

**Texas Commission on Environmental Quality
Texas Emissions Reduction Plan
Emissions Reduction Incentive Grants Program**

**Notice to Manufacturers of
Dual-Fuel Conversion Systems for Heavy-Duty On-Road and Non-Road Engines
*Procedures to Request a Determination of Emissions Reduction Factors***

The Texas Commission on Environmental Quality (TCEQ) has available procedures for a manufacturer of a dual-fuel (natural gas + diesel) conversion system for the retrofit of heavy-duty on-road or non-road engines to request a determination by the TCEQ of the emissions reduction factors that may be used in considering an application for grant funding under the Texas Emissions Reduction Plan (TERP) Emissions Reduction Incentive Grants (ERIG) Program.

Two key eligibility requirements of the ERIG Program have been that the project must result in at least a 25% reduction in nitrogen oxides (NO_x) and that the emissions of the new or retrofitted engine have been certified to meet federal emission standards or verified to reduce emissions by the United States Environmental Protection Agency (EPA) or the California Air Resources Board (CARB).

The TCEQ is authorized by statute to use a lower percentage reduction standard for projects to convert a heavy-duty on-road or non-road diesel engine to operate under a dual-fuel configuration that uses natural gas and diesel fuel. The TCEQ has set an alternative standard of at least a 10% reduction in NO_x for these types of projects.

The statutory provisions also recognize that dual-fuel conversion systems are only approved by the EPA or CARB to meet the emission standard applicable to the diesel engine, which does not account for a reduction in certain emissions in dual-fuel mode. The TCEQ is authorized to consider the certified emissions test results for the engine in dual-fuel mode in determining the emissions reductions that may be attributable to the installation of a dual-fuel conversion system.

This authorization only applies to the retrofit of an existing heavy-duty on-road or non-road diesel engine owned by the applicant to use natural gas and diesel fuel. The authorization does not apply to engines using other fuels or to locomotive, marine vessel, or stationary engines.

Also, only systems that have been certified or approved by the EPA or CARB may be considered under this alternative approach. The EPA does not currently have a requirement that alternative fuel conversion systems for non-road engines be approved by the EPA, although alternative fuel conversion systems to be sold in California are certified under CARB's alternative fuel retrofit certification program. To provide a mechanism for manufacturers to obtain definitive approval by the EPA for non-road engine conversion systems, the EPA will allow a manufacturer to submit a request under the EPA's Field Fix approval process. However, this option is only available for systems manufactured by the original equipment (engine) manufacturer and not a third-party manufacturer. Therefore, the TCEQ is not able to consider this alternative approach for a dual-fuel conversion system for non-road engines that has not been certified by CARB or received a Field Fix approval by the EPA.

The TCEQ has prepared procedures for manufacturers of eligible dual-fuel conversion systems to request a determination by the TCEQ of the NO_x emissions reduction factors that may be accepted for a retrofit project submitted for a grant under the ERIG Program. This determination is required before a dual-fuel conversion system will be considered for funding using the alternative emissions reduction factors.

Manufacturers of eligible dual-fuel conversion systems that intend to make their systems available in Texas may submit the information outlined in the procedures document, *Procedures to Request a Determination of Emissions Reduction Factors*. The document includes a required format for submitting information along with a list of materials and documentation to include with the request.

The TCEQ will periodically open new ERIG grant application periods. The TCEQ must have made the required determination before an application for a dual-fuel conversion system may be considered under this alternative approach.

If you have any questions, please contact Mr. Stephen Dayton at (512) 239-6824 or toll-free at 1-800-919-TERP (8377).