

## Appendix 10

### Use of Qualifying Fuel

This appendix outlines the criteria for project eligibility and gives the methods for calculating the reductions in NO<sub>x</sub> emissions for a project using qualifying fuel. In order to be considered a qualifying fuel, the fuel or fuel additive must be verified by the EPA or the California Air Resources Board (CARB), or otherwise accepted by the TCEQ as resulting in lower emissions of NO<sub>x</sub> than the baseline fuel for the vehicle or equipment in which the qualifying fuel or additive is used. The baseline fuel used for comparison normally will be either standard on-road or non-road diesel fuel, or gasoline.

The methods for calculating the reductions in NO<sub>x</sub> emissions for a qualifying fuel project also appear in this chapter. Most of the calculations will require input of an NO<sub>x</sub> emissions factor applicable to the engine or vehicle. The emissions standards and factors applicable to this program appear in a technical supplement, which will be made available in conjunction with these guidelines on the TERP website at <[www.terpgrants.org](http://www.terpgrants.org)>. Potential grant applicants should contact the TCEQ for copies of the supplement and for answers to questions about which emissions standards and factors to use.

In accordance with Texas Health and Safety Code 386.104(j) and TERP program rules, 30 TAC 114.622(g), the executive director or his or her designee has the authority to waive certain eligibility requirements, based on a finding of good cause. The executive director may identify eligibility criteria for which a waiver may be considered, based on a finding of good cause and subject to the statutory and regulatory requirements. Waiver options will be explained in the grant-application materials.

In determining good cause and deciding whether to grant a waiver, the executive director shall ensure that the emissions reductions that will be attributable to the project will still be valid and, where applicable, meet the conditions for assignment for credit to the State Implementation Plan.

### Eligible Activities and Costs

The reimbursements for incremental fuel costs under this category should be made over the life of the activity, based on the actual amount of fuel purchased and the cost of that fuel. The incentive amounts included in the grant contract are not to exceed a maximum amount that may be reimbursed under the grant. The actual reimbursement will depend upon the cost differential between the baseline fuel and

the qualifying fuel at the time of the purchase. Administrative costs, in-house labor costs, and travel costs are not eligible expenses.

In some cases, the TCEQ may preapprove a reimbursement amount per unit of qualifying fuel for all activities using the fuel. Grant applicants and suppliers of qualifying fuel may consult with the TCEQ regarding alternative approaches for establishing an approved reimbursement amount.

## Project Criteria

In addition to the eligibility criteria previously presented, the following list applies to projects involving qualifying fuel activities. The TCEQ may impose additional criteria, and may more narrowly define the criteria established in this guide, during a particular funding period or by geographic area, as needed to best achieve the objectives of the TERP.

- One or more eligible activities of the same project type (i.e., on-road, non-road, locomotive, etc.) that will occur in the same primary area may be included under one project application.
- Fuel used in vehicles and equipment used primarily for competition or recreation is not eligible for funding.
- When required under federal law, fuel additives must be registered by the EPA to be eligible under this program.
- When required, qualifying fuel to be used in on-road vehicles must be registered by the EPA for on-road use to be eligible under this program.
- The reductions in NO<sub>x</sub> emissions attributable to the qualifying fuel must be verified by the EPA or the CARB, or accepted on other grounds by the TCEQ.
- Qualifying fuel technologies will be reviewed by the TCEQ's technical staff. Any questions regarding the effects of a fuel or fuel additive on health or the environment will need to be resolved before the fuel is considered eligible for funding. Manufacturers and suppliers of a qualifying fuel are encouraged to discuss their products with the TCEQ early in the process, before submitting a grant application.
- The cost-effectiveness of a project, other than a demonstration project, must not exceed any limits established by the TCEQ on the cost per ton of NO<sub>x</sub> emissions reduced in the eligible counties for which the project is proposed.
- In the areas of the state where TxLED is required, the baseline and reduced emissions-rate calculations for diesel engine usage after September 2005 must be adjusted using a correction factor, in addition to any other calculation adjustments.
- An activity is not eligible if it is required by any state or federal law, rule, regulation, memorandum of agreement, or other legally binding document. However, this restriction does not apply to an otherwise qualified activity—regardless of the State Implementation Plan's assumption that the change

in equipment, vehicles, or operations will occur—if, on the date the grant is awarded, the change is not yet required by any state or federal law, rule, regulation, memorandum of agreement, or other legally binding document. This restriction also does not apply to a purchase of vehicles or equipment that is required only by local law or regulation, or by controlling-board policy of a public or private entity. Projects used to demonstrate a technology that may be used to comply with an emissions-reduction requirement may be funded, as long as the reductions directly attributable to the project are not used to comply with those requirements.

- An activity involving a new emissions-reduction measure that would otherwise generate marketable credits under state or federal emissions-reduction credit averaging, banking, or trading programs is not eligible for funding under this program unless:
  - the activity includes the transfer of the reductions that would otherwise be marketable credits to the State Implementation Plan, or the owner or operator, as provided under Texas Health and Safety Code 386.056; and
  - the reductions are permanently retired.
- The incremental cost of the proposed activity must be reduced by the value of any existing financial incentive that directly reduces the cost of the proposed activity, including tax credits or deductions, other grants, or any other public financial assistance.
- The use of qualifying fuel funded under this program must take place in one or more of the eligible counties.
- For most qualifying fuel activities, annual use will be measured using calculations based on the fuel use. The TCEQ may consider using either miles of operation or hours of operation using the qualifying fuel for particular applications, case by case.
- Applicants must agree to monitor the use of grant-funded vehicles, equipment, infrastructure, and fuel, and to report to the TCEQ for the life of each grant-funded activity.
- Applicants must also agree to notify the TCEQ of any changes in the following during the activity life: termination of use; change in use, sale, transfer, or accidental or intentional destruction of grant-funded vehicles or equipment; or change in use of the qualifying fuel.
- Administrative costs and other internal costs of the grant recipient—including but not limited to personnel expenses, internal salaries, indirect costs, and travel—are not eligible. This restriction also applies when the grant recipient acts as a transportation provider for delivery of the grant-funded vehicle or equipment before or after accepting it.

### Figure A10.1 Correction Factor for TxLED

The TCEQ adopted rules (30 TAC 114.312-19) requiring that diesel fuel sold or supplied for use in compression-ignition engines in certain counties in Texas must meet low-emission-diesel standards.

The counties affected by the TxLED requirements currently include all those eligible for TERP incentive funding, as listed in Table 3.1, except for El Paso County.

The requirements set a maximum for content of aromatic hydrocarbons of 10% by volume. The requirements also set a minimum cetane number for TxLED of 48.

The TxLED requirements are intended to result in reductions in NO<sub>x</sub> emissions from diesel engines. Currently, reduction factors of **5.7%** (0.057) for on-road use and **7.0%** (0.07) for non-road use have been accepted as estimates for use of TxLED. However, these estimates are subject to change, based on the standards accepted by the EPA for use in the Texas State Implementation Plan. The TCEQ will identify the appropriate reduction factors to use in the technical supplement prepared to support these guidelines.

For activities in the applicable counties, a correction factor will need to be applied when calculating the baseline or reduced emissions for diesel engines.

**On-road:**

$$\text{TxLED correction factor} = 1 - 0.057 = \mathbf{0.943}$$

**Non-road:**

$$\text{TxLED correction factor} = 1 - 0.070 = \mathbf{0.93}$$

- Consultant fees for the preparation of a grant application, either directly or as an addition to the cost basis of the grant-funded vehicle, equipment, or engine, are not eligible.
- Fees for a third-party consultant hired by the grant recipient to manage and administer the grant-funded activities, including coordination of the work and submission of reports and paperwork to the TCEQ for the grant recipient, are not eligible. This restriction is not intended to limit the ability of the vehicle or equipment supplier or installer to include reasonable and necessary costs for managing the work to be performed in the price of the vehicle, equipment, or installation. The costs for professional services, including engineering and technical work, required for completion of the activity may be included, subject to the restrictions pertaining to that type of project. Per the Uniform Grant Management Standards, the “cost plus a percentage of cost” method of contracting for professional services must not be used.
- The TCEQ may impose additional criteria for certain projects and funding periods, consistent with these guidelines.

## NO<sub>x</sub> Emissions Factors

The baseline NO<sub>x</sub> emissions factors for this program should be the federal standards for NO<sub>x</sub> emissions applicable to the type of engine and model year of vehicle. The

federal NO<sub>x</sub> emissions standards for engines are listed in a technical supplement available from the TCEQ. Potential grant applicants should consult with the TCEQ to ensure they use the appropriate baseline standards.

## Calculating Reductions in NO<sub>x</sub> Emissions

The NO<sub>x</sub>-emissions reductions for a qualifying-fuel activity will be based on the types of vehicles and equipment using the fuel. Grant applicants should refer to the chapter or chapters of these guidelines applicable to the vehicles and equipment being fueled, to determine how the emissions reductions will be calculated.

In most cases, reductions in NO<sub>x</sub> emissions should be based on the difference between the NO<sub>x</sub> emissions using the baseline fuel and the NO<sub>x</sub> emissions using the qualifying fuel. The grant applicant will be required to list the vehicles and equipment that will be fueled using the qualifying fuel.

For many types of qualifying fuel, the TCEQ may allow applicants to list the vehicles and equipment by category, rather than listing each individual vehicle or piece of equipment. The technical supplement to these guidelines will include information on the categories that may be used.

## Calculating Cost-Effectiveness

Only the amount of incentive funds requested under the program should be used in calculating cost-effectiveness. The incremental costs for each activity must be reduced by the value of any existing financial incentive that directly reduces the cost of the proposed activity, including tax credits or deductions, other grants, or any other public financial assistance.

The cost-effectiveness of qualifying fuel activities should be determined somewhat differently than for other activities. Whereas the incentive amount for other types of activities must be amortized over the activity life, using a 3% discount rate, the incentive amount for qualifying fuel activities does not need to be amortized. Cost-effectiveness calculations appear in Table A10.1.

For projects that include more than one activity, the total project incentive amount should be used to determine cost-effectiveness. The applicant may request an incentive amount that is less than the full incremental costs, in order to meet the cost-effectiveness criteria.

**Table A10.1**  
**Calculating Cost-Effectiveness for Qualifying Fuel Activities**

total cost (\$) / total NO <sub>x</sub> -emissions reduction (tons) = cost-effectiveness (\$/ton)	
Cost-effectiveness (\$/ton):	\$

*To determine the cost-effectiveness:* First sum all of the annualized costs for the activities included in the project. For purposes of calculating the cost-effectiveness of a project that includes other types of activities, the annualized cost for the qualifying fuel activity should be the total activity cost. Also sum the annual emissions reductions from each activity to determine an annual emissions reduction for those activities. Again, the total emissions reductions for the qualifying fuel activity should be added to the annualized emissions reductions from the other activities. Then divide the combined annualized costs for all activities included in the project application by the total annual reductions in NO<sub>x</sub> emissions for the combined project activities.

*total annualized costs / total annual NO<sub>x</sub> reductions = project cost-effectiveness*