

# Texas Commission on Environmental Quality

## Interoffice Memorandum

**To:** Commissioners **Date:** August 3, 2012

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

**From:** Steve Hagle, P.E., Deputy Director

**Docket No.:** 2009-2039-RUL

**Subject:** Commission Approval for Rulemaking Adoption  
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 (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 112 producers and importers currently registered under the TxLED program.

The total projected nitrogen oxides (NO<sub>x</sub>) 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<sub>x</sub> emission reduction benefit in 2018 from TxLED marine diesel use in the eight-county HGB ozone nonattainment area is approximately 0.89 tpd.

The adopted rulemaking will 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

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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 2011, approximately 52% of all TxLED was reported to have been produced using the additive-based alternative diesel formulations approved by the TCEQ. Approximately 30% of all TxLED in 2011 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. The adopted revisions to §114.315 will 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, the adopted rule revisions will 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, will remain as the only TCEQ method for approving alternative diesel fuel formulations. Companies will also have the option of seeking CARB approval. Also, revising the rules to grandfather all alternative diesel formulations approved prior to April 1, 2012, will 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 (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. The adopted rule revisions 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 and will provide further clarification of an

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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. The adopted rule revisions to §114.318 will remove the expired provisions pertaining to the use of early gasoline sulfur reduction credits as a methodology option for AERP compliance and will 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. The adopted rule revisions to §114.6 will amend the definitions of final blend, further process, produce, producer, and production facility to 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. The adopted revisions to §114.314 and §114.316 will include registration and quarterly reporting requirements for production facilities and will enhance TCEQ's compliance monitoring abilities and will provide further clarification that only the owners and operators of production facilities are considered producers under the TxLED program.

### **Scope of the rulemaking:**

The adopted rule revision will amend Chapter 114 as follows:

- amends §114.6 to repeal the definition of *designated alternative limit* as needed for consistency with the adopted new §114.313; repeals the definition of *motor vehicle fuel*; rennumbers and revises 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 makes 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;
- amends §114.312 to make changes needed for accuracy and consistency with the adopted changes to §114.313 and §114.315; removes 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 cites the current effective date of the California diesel fuel regulations relevant to this section;
- repeals the existing §114.313 and adopts a new §114.313 that will establish new designated alternative limits that have the same fuel property limits as currently

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- specified in 13 CCR §2282(h)(1) to provide additional flexibility to the TxLED program while ensuring equivalent emission reductions;
- amends §114.314 to remove expired registration requirements; requires 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; requires producers and importers to provide information on each production facility and import facility from which TxLED is produced or imported; and makes other clarifying changes as needed to enhance and simplify the registration process;
  - amends §114.315 to remove the supplementary test methods for viscosity and flash point in subsection (a); removes 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 will only be approved through the provision currently specified under subsection (d) for using the EPA's Unified Model; specifies that the approvals of all additive-based alternative diesel fuel formulations approved prior to April 1, 2012, and thereafter, will be subject to revocation if the composition of the additive is found to be altered; and adds a subsection (e) to allow all alternative diesel formulations approved by the TCEQ prior to April 1, 2012, to remain in effect;
  - amends §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 specifies the sampling and analysis requirements for specific fuel properties for TxLED produced under §§114.312(a), (e), and (f), 114.313, and 114.318;
  - amends §114.317 to make clarifying changes as needed for accuracy and consistency with the adopted changes to §114.316 and §114.319;
  - amends §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; requires 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 allows 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
  - amends §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 makes other clarifying changes as needed for accuracy and consistency within the section.

**A.) Summary of what the rulemaking will do:**

The adopted rulemaking will 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 approval procedures for alternative diesel fuel formulations; specify that the approvals of all

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additive-based alternative diesel fuel formulations will 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 adopted 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 adopted under Texas Health and Safety Code (THSC), §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; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §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; THSC, §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act; and THSC, §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 adopted rulemaking will 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 adopted rulemaking will require additive manufacturers to seek CARB approval for any new additive-based alternative diesel formulations.

**B.) Public:**

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

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**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 adoption; however, written responses to those comments are not included in this rule preamble.

**Public comment:**

The commission scheduled a public hearing for April 26, 2012, at 10:00 a.m. in Building E, Room 201S, at the commission's central office located at 12100 Park 35 Circle. However, the public hearing was not formally opened for comment and a transcript was not prepared because none of the persons present at the hearing location wanted to make comments on the record.

The public comment period closed on April 27, 2012. The commission received comments from the Biodiesel Coalition of Texas (BCOT), Good Company Associates, Love's Travel Stops and Country Stores, Inc. and the Musket Corporation (Love's/Musket), the National Biodiesel Board (NBB), and the EPA. All five commenters were in support of the rule changes, and four of the commenters suggested minor non-substantive changes and/or requested additional clarification on the rule changes.

**Significant changes from proposal:**

In response to comments by BCOT, Love's/Musket, and NBB relating to biodiesel, additional changes were made to the definition of additive in §114.6(1)(B) to further clarify that only those substances that have been added to diesel fuel for the purpose of producing TxLED would be considered additives under the TxLED program.

In response to comments by Good Company Associates, additional changes were made to the definitions of motor vehicle in §114.6(14) and non-road equipment in §114.6(15) to revise the relevant Texas Transportation Code (TTC) citations from TTC, §502.002 to TTC, §502.040 and from TTC, §502.006 to TTC, §502.140. These citation changes were needed in order to reflect the renumbering of the statute as directed by House Bill 2357, 82nd Texas Legislature, 2011.

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**Potential controversial concerns and legislative interest:**

Diesel additive companies may oppose the 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.

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

The adopted rulemaking affects 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 is no longer required under the adopted rulemaking.

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

The consequence of not adopting the proposed rulemaking will be that the TCEQ will 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 TCEQ has reviewed 32 TxLED alternative diesel formulation approval applications since the program began in 2005 at a cost to the state of approximately \$618,954. The TCEQ approved 18 of the 32 reviewed applications and provided conditional approvals for two other applications that were later rescinded after additional testing was conducted.

The alternatives to adopting 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<sub>x</sub> emission reductions currently modeled in the SIP for the TxLED rules; and
- maintain the status quo and continue to implement the current TxLED rules.

**Key points in the adoption rulemaking schedule:**

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

**Anticipated *Texas Register* publication date:** September 7, 2012

**Anticipated effective date:** September 13, 2012

**Six-month Texas Register filing deadline:** September 24, 2012

**Agency contacts:**

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**Attachments**

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