



TCEQ REGULATORY GUIDANCE

**Air Quality Division
DRAFT
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Questions & Answers regarding the Texas Low Emission Diesel Fuel (TxLED) Regulations

Texas Commission on Environmental Quality • PO Box 13087 • Austin, Texas • 78711-3087

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Compliance with Texas low emission diesel (TxLED) fuel standards

How does a producer or importer comply with the TxLED fuel standards?

Producers and importers can satisfy the TxLED fuel standards of [Title 30 Texas Administrative Code \(30 TAC\) §114.312](#) using any of the following five methods:

- Produce or import diesel fuel that has a maximum aromatic hydrocarbon content of 10% by volume and has a minimum cetane number of 48.
- Produce or import diesel fuel that complies with the California diesel fuel regulations under [Title 13 California Code of Regulations \(13 CCR\) §2282](#) in effect as of August 4, 2005, except for those regulations established for small refineries. Diesel fuel produced to comply with the “designated equivalent limits” specified in the California diesel regulations under [13 CCR §2282\(h\)\(1\)](#) would also be considered compliant with the TxLED fuel standards.
- Produce or import diesel fuel that complies with the specifications of a California Air Resources Board (CARB) certified alternative diesel formulation that was approved by CARB to meet the California diesel regulations under [13 CCR §2282](#) in effect as of August 4, 2005. CARB certified alternative diesel formulations that were approved for compliance with California’s small refinery specifications for diesel fuel are not acceptable.
- Produce or import diesel fuel that complies with all of the designated alternative limits specified under [30 TAC §114.313](#).
- Produce or import diesel fuel that complies with an alternative diesel fuel formulation that has been approved by the TCEQ under [30 TAC §114.315](#) as achieving comparable or better emission reductions.
- Produce diesel fuel under an alternative emission reduction plan (AERP) that has been approved by the TCEQ under [30 TAC §114.318](#) as a substitute fuel strategy that will achieve equivalent emission reductions.

For the purposes of this guidance document, the definition of “diesel fuel” as specified in [30 TAC §114.6](#) applies.

How do the TxLED fuel standards apply to biodiesel, biodiesel blends, and biodiesel blenders?

The sale and supply of B100 biodiesel (100% biodiesel) is not regulated under the TxLED regulations because B100 biodiesel does not meet the definition of diesel fuel as defined under [30 TAC §114.6](#).

The sale and supply of biodiesel blends, e.g., B20, are also not regulated under the TxLED regulations because biodiesel does not meet the definition for "additive" as specified in [30 TAC §114.6](#) when it is blended with diesel fuel. However, the petroleum diesel that is to be blended with biodiesel must comply with the TxLED regulations when the biodiesel blend is to be sold or supplied for use as fuel in any of the 110 central and eastern Texas affected by the TxLED requirements.

Biodiesel Blenders

For the purposes of [30 TAC §§114.312 - 114.319](#), the blenders of biodiesel blends will not be considered as producers of diesel fuel subject to the TxLED regulations. Rather, biodiesel blenders will only be considered as part of the diesel distribution chain and, as such, are required to comply with the record keeping requirements specified in [30 TAC §114.316\(e\)](#).

Biodiesel Blends

Biodiesel blends will be considered compliant with the TxLED standards provided the petroleum diesel fuel used to make the biodiesel blend is compliant with the TxLED standards.

Biodiesel Blendstock Recommendations

The TCEQ recommends that the biodiesel blendstock used for biodiesel blends in TxLED affected counties meet the following specifications:

1. The biodiesel blendstock should meet all of the requirements of the current active version of ASTM D6751 (*Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels*); and
2. The biodiesel blendstock should contain no more than 15 parts per million (ppm) sulfur, as determined using the appropriate test methods and procedures specified in the current active version of ASTM D6751.

For the purposes of this guidance document, the definitions of "biodiesel" and "biodiesel blend" as specified in [34 TAC §3.443](#) apply.

Do the TxLED fuel standards apply to diesel fuel used for nonroad equipment, locomotives, and marine engines?

Yes. All diesel fuel that is commonly or commercially known or represented as Grade No.1D or No.2D diesel fuel in accordance with the ASTM D975, *Standard Specification for Diesel Fuel Oils*, that is sold in or supplied into any of the 110 Texas counties affected by the TxLED regulations that may ultimately be used to power a diesel-fueled compression-ignition engine within those affected counties is required to meet the TxLED fuel standards. In addition, all marine distillate fuels classified as DMX or DMA as specified by the International Standard ISO 8217 (*Specifications for Marine Fuels*), also known as marine gas oil (MGO), that may ultimately be used to power a diesel-fueled compression-ignition engine on a marine vessel in the eight-county Houston/Galveston/Brazoria (HGB) 1997 ozone nonattainment area of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties are also required to meet the TxLED fuel standards.

There is no distinction in the TxLED regulations between Grades No. 1D or No. 2D diesel fuel used by on-highway motor vehicles and that used by nonroad equipment, locomotives, and marine engines.

The TxLED regulations do not contain a standard for sulfur in diesel. Therefore, producers and importers must comply with the federal sulfur standards applicable to the type and use of the diesel being produced or imported, i.e., 15 ppm sulfur maximum for diesel used by on-highway motor vehicles beginning June 1, 2010, 15 ppm sulfur maximum for diesel used by nonroad equipment beginning June 1, 2010, and for locomotives and marine engines beginning June 1, 2012.

I own a facility located in the 110-county region that is subject to the Title V permitting program and I have diesel fuel storage tanks on site. Are the TxLED regulations in Chapter 114 an applicable requirement for Title V purposes?

No. [30 TAC Chapter 114](#) relates to air pollution control from mobile sources, rather than stationary sources. Therefore, Chapter 114 is not an applicable requirement under the TCEQ's Title V program rules.

Affected Parties

Who is affected by this rule?

Primarily, the TxLED regulations apply to the producers and importers of diesel fuel that intend to sell, offer for sale, supply, or offer for supply diesel fuel in any of the 110 counties covered by the rules. However, in some fashion all parties involved in the

production, distribution, and use of diesel fuel in the 110 counties in the Eastern half of Texas are affected since [30 TAC §114.312\(a\)](#) states that no person shall sell, offer for sale, supply, or offer for supply, dispense, transfer, allow the transfer, place, store, or hold any diesel fuel in any stationary tank, reservoir, or other container in the affected 110 counties that may ultimately be used to power a diesel fueled compression-ignition engine in the affected counties unless the diesel fuel is compliant with the TxLED regulations.

Are consumers required to purchase and use TxLED when operating diesel engines in the affected counties?

The ultimate consumer of diesel fuel in the affected 110 counties is not required to purchase or use TxLED. However, all diesel fuel suppliers in the affected counties are prohibited from selling diesel fuel for use as a fuel to power a diesel-fueled compression-ignition engine within the 110 affected counties that is not compliant with the TxLED regulations.

Who does the TCEQ consider to be a producer or importer?

A producer is any person or company that manufactures diesel fuel either through the refining of petroleum or the combining of blend stocks to create the finished product that is represented as diesel fuel. This definition also applies to any person or company that blends an additive with non-compliant diesel fuel to create a finished product that may be represented as TxLED compliant diesel fuel or “further processes” a TxLED compliant diesel fuel by adding an additive to create a new finished product, e.g., an additive-based alternative diesel fuel formulation of TxLED.

An importer is any person or company that is responsible for the transport of diesel fuel into the affected 110 counties from outside the state.

Who would be considered a Wholesale Bulk Purchaser?

A company or organization that purchases large volumes of diesel fuel for its own use and stores it at its own storage facility (e.g., purchasing quantities of 50,000+ gallons at a time).

Additives

Do all additives have to be approved by the TCEQ before they can be added to diesel fuel in the affected counties?

No. The only additives that must be approved by the TCEQ are those that are used in diesel fuel to produce TxLED in compliance with the TxLED regulations. Additives

such as those used to increase lubricity or enhance cold flow characteristics are not required to be approved.

Alternative diesel formulations

What is an alternative diesel fuel formulation?

An alternative diesel fuel formulation is a diesel fuel that has been approved by the TCEQ to achieve emission reductions that are comparable to or better than those that would be accomplished by TxLED, but without meeting the fuel content specifications for aromatic hydrocarbons and cetane as specified in [30 TAC §114.312\(a\)](#). An alternative diesel fuel formulation could be produced through changes in the chemical characteristics of the fuel or through the blending of fungible diesel with an additive.

Diesel fuel producers and importers may use a TCEQ approved alternative diesel fuel formulation for compliance with the TxLED fuel content requirements as provided under [30 TAC §114.312\(d\)](#) of the TCEQ regulations.

How is an alternative diesel formulation different from an alternative emission reduction plan (AERP)?

As explained earlier, an alternative diesel formulation must be a diesel fuel. An alternative emission reduction plan (AERP) is used by producers who want to use a substitute fuel strategy to reduce the same amount of emissions that would have been reduced if they were producing TxLED. The TxLED regulations under [30 TAC §114.318](#) specify the requirements that producers must meet to use an AERP for compliance with the TxLED fuel standards under [30 TAC §114.312](#).

How do I receive approval for my alternative diesel fuel formulation?

The process to obtain TCEQ approval of an alternative diesel fuel formulation for TxLED is specified in [30 TAC §114.315\(c\)](#) and requires the alternative diesel fuel formulation to undergo testing to determine fuel properties such as cetane number, aromatic hydrocarbon content, American Petroleum Institute (API) gravity, and distillation temperatures in order to be approved by the TCEQ.

Alternative diesel fuel formulations that have been approved by the California Air Resources Board (CARB), except those approved to meet California diesel fuel specifications applicable to small refineries, are considered approved by the TCEQ without the need for further review and may be used by producers and importers for compliance with the TxLED fuel standards as provided under [30 TAC §114.312\(c\)](#).

Approval Procedures

Persons seeking approval for an alternative diesel fuel formulation under [30 TAC §114.315\(c\)](#) must submit an application to the TCEQ that includes the following documentation:

1. A cover letter to the TCEQ requesting approval of the proposed alternative diesel fuel formulation. The cover letter must identify the applicant and describe the fuel property composition of the proposed alternative diesel fuel formulation.
2. Fuel analysis data from an independent testing facility documenting the fuel properties of a sample of the proposed alternative diesel fuel formulation to demonstrate that the applicable fuel properties of the proposed alternative diesel fuel formulation will reduce NO_x emissions by at least 5.5% from on-road diesel fuel for the year 2007, and at least 6.2% from non-road diesel, when using the Unified Model as described in the EPA staff discussion document, [Strategies and Issues in Correlating Diesel Fuel Properties with Emissions, Publication Number EPA420-P-01-001](#), published July 2001. The fuel analysis testing must comply with the testing requirements specified under [30 TAC §114.315\(a\)](#). **NOTE:** The Unified Model may not be used for additive based formulations.
3. Information that indicates that the emissions testing facility to be used to conduct the testing has reasonable quality assurance and quality control procedures in place to ensure the accuracy of the test results.

NOTE: An Excel spreadsheet version of the Unified Model is available on the TCEQ's TxLED Web site at <http://www.tceq.texas.gov/airquality/mobilesource/txled/txled-alternative-emission-reduction-plans> .

The TCEQ will review the application and submitted fuel analysis data to determine whether the proposed alternative diesel fuel formulation satisfies the NO_x emissions reduction requirements specified under [30 TAC §114.315\(c\)](#) using the Unified Model. If the results of the Unified Model satisfy the requirements for approval under [30 TAC §114.315\(c\)](#), the TCEQ will issue an approval notification for the alternative diesel fuel formulation.

Upon the TCEQ's decision to approve an alternative diesel fuel formulation for TxLED under [30 TAC §114.315](#), the TCEQ will issue an approval notification certifying that the alternative diesel fuel formulation may be used to satisfy the TxLED fuel standards specified under [30 TAC §114.312](#). As part of the approval notification, an identification number will also be assigned to the approved alternative diesel fuel formulation that would be used for reporting as required under [30 TAC §114.316](#). The approval notification and approval letter will be posted on the TCEQ's TxLED Web site at <http://www.tceq.texas.gov/airquality/mobilesource/txled/cleandiesel.html> .

How long does it take to go through the TCEQ alternative diesel fuel formulation approval process?

The TCEQ estimates that the entire process could take up to a month or more to complete depending upon the completeness of the application and review time.

If my CARB-approved alternative diesel fuel formulation (which is additive-based) has a base fuel specification for sulfur that is less than 15 ppm, will the TCEQ accept it as TxLED when it is blended into higher sulfur diesel fuel used for nonroad applications?

Yes. The sulfur content of an alternative diesel fuel formulation would have no impact on the ability of the formulation to reduce NO_x emissions. Therefore, if the additive is approved by California or the TCEQ when blended with ultra-low sulfur diesel fuel (<15 ppm), the TCEQ will continue to accept it when it is blended with higher sulfur diesel fuel (>15 ppm).

If the untreated diesel fuel that was used as the candidate fuel in a TCEQ- or CARB-approved additive-based alternative diesel formulation had an aromatic hydrocarbon content of 29% by volume when the formulation was tested for approval, is the additive allowed to be mixed with a diesel fuel that has an aromatic hydrocarbon content of 32% by volume?

Any TCEQ- or CARB-approved additive-based alternative diesel formulation that used a candidate fuel with fuel properties that demonstrate a calculated reduction in NO_x emissions of no greater than 3.0 percent in 2007 when using the Unified Model as described in the EPA staff discussion document, [*Strategies and Issues in Correlating Diesel Fuel Properties with Emissions*, Publication Number EPA420-P-01-001](#), published July 2001, may use any diesel fuel as defined under [30 TAC §114.6](#) as the base diesel fuel when blending the formulation.

NOTE: An Excel spreadsheet version of the Unified Model is available on the TCEQ's TxLED Web site at <http://www.tceq.texas.gov/airquality/mobilesource/txled/txled-alternative-emission-reduction-plans> .

Are the additive-based alternative diesel fuel formulations approved by the TCEQ or CARB for use with any ASTM D975 compliant Grade No. 1D or No. 2D diesel fuels also approved by the TCEQ for use with DMX or DMA classified marine diesel fuels?

Yes. The TCEQ- or CARB-certified additive-based alternative diesel formulations that were approved for use with any ASTM D975 compliant Grade No. 1D or No. 2D diesel fuel may be used by producers and importers for treating DMX or DMA classified

marine diesel fuels for compliance with the TxLED fuel standards. However, if the TCEQ- or CARB-certified additive-based alternative diesel formulation required the base diesel fuel to meet a designated specification, such as a minimum cetane number, then the DMX or DMA classified marine diesel fuel would also be required to meet the designated specification as well.

Who do I contact at the TCEQ about my questions regarding alternative diesel fuel formulations?

For questions regarding alternative diesel formulations and the approval processes, please contact:

Morris Brown, Air Quality Division
(512) 239-1438
morris.brown@tceq.texas.gov

Alternative Emission Reduction Plan (AERP)

What is an alternative emission reduction plan and when is it necessary?

An alternative emission reduction plan (AERP) is the documentation by which a diesel fuel producer demonstrates how a substitute fuel strategy (or strategies) will reduce the same amount of NO_x emissions that otherwise would have been reduced if they were producing TxLED through compliance with [30 TAC §114.312](#). The TxLED regulations under [30 TAC §114.318](#) specify the requirements that diesel fuel producers must meet to use an AERP for compliance with the TxLED fuel standards under [30 TAC §114.312](#).

An AERP may be submitted by diesel fuel producers who intend to sell, offer for sale, supply, or offer for supply diesel fuel in the 10 counties covered under the TxLED rules and who do not intend to produce diesel fuel that would comply with the TxLED requirements under [30 TAC §114.312](#) or [30 TAC §114.313](#).

What type of AERPs may be submitted to the TCEQ for approval?

The TxLED regulations under [30 TAC §114.318](#) specify the type of AERP that may be used by producers to demonstrate compliance with the TxLED fuel standards under [30 TAC §114.312](#). The type of AERP allowed under the TxLED regulations is listed as follows:

1. *The production of cleaner diesel on average.* To demonstrate compliance with the AERP provisions under [30 TAC §114.318\(b\)](#) for the production of cleaner diesel, producers must use the Unified Model as described in EPA's July 2001 staff discussion document, [Strategies and Issues in Correlating Diesel Fuel Properties](#)

[with Emissions \(Report EPA420-P-01-001\)](#) to calculate whether the average fuel properties of all of the diesel fuel supplied by the producer to an affected area each calendar quarter achieves the minimum NOX emission reductions specified under [30 TAC §114.318\(b\)](#).

What tools may be used to demonstrate compliance with the AERP requirements?

The TCEQ has developed an Excel spreadsheet tool, known as the TxLED Unified Model Calculator, for producers to use to determine whether their proposed AERP will comply with requirements specified under [30 TAC §114.318\(b\)](#) to be approved by the TCEQ. The TxLED Unified Model Calculator contains all of the calculations as described in EPA's July 2001 staff discussion document, [Strategies and Issues in Correlating Diesel Fuel Properties with Emissions \(Report EPA420-P-01-001\)](#) to calculate compliance under [30 TAC §114.318](#) and it is available on the TCEQ's TxLED Web site at <http://www.tceq.texas.gov/airquality/mobilesource/txled/txled-alternative-emission-reduction-plans>.

When do AERPs need to be submitted to the TCEQ?

An AERP must be submitted and approved by the executive director prior to the use of that plan for compliance with the TxLED regulations. The TCEQ will determine whether to approve or disapprove an AERP that is submitted by a diesel fuel producer in accordance with [30 TAC §114.318](#) within 45 days of submittal.

The TCEQ has developed an Alternative Emission Reduction Plan Submittal Form for producers to use to submit their proposed AERP to the TCEQ for approval. A copy of the Alternative Emission Reduction Plan Submittal Form is available on TCEQ's TxLED Web site at <http://www.tceq.texas.gov/airquality/mobilesource/txled/cleandiesel.html>.

Does my AERP need approval from both the TCEQ and EPA?

No. AERPs that comply with the requirements specified under [30 TAC §114.318](#) and are approved by the TCEQ do not need further approval from the EPA to be used for compliance with TxLED regulations.

Are reductions at stationary sources acceptable as part of the AERP?

No. The TxLED rules specify that an AERP must be composed of a substitute fuel strategy as specified under [30 TAC §114.318\(b\)](#).

Can I purchase Emission Reduction Credits (ERCs) to satisfy my NO_x reduction target?

No. The TxLED rules specify that an AERP must be composed of a substitute fuel strategy as specified under [30 TAC §114.318\(b\)](#).

Can I use the sulfur credits generated under the Averaging, Banking and Trading (ABT) provisions of the federal Tier 2 ultra low sulfur gasoline (ULSG) regulations to satisfy my NO_x reduction target?

No. Producers are not allowed to use the sulfur credits they are generating under the federal Tier 2 ULSG gasoline ABT program for meeting their compliance with TxLED regulations.

Am I allowed to include a force majeure or variance provision in the AERP that I submit?

No. The TxLED regulations under [30 TAC §114.318](#) do not include provisions for force majeure or variance approvals. However, producers with alternative emission reduction plans may submit a written request to the executive director of the TCEQ for enforcement discretion if an unforeseeable event occurs that prevents their compliance with the TxLED regulations under their approved alternative emission reduction plan. The written request should include: (1) a description of the unforeseeable event that prompts the request; (2) an estimate of the volume, timing, quality, and destination of noncompliant material that will be distributed as a result; and (3) proposed measures to make-up those emissions reductions. The executive director will notify the producer if the enforcement discretion is granted.

How will the TCEQ ensure compliance?

The TCEQ relies on the monitoring, record-keeping, and reporting requirements as the primary means of enforcement. Additionally, the TCEQ reserves the right to do random fuel analysis tests on final blends.

What are the monitoring, record-keeping, and reporting requirements for a producer with an approved AERP?

Producers with approved AERPs are required to comply with the product transfer document labeling requirements, the monitoring (sampling and testing) requirements, and quarterly reporting requirements specified in [30 TAC §114.316](#).

How long is an AERP effective?

An approved AERP using the cleaner diesel provisions under the [30 TAC §114.318\(b\)](#) is considered to be effective as long as it continues to achieve equivalent emission reductions.

Am I allowed to revise my AERP after it has been submitted?

Yes. The TCEQ recognizes that AERPs may need to change with market conditions or for other reasons. However, any changes to AERPs must include the appropriate re-

modeling of emissions reductions to ensure that your NO_x emission reduction target continues to be met. The revised AERP will require TCEQ approval.

Who do I contact at the TCEQ about my questions regarding AERPs?

For questions regarding alternative emission reduction plans, please contact the following TCEQ staff:

Primary Contact:

Morris Brown, Air Quality Division
(512) 239-1438
morris.brown@tceq.texas.gov

Legal Contact:

John Minter, Legal Division
(512) 239-6366
john.minter@tceq.texas.gov

Cetane Measurement

Can I use a Cetane Index to determine compliance with the Cetane Number requirements of the TxLED rules?

Yes, when appropriate. Whenever ASTM D613 (*Test Method for Cetane Number of Diesel Fuel Oil*) is not readily available to determine the cetane number as required in the TxLED rules for compliance with the low emission diesel standards specified under [30 TAC §114.312](#) and the monitoring, recordkeeping, and reporting requirements specified under [30 TAC §114.316](#), the cetane index as determined by ASTM D4737 (*Test Method for Calculated Cetane Index by Four Variable Equation*) may be used as an approximation.

Commingling

Does the TCEQ allow the commingling of TxLED and TxLED-compliant fuels in the distribution system?

Yes. Volumes of diesel fuel identified on their product transfer documents (PTD) as TxLED, TxLED-compliant under an alternative emission reduction plan (AERP), or non-compliant diesel fuel that requires further processing, may be commingled in the same storage facility while in the distribution system. The operator of the storage facility will be required to label the PTD of the outgoing diesel fuel according to the volume of the specific fuel received. (For example, if 10,000 barrels of TxLED entered the storage tank,

then 10,000 barrels being transferred out of the storage tank should be labeled as TxLED).

The same volume of diesel fuel that is labeled as non-compliant diesel requiring further processing (i.e., fungible EPA diesel) that is commingled with compliant fuel in the same storage facility must also be labeled the same when transferred out of the storage tank or it must be further processed (i.e., injecting an approved additive into the fuel either as specified in accordance with an TCEQ-approved additive-based alternative diesel formulation) and labeled accordingly as either TxLED or TxLED-compliant under an TCEQ-approved AERP.

Can non-compliant fungible EPA diesel that is to be blended with an approved additive (e.g., ORYXE LED+6610, or Kern KOR-4c) be commingled with TxLED-compliant fuel? What portion of that total blended volume must be additized?

Yes, see previous answer above. The volume to be additized is dependent on the volume of non-compliant diesel fuel that is being received and how it is being additized. If the non-compliant diesel fuel is being additized as it is going into the storage tank to be commingled with the TxLED or an amount of the additive is blended into the tank during storage to compensate for the volume of fungible EPA diesel, then no further additization is required. However, if the additive is blended into the fuel as it leaves the tank, then the same volume of the non-compliant diesel fuel that went into the storage tank will be required to be additized at the rate required under the approved alternative diesel formulation.

Can I commingle non-compliant fungible EPA diesel that will not be supplied to the affected areas in the same storage tank with volumes of TxLED, TxLED-compliant under an alternative emission reduction plan, and non-compliant fungible EPA diesel that requires further processing, that will be supplied to the affected counties?

Yes, see previous answers above. The volume of fungible EPA diesel exiting a commingled tank for distribution and use outside of the affected counties is not required to comply with TxLED regulations, including labeling requirements. However, the operator of the storage facility may only label the PTDs of the diesel fuel being supplied out of the commingled tank for use within the TxLED affected counties in accordance with the specific volumes of TxLED and TxLED-compliant under a TCEQ approved AERP that are received; any other volumes of diesel fuel from the commingled tank will be considered non-compliant diesel that needs to be further processed before it can be distributed for use within the TxLED affected counties.

Enforcement

At what point is a stationary tank, reservoir, or other storage container considered compliant with §114.312(a) if that receptacle contains non-compliant diesel but is being refueled only with TxLED or TxLED-compliant fuel under an alternative emission reduction plan?

The storage receptacle would be considered compliant with [30 TAC §114.312\(a\)](#) when the volume as indicated on the PTDs of the received TxLED or TxLED-compliant fuel being transferred into the storage receptacle exceeds the volume of the storage receptacle.

If the TCEQ samples/tests product at some point in the distribution system, how does the TCEQ know if the fuel is in compliance since although it may not meet TxLED specifications, it may be acceptable under the producer's alternative emission reduction plan?

The primary check for compliance in the distribution system will be through the review of PTDs and the producer's testing/sampling records. Other compliance methods may also be used as deemed appropriate.

Lubricity

Did the TCEQ adopt the lubricity standard as specified in ASTM D975, *Standard Specification for Diesel Fuel Oils*?

No. The TxLED regulations cite ASTM D975 for appropriate test methods and as a reference for specific definitions. The TxLED regulations do not contain a specified lubricity standard.

NOTE: The Texas Department of Agriculture, as directed by House Bill 2925, Acts of the 81st Texas Legislature, has adopted new minimum fuel quality standards in [4 TAC §5.7](#), effective January 26, 2010, specifying ASTM D975, *Standard Specification for Diesel Fuel Oils*, as the standard specification for all diesel motor fuels and renewable diesel fuels sold or supplied for use in Texas. The current active version of the ASTM D975 standard includes a minimum specification for lubricity.

Permits

Will I need a permit for the diesel additive storage tanks that will be needed for the production of TxLED using a TCEQ-approved

alternative diesel formulation or under an alternative emission reduction plan?

This document does not attempt to address permit authorizations you may need to comply with the TxLED rules. Depending upon your strategy for compliance, various types of permits may be needed at the federal, state and local level. Please link to the TCEQ's Small Business and Local Government Assistance (SBLGA) program Web page at <http://www.tceq.texas.gov/assistance> or call 1-800-447-2827 for assistance regarding permit requirements.

Registration

Who is required to register?

Only those diesel producers and importers that sell or supply diesel fuel for use within the 110 Texas counties affected by the TxLED regulations are required to register with the TCEQ. Diesel producers and importers are required to register with the TCEQ by no later than 45 days after they begin to sell or supply diesel fuel for use within any of the 110 counties affected by the TxLED regulations.

Recordkeeping

Who is required to keep records?

All parties in the distribution chain, including producers, importers, bulk terminals, pipeline operators, common carriers, wholesale bulk purchasers, and retail fuel dispensing outlets, that sale or supply diesel fuel for use as a fuel within any of the 110 Texas counties affected by the TxLED regulations are required to maintain copies or records of the product transfer documents for a minimum of two years. These records must be made available upon request to the TCEQ, EPA, or to the local air pollution agency having jurisdiction in the area.

Sampling and Testing

Who is required to sample and test diesel fuel for compliance with the TxLED regulations?

Only producers and importers are required to sample and test to ensure that the diesel fuel they are producing or importing is compliant with the TxLED regulations. The other parties in the distribution chain, such as bulk terminals, pipeline operators, common carriers, wholesale bulk purchasers, and retail fuel dispensing outlets, are not required to sample or test. However, if a bulk terminal or other party in the distribution chain further

processes a volume of diesel fuel, (i.e., adding an approved diesel fuel additive into the fuel as specified in accordance with an TCEQ approved alternative diesel formulation), then that party becomes the producer of that final blend and is required to sample and test accordingly. In addition, they would also be required to comply with all of the other requirements in the TxLED regulations that apply to producers, including the registration and reporting requirements.

How often must I do sampling and testing?

Producers and importers must sample and test each final blend of TxLED that is produced or imported for use as fuel in any of the 110 Texas counties affected by the TxLED regulations. However, the type of sampling and testing is dependent upon the compliance method used to produce the TxLED.

For TxLED that is produced with the use of an additive as it being loaded to pipelines, tank ships, railway tank cars, or delivery truck tank trailers, the sampling and testing requirement may be satisfied through the use of a volumetric additive reconciliation (VAR) system that records the volume of additive and the volume of the diesel fuel additized in each final blend of TxLED produced. The producer should closely monitor the VAR records to ensure compliance with additive treat rates and to reduce the occurrence of large volumes of non-compliant diesel fuel being produced as a result of malfunctions in the additive injection systems.

Do I have to pull a physical sample of the final blend when I produce TxLED at the terminal rack using an additive injection system?

It depends upon the specification of the additive's approved alternative diesel formulation. If the additive was approved for use with fungible EPA diesel, with no other specific fuel property requirements (e.g., a minimum cetane number of 50), the producer may "sample and test" each final blend of TxLED produced by the operation of the additive injection system through the use of a VAR system that records the volume of additive being injected and the volume of diesel being additized to ensure that the approved additive treat rate was being maintained. A VAR report would be used as the record for this type of "sample."

However, if the additive's approved alternative diesel formulation required the base fuel to meet a specific fuel property requirement that is more stringent than required for fungible EPA diesel (e.g., an aromatic hydrocarbon content of less than 25 percent per volume), the producer must obtain a physical sample of the final blend to test for the appropriate fuel components of the base fuel and additive as listed in the additive's alternative diesel formulation approval notification issued by the TCEQ.

If the fuel analysis of a sample of TxLED shows that the total aromatic hydrocarbon content is calculated to be 10.43 percent by volume and

the specification listed in the rules is 10 percent maximum by volume, is this fuel compliant?

Yes. The TCEQ will allow the results of fuel analysis to be rounded off to two significant figures, i.e., 10.43 may be rounded to 10 and therefore compliant with the specification. The procedure accepted by the TCEQ for rounding final results is as follows: If the first digit to be discarded is less than five, the last digit retained should not be changed; if greater than five or if it is a five followed by at least one digit other than zero, the last figure retained should be increased by one unit; if it is exactly five, followed only by zeros, the last digit retained should be rounded upward if it is an odd number, but no adjustment if it is an even number. However, all intermediate calculations used to determine the final results must retain at least five significant figures, only the final number should be rounded off as described above.