

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** February 17, 2012

Thru: Bridget Bohac, Chief Clerk
Mark R. Vickery, P.G., Executive Director

From: Susana M. Hildebrand, P.E., Chief Engineer

Docket No.: 2009-2039-RUL

Subject: Commission Approval for Proposed Rulemaking
Chapter 114, Control of Air Pollution from Motor Vehicles
Revision of Texas Low Emission Diesel (TxLED) Rules
Rule Project No. 2009-001-114-EN

Background and reason(s) for the rulemaking:

The current state regulations for Texas low emission diesel (TxLED) under 30 Texas Administrative Code (30 TAC) Chapter 114 require that all diesel as defined under §114.6 (concerning Low Emission Fuel Definitions) that is sold or supplied for use in a compression-ignition engine operating in any of the 110 central and eastern Texas counties listed in §114.319 (concerning Affected Counties and Compliance Dates) must comply with the specifications for aromatic hydrocarbons and cetane number as listed in §114.312 (concerning Low Emission Diesel Standards) or one of the other compliance options listed under this section. This regulation includes all diesel used as fuel for on-road motor vehicles and non-road equipment. The TxLED regulations also apply to marine distillate fuels when these marine distillate fuels are sold or supplied for use in the 1997 Houston-Galveston-Brazoria (HGB) ozone nonattainment area counties of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller. Diesel producers are also allowed to produce TxLED in accordance with an alternative emission reduction plan as specified under §114.318 (concerning Alternative Emission Reduction Plan). TxLED producers and importers are required to register with the Texas Commission on Environmental Quality (TCEQ) as specified under §114.314 (concerning Registration of Diesel Producers and Importers) and to submit quarterly reports to the TCEQ as specified under §114.316 (concerning Monitoring, Recordkeeping, and Reporting Requirements). There are 114 producers and importers currently registered under the TxLED program.

The total projected nitrogen oxides (NO_x) emission reduction benefit from TxLED in 2018 from all 110 counties currently regulated is estimated to be approximately 5.62 tons per day (tpd) from on-road vehicle use and 7.54 tpd from non-road equipment use. The estimated NO_x emission reduction benefit in 2018 from TxLED marine diesel use in the eight-county HGB ozone nonattainment area is approximately 0.89 tpd.

The purpose for the proposed rulemaking is to address the following four issues:

1. Alternative Diesel Formulation Approval Process

The TCEQ has currently approved 20 alternative diesel formulations in accordance with the testing requirements specified under §114.315 (concerning Approved Test Methods) that producers and importers may use to produce TxLED, with 18 of these formulations

Re: Docket No. 2009-2039-RUL

requiring the use of a diesel additive. All but one of the additive-based alternative diesel formulations for TxLED were approved under the testing procedures specified under §114.315(c). In 2010, approximately 34% of all TxLED was reported to have been produced using the additive-based alternative diesel formulations approved by the TCEQ. Approximately 24% of all TxLED in 2010 was reported to have been produced using an additive-based alternative diesel formulation for California diesel approved by the California Air Resources Board (CARB) that producers are allowed to use under §114.312(e) to comply with TxLED standards.

The current TCEQ process to evaluate an alternative diesel formulation for TxLED under §114.315(c) includes review and approval of test protocols prior to emissions testing, observation of the emissions testing at the testing facilities, review of the final test reports from the testing facilities describing the results of the emissions testing, and determining whether the emissions test results satisfy the criteria specified in §114.315(c) that allows the TCEQ to approve the formulation. The TCEQ is also required to request the United States Environmental Protection Agency's (EPA) consultation when proposing to approve an alternative diesel formulation for TxLED.

The TCEQ approval process specified in §114.315(c) has resulted in fiscal and staff resource challenges for the agency. The professional services needed to validate the emissions testing data and to physically observe the emissions testing being performed for approval purposes is costing the TCEQ approximately \$20,000 per application. This rule change would revise the rules to remove the test procedures in §114.315(c) in order to more efficiently utilize agency resources associated with the review, physical testing, and approval process. In addition, this rule change would remove the TCEQ approval option currently specified in §114.315(d) allowing the testing of alternative diesel fuel formulations through the EPA's Environmental Technology Verification (ETV) Program, which the EPA has discontinued. The other TCEQ approval option currently specified under §114.315(d), which specifies criteria for using the Unified Model that was developed by the EPA specifically for the TxLED program, would remain as the only TCEQ method for approving alternative diesel fuel formulations. Companies also have the option of seeking CARB approval. Also, revising the rules to grandfather all alternative diesel formulations approved prior to April 1, 2012, would maintain market stability and address concerns from vendors with previously approved products.

2. Designated Alternative Limits

Section 114.312(e) allows diesel fuel produced to comply with specific California regulations for diesel fuel to be used for compliance with the TxLED requirements, including diesel fuel produced under the designated equivalent limits specified under Title 13 California Code of Regulations (13 CCR) §2282(h)(1). Although this subsection was adopted in March 2005, it does not appear that many producers in Texas are taking advantage of the flexibility provided by these parameters. Revising the current rules to amend §114.313 (relating to Designated Alternative Limits) to include the same fuel property limits specified in 13 CCR §2282(h)(1) as designated alternative limits that producers may use to produce TxLED would provide further clarification of an

Re: Docket No. 2009-2039-RUL

underutilized flexibility in the TxLED program while ensuring equivalent emission reductions.

3. Alternative Emission Reduction Plans

The TxLED regulations allow producers to use diesel offset credits from early gasoline sulfur reductions as a compliance option under the alternative emission reduction plan (AERP) provisions specified under §114.318. However, the ability to use diesel offset credits in the ozone nonattainment counties specified under §114.319(b)(1) - (3) expired December 31, 2008, and expired in the other 90 TxLED counties on December 31, 2010. Revising the current rules in §114.318 to remove the expired provisions pertaining to the use of early gasoline sulfur reduction credits as a methodology option for AERP compliance would simplify this section of the rules.

4. Administrative

The TxLED regulations contain several administrative compliance deadlines that have expired and other administrative requirements relating to registration and reporting that are outdated or need further clarification. Revising the current rules in §114.6 to amend the definitions of final blend, further process, produce, producer, and production facility would clarify that only the person or company that owns or operates the production facility producing the final blend of diesel fuel is considered a producer and is therefore required to register and comply with the other TxLED requirements. Revising the current rules in §114.314 and §114.316 to include registration and quarterly reporting requirements for production facilities would enhance TCEQ's compliance monitoring abilities and would provide further clarification that only the owners and operators of production facilities are considered producers under the TxLED program.

Scope of the rulemaking:

The proposed rule revision would amend Chapter 114 as follows:

- amend §114.6 to repeal the definition of *designated alternative limit* as needed for consistency with proposed new §114.313; repeal the definition of *motor vehicle fuel*; renumber and revise the definitions of *bulk plant*, *further process*, *import*, *import facility*, *importer*, *produce*, *producer*, and *production facility* to replace the term "motor vehicle fuel" with the terms "gasoline" or "diesel fuel" as needed for consistency and clarity; and make other clarifying changes to the definitions of *additive*, *diesel fuel*, *final blend*, *further process*, *gasoline*, *low emission diesel*, *motor vehicle*, *non-road equipment*, *produce*, *producer*, *production facility*, and *retail dispensing outlet* as needed for consistency with other changes to this subchapter;
- amend §114.312 to make changes needed for accuracy and consistency with the proposed changes to §114.313 and §114.315; remove language limiting the acceptance of CARB approved alternative diesel fuel formulations to only those approved on or before January 18, 2005, in order to allow the use of new alternative diesel fuel formulations approved by CARB in the future; and cite the current effective date of the California diesel fuel regulations relevant to this section;
- repeal the existing §114.313 and propose a new §114.313 that would establish new designated alternative limits that have the same fuel property limits as currently

Re: Docket No. 2009-2039-RUL

- specified in 13 CCR §2282(h)(1) to provide additional flexibility to the TxLED program while ensuring equivalent emission reductions;
- amend §114.314 to remove expired registration requirements; require all new producers and importers to register by no later than 45 days after the first date that they begin to provide TxLED to the affected counties; require producers and importers to provide information on each production facility and import facility from which TxLED is produced or imported; and make other clarifying changes as needed to enhance and simplify the registration process;
 - amend §114.315 to remove the supplementary test methods for viscosity and flash point in subsection (a); remove the alternative diesel formulation test procedures in subsection (c) and the option for testing alternative diesel fuel formulations through the EPA's ETV program in subsection (d) to clarify that alternative diesel fuel formulations would only be approved through the provision currently specified under subsection (d) for using the EPA's Unified Model; specify that the approvals of all additive-based alternative diesel fuel formulations approved prior to April 1, 2012, and thereafter, would be subject to revocation if the composition of the additive is found to be altered; and add a subsection (e) to allow all alternative diesel formulations approved by the TCEQ prior to April 1, 2012, to remain in effect;
 - amend §114.316 to make clarifying changes to the reporting requirements as needed for accuracy and consistency with the proposed changes to §§114.313 - 114.315 and 114.318; and specify the sampling and analysis requirements for specific fuel properties for TxLED produced under §§114.312(a), 114.312(e), 114.312(f), 114.313, and 114.318;
 - amend §114.317 (concerning Exemptions to Low Emission Diesel Requirements) to make clarifying changes as needed for accuracy and consistency with the proposed changes to §114.316 and §114.319;
 - amend §114.318 to remove the provisions pertaining to the calculation and use of early gasoline sulfur reduction credits as a methodology option for AERP compliance; require AERPs that use the Unified Model to calculate compliance based on the average fuel properties determined each calendar quarter, instead of yearly as currently required; and allow producers to calculate the average fuel properties used in the Unified Model based on the fuel properties of diesel sold or supplied for use in all affected counties, instead of specific groups of counties as currently required; and
 - amend §114.319 to remove expired compliance schedules in subsection (c) and to add a new subsection (d) to clarify that if the final compliance date of any provision in the section is before the adoption of the current revision to the section and the compliance dates are not specified in the current revision, then the compliance date is past and all affected persons must be and remain in compliance with the provision as of the original compliance date; and make other clarifying changes as needed for accuracy and consistency within the section.

A.) Summary of what the rulemaking will do:

The proposed rulemaking would revise definitions; establish new designated alternative limits for TxLED fuel properties; remove expired registration requirements and establish new registration requirements for identifying production and import facilities; revise

Re: Docket No. 2009-2039-RUL

approval procedures for alternative diesel fuel formulations; specify that the approvals of all additive-based alternative diesel fuel formulations would be subject to revocation if the composition of the additive is found to be altered; allow all alternative diesel formulations approved by the TCEQ prior to April 1, 2012, to remain in effect; revise reporting requirements to include production and import facility data; require alternative emission reduction plans using the Unified Model to determine compliance each calendar quarter; remove expired early gasoline sulfur reduction credits provisions; and make other clarifying changes as needed for accuracy and consistency.

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

None.

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

Not applicable.

Statutory authority:

The revisions are proposed under Texas Water Code (TWC), §5.103, concerning Rules, and TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC. The revisions are also proposed under Texas Health and Safety Code, §382.002, concerning 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; §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act; and §382.202, concerning Vehicle Emissions Inspection and Maintenance Program, which authorizes the commission to establish vehicle fuel content standards after January 1, 2004, as long as distribution of TxLED as described in the state implementation plan (SIP) is not required prior to February 1, 2005, and authorizes the commission to consider alternative emission reduction plans to comply with TxLED requirements.

Effect on the:

A.) Regulated community:

The proposed rulemaking would require diesel producers and importers to register each of their production facilities and/or import facilities that supply diesel fuel for use in the TxLED affected counties and to submit quarterly reports regarding the production and/or importation of TxLED from each registered facility. In addition, the proposed rulemaking would require additive manufacturers to seek CARB approval for any new additive-based alternative diesel formulations.

Re: Docket No. 2009-2039-RUL

B.) Public:

The public would benefit from improved air quality; however, the proposed regulation has the potential for any cost impact on the regulated community to be passed on to consumers.

C.) Agency programs:

Minimal impact is anticipated on agency resources since compliance is monitored through reporting and record reviews. Any cost savings associated with revisions to the alternative diesel formulation approval procedures will be reallocated to other air compliance activities.

Stakeholder meetings:

Stakeholder meetings were held on September 1, 2011, and November 1, 2011, to discuss the potential revisions to the TxLED regulations; and informal comments were accepted for a two-week period following each of the meetings. The stakeholder meetings were open participation.

The stakeholders' informal comments were considered during the development of this proposal.

Potential controversial concerns and legislative interest:

Diesel additive companies may oppose the proposed changes to the approval procedures for alternative diesel fuel formulations since any new additive-based alternative diesel formulations for TxLED would have to be approved by the CARB in order to be accepted by the TCEQ for use in the TxLED program.

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

The proposed rulemaking will affect one current TCEQ policy, i.e., requiring TCEQ observers to be present during the emissions testing being performed for the approval of an alternative diesel fuel formulation for TxLED. This policy will no longer be required under the proposed rulemaking.

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

The consequence of not proceeding with the proposed rulemaking would be that TCEQ would continue to implement the current TxLED regulations that will require a continued cost of approximately \$20,000 per TxLED alternative diesel formulation approval application for the professional services needed to validate the emissions testing data and to physically observe the emissions testing being performed for approval purposes.

The alternatives to proceeding with the proposed rulemaking would be:

- Repeal the TxLED rules entirely and rely on federal diesel regulations to achieve emission reductions. However, as the federal rule focuses on sulfur limits and particulate emissions, the TCEQ would need to address potential Federal Clean Air Act backsliding provisions (Section 110(l) demonstration) for the NO_x emission reductions currently modeled in the SIP for the TxLED rules.

Commissioners
Page 7
February 17, 2012

Re: Docket No. 2009-2039-RUL

- Maintain the status quo and continue to implement the current TxLED rules.

Key points in the proposal rulemaking schedule:

Anticipated proposal date: March 7, 2012

Anticipated *Texas Register* publication date: March 23, 2012

Public hearing date (if any): April 26, 2012

Public comment period: March 23, 2012 through April 27, 2012

Anticipated adoption date: August 2012

Agency contacts:

Morris Brown, Rule Project Manager, 239-1438, Air Quality Division

John Minter, Staff Attorney, 239-0663

Charlotte Horn, Texas Register Coordinator, 239-0779

Attachments

cc: Chief Clerk, 2 copies
Executive Director's Office
Susana M. Hildebrand, P.E.
Anne Idsal
Curtis Seaton
Ashley Morgan
Office of General Counsel
Morris Brown
Charlotte Horn