# Instructions for Completing the Texas Natural Gas Vehicle Grant Program Manufacturer Information Request Forms

## Texas Natural Gas Vehicle Grant Program (TNGVGP)

#### Texas Emissions Reduction Plan (TERP) Texas Commission on Environmental Quality (TCEQ)

# **1.0 Purpose**

The Texas Natural Gas Vehicle Grant Program (TNGVGP) provides grants for eligible projects that replace existing medium-duty and heavy-duty vehicles with vehicles powered by compressed natural gas (CNG), liquefied natural gas (LNG), or liquefied petroleum gas (LPG). Replacement projects may include purpose-built alternative fuel vehicles and engines, and may also include vehicles and engines converted to operate on an eligible fuel.

TCEQ is using this form (TCEQ-20609) to request information from manufacturers and authorized representatives of vehicles, engines, and conversion systems that can certify compliance with federal  $NO_x$  emission standards. This list will cover vehicles and engines, as well as systems for the conversion of vehicles and engines, which are eligible for funding under TNGVGP.

Eligible projects must result in a reduction in NO<sub>x</sub> emissions by at least 25%, based on the federal emission standard or family emissions limit (FEL) of the vehicle or engine being replaced and the replacement vehicle or engine. For dual-fuel engines operating on a combination of diesel fuel and the eligible fuel, the engine must be capable of at least 60% displacement of diesel fuel in dual-fuel mode. Manufacturers of dual-fuel engines must establish to TCEQ's satisfaction that an engine or conversion system is capable of displacing at least 60% diesel fuel use when operating in dual-fuel mode.

For more information about program requirements, please visit the <u>TNGVGP OEM webpage</u>, or contact the TERP grants staff at 800-919-TERP (8377).

# 2.0 Vehicle and Engine Eligibility

## **Replacement Projects**

Vehicles and engines may be purpose-built to operate on CNG, LNG, or LPG, or may be converted to operate on CNG, LNG, or LPG using a system issued a Certificate of Conformity (COC) by the U.S. Environmental Protection Agency (EPA) for conversion of that new vehicle or engine model and model year.

To be included in the list, vehicles and engines must meet the following eligibility requirements:

#### Eligible Chassis-Certified Vehicles

An eligible chassis-certified vehicle must:

- Have a gross vehicle weight rating (GVWR) of 8,501 lbs or more.
- Be a purpose-built or converted on-road motor vehicle that operates on CNG, LNG, or LPG, or in combination with diesel fuel and capable of at least 60% displacement of diesel fuel use in dual-fuel operation.
- Be certified by the EPA to meet or exceed the current emissions standards for chassis-certified heavy-duty vehicles and vehicles classified as a Medium-Duty Passenger Vehicle.

Bi-fuel chassis-certified vehicles, capable of operating on an eligible fuel and gasoline, are not eligible.

#### **Eligible Heavy-Duty Engines**

An eligible heavy-duty engine must:

- Be intended for installation on heavy-duty vehicles with a GVWR of 8,501 lbs or more.
- Be a purpose-built heavy-duty engine that operates on CNG, LNG, or LPG, or in combination with diesel fuel and capable of at least 60% displacement of diesel fuel use in dual-fuel operation.
- Be certified by the EPA to emit not more than 0.2 grams of NO<sub>x</sub> per brake horsepower-hour (bhp-hr).

Bi-fuel engines, capable of operating on an eligible fuel and gasoline, are not eligible.

#### **Repower Projects**

A repower project may include the replacement of the engine on an existing vehicle over 8,501 GVWR with a different eligible engine or may include conversion of the vehicle or engine with an eligible conversion system.

A project must result in a reduction in NO<sub>x</sub> emissions by at least 25%. Any conversion system must be certified by the EPA to a NO<sub>x</sub> emissions standard or FEL that is at least 25% lower than the emissions standard or FEL of the original vehicle or engine.

#### **Certified Engines**

A heavy-duty engine eligible for replacing an existing engine must:

- Be intended for installation on an existing heavy-duty vehicle with a GVWR of 8,501 lbs or more.
- Be a purpose-built heavy-duty engine that operates on CNG, LNG, or LPG, or in combination with diesel fuel and capable of at least 60% displacement of diesel fuel use in dual-fuel operation.
- Be certified by the EPA to emit not more than 0.2 grams of  $NO_x$  per bhp-hr.

Bi-fuel engines, capable of operating on an eligible fuel and gasoline, are not eligible.

#### Certified Heavy-Duty Engine Conversions

A conversion system eligible for converting an existing engine or replacing an existing engine with a converted engine must:

- Be intended for installation on an existing heavy-duty vehicle with a GVWR of 8,501 lbs or more.
- Be intended to convert a heavy-duty engine to operate on CNG, LNG, or LPG, or in combination with diesel fuel and capable of at least 60% displacement of diesel fuel use in dual-fuel operation.
- Be certified by the EPA to emit not more than 0.2 grams of  $NO_x$  per bhp-hr.

Bi-fuel engines, capable of operating on an eligible fuel and gasoline, are not eligible.

#### **Certified Vehicle Conversion Systems**

A conversion system eligible for converting an existing chassis-certified vehicle must:

- Be intended for the conversion of an existing chassis-certified heavy-duty vehicle or mediumduty passenger vehicle with a GVWR of 8,501 lbs or more.
- Be intended to convert the vehicle to operate on CNG, LNG, or LPG, or in combination with diesel fuel and capable of at least 60% displacement of diesel fuel use in dual-fuel operation.
- Be certified by the EPA to meet or exceed the current emissions standards for chassis-certified heavy-duty vehicles or meet or exceed the EPA's Bin 5 standard for vehicles classified as Medium-Duty Passenger Vehicles.

Bi-fuel chassis-certified vehicles, capable of operating on an eligible fuel and gasoline, are not eligible.

#### Acceptance of Test Data

For repower projects, in cases where a conversion system is not certified to the current federal emission standards, TCEQ may consider whether the results of testing conducted for certification or the acceptance of the system by the EPA demonstrates that the system results in a NO<sub>x</sub> emissions rate consistent with the current emissions standards.

Tests conducted for certification by the California Air Resources Board (CARB) may also be considered.

Under this alternative acceptance provision, the testing used to obtain the emissions data must be consistent with the testing required for EPA approval of an alternative fuel conversion system for New and Relatively New vehicles or engines under Title 40, Code of Federal Regulations (40 CFR), Section 85.510.

# **3.0 Form Instructions**

Original Equipment Manufacturers (OEM) of natural gas vehicles, engines, or conversion systems and authorized representatives may submit TNGVGP Manufacturer Information Request Forms to TCEQ. Forms can be downloaded from our the <u>TNGVGP OEM webpage</u> and filled out electronically.

Depending on the type of natural gas vehicle, engine, or conversion system being submitted for consideration, the respondent will choose from one of the six Manufacturer Information Request Forms (Forms 20609/a-f). Each of the six forms includes a Contact Information page and an Equipment Information page. All respondents must first select the appropriate Information Request Form, complete and sign the Contact Information page, and complete as many copies of the Equipment Information page as needed for all the eligible models manufactured by the OEM.

If you need additional information or clarification, please contact TCEQ staff before submitting the forms. You may include forms for various models with each submission.

#### Submission

Responses will be accepted for consideration by TCEQ electronically via <u>TNGVGP-</u> <u>Apply@tceq.texas.gov</u> or via mail at one of TCEQ's addresses listed below. Responses sent electronically should include 'TNGVGP Info Request' in the subject line.

#### **Regular Post Delivery**

Texas Commission on Environmental Quality

Air Grants Division

(TNGVGP) MC-204

P.O. Box 13087

Austin, TX 78711-3087

#### Express Mail

Texas Commission on Environmental Quality

Air Grants Division

(TNGVGP) MC-204

12100 Park 35 Circle

Austin, TX 78753

## **Submission Deadlines**

TCEQ will accept submissions on a continuing basis as vehicles, engines, and conversion systems are certified by the EPA.

# 4.0 Manufacturer Information Request Forms

Each of the following six Manufacturer Information Request Forms (20609/a-f) include a cover page, a Contact Information page (Section 1), and an Equipment Information page (Section 2). All respondents must determine the correct information request form and then complete Sections 1 and 2.

## Form 20609/a - Chassis-Certified Vehicles

Form 20609/a should be used for purpose-built chassis-certified vehicles powered by CNG, LNG, or LPG and certified to the current federal emission standards. This form should not be used for vehicles that are originally manufactured to operate on gasoline or diesel fuel, even if the conversion of the vehicle may occur through a flow-through process prior to first sale of the vehicle.

Chassis-certified vehicles include vehicles classified as Medium Duty Passenger Vehicles under EPA requirements, those with a GVWR between 8,501 and 10,000 lbs, and heavy-duty vehicles with a GVWR between 8,501 and 14,000 lbs that are alternatively chassis-certified by the EPA.

## Form 20609/b - Heavy-Duty Engines

Form 20609/b should be used for purpose-built heavy-duty engines powered by CNG, LNG, or LPG and certified by the EPA to the current federal emission standards.

## Form 20609/c – Chassis-Certified Vehicle Conversion Systems

Form 20609/c should be used for systems that convert a chassis-certified vehicles after their initial manufacturing as part of a flow-through process before first sale of the new vehicle. The converted vehicle must be certified by the EPA to the current federal emission standards.

## Form 20609/d – Existing Engine Conversion Systems

Form 20609/d should be used for systems that convert an older, existing heavy-duty compression ignition diesel engine to operate on an eligible fuel or a combination of an eligible fuel and diesel fuel (dual-fuel). The converted engine must be certified by the EPA to the current federal emission standards under the provisions of 40 CFR Part 85, under which a manufacturer may request that EPA certify the conversion system to a more stringent standard than the emission standard of the engine(s) being converted.

# Form 20609/e – Chassis-Certified Vehicle Conversion Systems Not Certified to the Current Federal Emission Standards

Manufacturers of systems that convert an older existing chassis-certified vehicle under as a repower project may submit information about the system in Form 20609/e. The conversion must result in a reduction in NO<sub>x</sub> emissions by at least 25% compared to the unconverted vehicle.

In most cases, if the manufacturer of a conversion system for Intermediate Age (IA) or Outside Useful Life (OUL) vehicles or engines has performed the level of testing required to approve the conversion of New and Relatively New vehicles and engines, the manufacturer will also request that EPA issue a Certificate of Conformity for that IA or OUL conversion system. If a Certificate of Conformity has been issued by the EPA, provide that with the test data. If possible, a manufacturer should request that EPA include the certified test results on the certificate.

In addition, if the manufacturer has received an Executive Order (EO) from CARB certifying a vehicle or engine to the California requirements, the certified test results should be listed on the EO. That EO should be also be provided.

The results for the tests conducted under the required Federal Test Procedures (FTP) should be provided along with the results of any other tests requested or required by EPA or CARB. Documentation provided to the EPA or CARB, such as the test report from an independent testing facility outlining those results, should be included.

TCEQ will evaluate the FTP test results, in conjunction with the results of other tests, to determine if the NOx emissions results are consistent with levels that would be necessary for EPA approval to the current federal NOx emission standards.

Please be aware that systems which convert a diesel engine to use both diesel fuel and one of the eligible fuels in dual-fuel operation must demonstrate that the converted engine meets the current federal  $NO_x$  emission standards in both diesel-only mode and dual-fuel mode.

# Form 20609/f – Heavy-Duty Engine Conversion Systems Not Certified to the Current Federal Emission Standards

Manufacturers of systems that convert an older heavy-duty diesel or gasoline engine as a repower project, either by converting an existing engine on the vehicle or by removing and replacing an engine with a

converted engine, may submit information about the system in Form 20609/f. The repower must result in a reduction in NO<sub>x</sub> emissions by at least 25% compared to the unconverted vehicle.

In most cases, if the manufacturer of a conversion system for Intermediate Age (IA) or Outside Useful Life (OUL) vehicles or engines has performed the level of testing required to approve the conversion of New and Relatively New vehicles and engines, the manufacturer will also request that EPA issue a Certificate of Conformity for that IA or OUL conversion system. If a Certificate of Conformity has been issued by the EPA, provide that with the test data. If possible, a manufacturer should request that EPA include the certified test results on the certificate.

The results for any tests conducted under the required Federal Test Procedures (FTP) should be provided, as well as the results of other tests requested or required by EPA. Documentation provided to the EPA, such as the test report from an independent testing facility, outlining those results, should be included.

TCEQ will evaluate the FTP test results, in conjunction with the results of other tests, to determine if the NO<sub>x</sub> emissions results are consistent with levels that would likely be necessary for EPA approval to the current federal NO<sub>x</sub> emission standards.

Please be aware that systems which convert a diesel engine to use both diesel fuel and one of the eligible fuels in dual-fuel operation must demonstrate that the converted engine meets the current federal NO<sub>x</sub> emission standards in both diesel-only mode and dual-fuel mode.

# **Contact Us**

For additional guidance, or assistance with the Information Request Forms, please contact TERP staff at (800) 919-8377 or <u>terp@tceq.texas.gov</u>.