (relating to Emission Monitoring for Engines).

(c) No person shall start or operate any stationary diesel or dual-fuel engine for testing or maintenance of the engine between the hours of 6:00 a.m. and noon, except:

(1) for specific manufacturer's recommended testing requiring a run of over 18 consecutive hours;

(2) to verify reliability of emergency equipment (e.g., emergency generators or pumps) immediately after unforeseen repairs. Routine maintenance such as an oil change is not considered to be an unforeseen repair; or

(3) firewater pumps for emergency response training conducted in the months of April through October.

§117.2135. Monitoring, Notification, and Testing Requirements.

(a) Oxygen (O₂) monitors. If the owner or operator installs an O₂ monitor, the criteria in §117.8100(a) of this title (relating to Emission Monitoring System Requirements for Industrial, Commercial, and Institutional Sources) should be considered the appropriate guidance for the location and calibration of the monitor.

(b) Nitrogen oxides (NO_x) monitors. If the owner or operator installs a continuous emissions monitoring system (CEMS) or predictive emissions monitoring system (PEMS), the CEMS or PEMS must meet the requirements of §117.8100(a) or (b) of this title. If a PEMS is used, the PEMS must predict the pollution emissions in the units of the applicable emission limitations of this division.

(c) Monitor installation schedule. Installation of monitors must be performed in accordance with the schedule specified in §117.9210 of this title (relating to Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Minor Sources).

(d) Testing requirements. The owner or operator of any unit subject to §117.2110 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) shall comply with the following testing requirements.

(1) Each unit must be tested for NO_x, carbon monoxide (CO), and O₂ emissions.

(2) One of the ammonia monitoring procedures specified in §117.8130 of this title (relating to Ammonia Monitoring) must be used to demonstrate compliance with the ammonia emission specification of §117.2110(h)(2) of this title for units that inject urea or ammonia into the exhaust stream for NO_x control.

(3) For units not equipped with CEMS or PEMS, all testing must be conducted according to §117.8000 of this title (relating to Stack Testing Requirements). In lieu of the test methods specified in §117.8000 of this title, the owner or operator may use American Society for Testing and Materials (ASTM) D6522-00 to perform the NO_x, CO, and O₂ testing required by this subsection on natural gas-fired reciprocating engines. If the owner or operator elects to use ASTM D6522-00 for the testing requirements, the report must contain the information specified in §117.8010 of this title (relating to Compliance Stack Test Reports).

(4) Test results must be reported in the units of the applicable emission specifications and averaging periods. If compliance testing is based on 40 Code of Federal Regulations Part 60, Appendix A reference methods, the report must contain the information specified in §117.8010 of this title.

(5) For units equipped with CEMS or PEMS, the CEMS or PEMS must be installed and operational before testing under this subsection. Verification of operational status must, at a minimum, include completion of the initial monitor certification and the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

(6) Initial compliance with the emission specifications of §117.2110 of this title for units operating with CEMS or PEMS must be demonstrated after monitor certification testing using the NO_x CEMS or PEMS.

(7) For units not operating with CEMS or PEMS, the following apply.

(A) Retesting as specified in paragraphs (1) - (4) of this subsection is required within 60 days after any modification that could reasonably be expected to increase the NO_x emission rate.

(B) Retesting as specified in paragraphs (1) - (4) of this subsection may be conducted at the discretion of the owner or operator after any modification that could reasonably be expected to decrease the NO_x emission rate, including, but not limited to, installation of post-combustion controls, low-NO_x burners, low excess air operation, staged combustion (for example, overfire air), flue gas recirculation, and fuel-lean and conventional (fuel-rich) reburn.

(C) Stationary, reciprocating internal combustion engines not equipped with CEMS or PEMS must be periodically tested for NO_x and CO emissions as specified in §117.8140(a) of this title (relating to Emission Monitoring for Engines).

(8) Testing must be performed in accordance with the schedule specified in §117.9210 of this title.

(9) All test reports must be submitted to the executive director for review and approval within 60 days after completion of the testing.

(10) The owner or operator of an affected unit in the Dallas-Fort Worth eight-hour ozone nonattainment area must submit written notification of any CEMS or PEMS relative accuracy test audit (RATA) or testing required under this section to the

appropriate regional office and any local air pollution control agency having jurisdiction at least 15 days in advance of the date of RATA or testing.

(e) Run time meters. The owner or operator of any stationary diesel engine claimed exempt using the exemption of §117.2103(5), (8), (9), or (10) of this title (relating to Exemptions) shall record the operating time with a non-resettable elapsed run time meter.

§117.2145. Recordkeeping and Reporting Requirements.

(a) Recordkeeping. The owner or operator of a unit subject to §117.2110 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) shall maintain written or electronic records of the data specified in this subsection. Such records must be kept for a period of at least five years and must be made available upon request by authorized representatives of the executive director, the United States Environmental Protection Agency, or local air pollution control agencies having jurisdiction. The records must include:

(1) for each unit using a continuous emission monitoring system (CEMS) or predictive emission monitoring system (PEMS) in accordance with §117.2135(b) of

this title (relating to Monitoring, Notification, and Testing Requirements) monitoring records of:

(A) hourly emissions for units complying with an emission specification enforced on a block one-hour average; and

(B) daily emissions for units complying with an emission specification enforced on a rolling 30-day average. Emissions must be recorded in units of:

(i) pounds per million British thermal units (MMBtu) heat input; and

(ii) pounds or tons per day;

(2) for each stationary internal combustion engine subject to §117.2110 of this title, records of:

(A) emissions measurements required by §117.2130(b)(3) of this title (relating to Operating Requirements); and

(B) catalytic converter, air-fuel ratio controller, or other emissions-related control system maintenance, including the date and nature of corrective actions taken;

(3) records of carbon monoxide (CO) measurements specified in §117.2130(b)(3) of this title;

(4) records of the results of initial certification testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS, PEMS, or steam-to-fuel or water-to-fuel ratio monitoring systems; and

(5) records of the results of performance testing, including the testing conducted in accordance with §117.2135(d) of this title.

(b) Records for exempt engines. The following records must be maintained for at least five years and must be made available upon request to representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution control agency having jurisdiction.

(1) Written records of the number of hours of operation for each day's operation must be maintained for each engine claimed exempt under §117.2103(5), (8), (9), or (10) of this title (relating to Exemptions) or §117.2130(b)(3) of this title.

(2) For each engine claimed exempt under §117.2103(5) of this title, written records must be maintained of the purpose of engine operation and, if operation was for an emergency situation, identification of the type of emergency situation and the start and end times and date(s) of the emergency situation.

(3) For each engine claimed exempt under §117.2103(10) of this title, records must be maintained of manufacturer's specifications or test data sufficient to demonstrate compliance with the emission standard specified in §117.2103(10)(C) of this title.

(c) Records of operation for testing and maintenance. The owner or operator of each stationary diesel or dual-fuel engine shall maintain the following records for at least five years and make them available upon request by authorized representatives of the executive director, the United States Environmental Protection Agency, or local air pollution control agencies having jurisdiction:

(1) date(s) of operation;

(2) start and end times of operation;

(3) identification of the engine; and

(4) total hours of operation for each month and for the most recent 12 consecutive months.