

**§ 85.520**

**40 CFR Ch. I (7–1–11 Edition)**

be OBD equipped. The test group/engine family converted to an alternative fuel has fully functional OBD systems and therefore meets the OBD requirements such as those specified in 40 CFR 86, subparts A and S when operating on the alternative fuel.

(10) You must notify us by electronic submission in a format specified by the Administrator with all required documentation. The following must be submitted:

(i) You must describe how your conversion system qualifies as a clean alternative fuel conversion. You must include emission test results from the required exhaust, evaporative emissions, and OBD testing, applicable exhaust and evaporative emissions standards and deterioration factors. You must also include a description of how the test vehicle/engine selected qualifies as a worst-case vehicle/engine under 40 CFR 86.1828–10 or 40 CFR 86.096–24(b)(2) through (b)(3) as applicable.

(ii) You must describe the group of vehicles/engines (conversion test group/conversion engine family) that are covered by your notification based on the criteria specified in paragraph (b)(1) or (b)(2) of this section.

(iii) In lieu of specific test data, you may submit the following attestations for the appropriate statements of compliance, if you have sufficient basis to prove the statement is valid.

(A) The test group/engine family converted to an alternative fuel has properly exercised the optional and applicable statements of compliance or waivers in the certification regulations such as those specified in 40 CFR part 86, subparts A, B, and S and 40 CFR part 1065. Attest to each statement or waiver in your notification.

(B) The test group/engine family converted to dual-fuel or mixed-fuel operation retains all the OEM fuel system, engine calibration, and emission control system functionality when operating on the fuel with which the vehicle/engine was originally certified.

(C) The test group/engine family converted to dual-fuel or mixed-fuel operation retains all the functionality of the OEM OBD system (if the OEM vehicles/engines were required to be OBD equipped) when operating on the fuel

for which the vehicle/engine was originally certified.

(D) The test group/engine family converted to dual-fuel or mixed-fuel operation properly purges hydrocarbon vapor from the evaporative emission canister when the vehicle/engine is operating on the alternative fuel.

(iv) Include any other information as the Administrator may deem appropriate to establish that the conversion system is for the purpose of conversion to a clean alternative fuel and meets applicable emission standards.

(11) [Reserved]

(12) Your exemption from the prohibition on tampering remains valid for the applicable conversion test group/engine family and/or evaporative/refueling family, as long as the conditions under which you previously complied remain unchanged, such as small volume manufacturer or qualified small volume test group/engine family status. Your exemption from tampering is valid only if the conversion is installed on the OEM test groups/engine families and/or evaporative emissions/refueling families listed on the notification. For example, if you have complied properly with the provisions in this section in calendar year 2011 for converting a model year 2006 OEM test group/evaporative/refueling family, your exemption from tampering continues to apply for the conversion of the same model year 2006 OEM test group/evaporative/refueling family as long as the conditions under which the notification was submitted remain unchanged.

(13) Conversion systems must be properly installed and adjusted such that the vehicle/engine operates consistent with the principles of good engineering judgment and in accordance with all applicable regulations.

**§ 85.520 Exemption provisions for outside useful life vehicles/engines.**

(a) You are exempted from the tampering prohibition with respect to outside useful life vehicles/engines if you properly document and notify EPA that the conversion system satisfies all the provisions in this section; you meet the labeling requirements in § 85.530 before you sell, import or otherwise facilitate the use of a clean alternative

fuel conversion system; and you meet the applicable requirements in §85.535. You may also meet the requirements under this section by complying with the provisions in §85.515.

(b) Documenting and notifying EPA under this section includes the following provisions:

(1) You must notify us as described in this section.

(2) Conversion test groups, evaporative/refueling families, and conversion engine families may be the same as those allowed for the intermediate age vehicle/engine program in §85.515(b)(1) and (2).

(3) You must use good engineering judgment to specify, use, and assemble fuel system components and other hardware and software that are properly designed and matched for the vehicles/engines in which they will be installed. Good engineering judgment also dictates that any testing or data used to satisfy demonstration requirements be generated at a quality laboratory that follows good laboratory practices and that is capable of performing official EPA emission tests.

(4) *OBD requirements.* (i) The OBD system must properly detect and identify malfunctions in all monitored emission-related powertrain systems or components including any new monitoring capability necessary to identify potential emission problems associated with the new fuel. These include but are not limited to: Fuel trim lean and rich monitors, catalyst deterioration monitors, engine misfire monitors, oxygen sensor deterioration monitors, EGR system monitors, if applicable, and vapor leak monitors, if applicable. No original OBD system monitor that is still applicable to the vehicle/engine may be aliased, removed, bypassed, or turned-off. No MILs shall be illuminated after the conversion. Readiness flags must be properly set for all monitors that identify any malfunction for all monitored components.

(ii) Subsequent to the vehicle/engine fuel conversion, you must clear all OBD codes and reset all OBD monitors to not-ready status using an OBD scan tool appropriate for the OBD system in the vehicle/engine in question. You must operate the vehicle/engine with the new fuel on representative road op-

eration or chassis dynamometer/engine dynamometer testing cycles to satisfy the monitors' enabling criteria. When all monitors have reset to a ready status, you must submit an OBD scan tool report showing that with the vehicle/engine operating in the key-on/engine-on mode, all supported monitors have reset to a ready status and no emission related "pending" (or potential) or "confirmed" (or MIL-on) diagnostic trouble codes (DTCs) have been stored. The MIL must not be commanded "On" or be illuminated. A MIL check must also be conducted in a key-on/engine-off mode to verify that the MIL is functioning properly. You must include the VIN/EIN number of the test vehicle/engine. If necessary, the OEM evaporative emission readiness monitor may remain unset for dedicated gaseous fuel conversion systems.

(iii) In addition to conducting OBD testing described in this paragraph (b)(4), you must submit to EPA the following statement of compliance, if the OEM vehicles/engines were required to be OBD equipped. The test group/engine family converted to an alternative fuel has fully functional OBD systems and therefore meets the OBD requirements such as those specified in 40 CFR 86, subparts A and S when operating on the alternative fuel.

(5) Conversion test groups/engine families for conversions to dual-fuel or mixed-fuel vehicles/engines may not include vehicles/engines subject to different emissions standards unless applicable exhaust and OBD demonstrations are also conducted for the original fuel(s) demonstrating compliance with the most stringent standard represented in the test group. However the data generated from testing on the new fuel for dual-fuel or mixed-fuel test vehicles/engines may be carried over to vehicles/engines that otherwise meet the conversion test group/engine family criteria and for which the test vehicle/engine data demonstrate compliance with the applicable vehicle/engine standards. Clean alternative fuel conversion evaporative families for dual-fuel or mixed-fuel vehicles/engines cannot include vehicles/engines that were originally certified to different evaporative emissions standards.

**§ 85.524**

**40 CFR Ch. I (7–1–11 Edition)**

(6) You must notify us by electronic submission in a format specified by the Administrator with all required documentation. The following must be submitted.

(i) You must describe how your conversion system complies with the good engineering judgment criteria in § 85.520(b)(3) and/or other requirements under this subpart or other applicable subparts such that the conversion system qualifies as a clean alternative fuel conversion. The submission must provide a level of technical detail sufficient for EPA to confirm the conversion system's ability to maintain or improve on emission levels in a worst case vehicle/engine. The submission of technical information must include a complete characterization of exhaust and evaporative emissions control strategies, the fuel delivery system, durability, and specifications related to OBD system functionality. You must present detailed information to confirm the durability of all relevant new and existing components and to explain why the conversion system will not harm the emission control system or degrade the emissions. EPA may ask you to supply additional information, including test data, to support the claim that the conversion system does not increase emissions and involves good engineering judgment that is being applied for purposes of conversion to a clean alternative fuel.

(ii) You must describe the group of vehicles/engines (conversion test group/conversion engine family) that is covered by your notification based on the criteria specified in paragraph (b)(2) of this section.

(iii) In lieu of specific test data, you may submit the following attestations for the appropriate statements of compliance, if you have sufficient basis to prove the statement is valid.

(A) The test group/engine family converted to an alternative fuel has properly exercised the optional and applicable statements of compliance or waivers in the certification regulations such as those specified in 40 CFR part 86, subparts A, B, and S and 40 CFR part 1065. Attest to each statement or waiver in your notification.

(B) The test group/engine family converted to dual-fuel or mixed-fuel oper-

ation retains all the OEM fuel system, engine calibration, and emission control system functionality when operating on the fuel with which the vehicle/engine was originally certified.

(C) The test group/engine family converted to dual-fuel or mixed-fuel operation retains all the functionality of the OEM OBD system (if the OEM vehicles/engines were required to be OBD equipped) when operating on the fuel with which the vehicle/engine was originally certified.

(D) The test group/engine family converted to dual-fuel or mixed-fuel operation properly purges hydrocarbon vapor from the evaporative emission canister when the vehicle/engine is operating on the alternative fuel.

(E) The test group/engine family converted to an alternative fuel uses fueling systems, evaporative emission control systems, and engine powertrain components that are compatible with the alternative fuel and designed with the principles of good engineering judgment.

(iv) You must include any other information as the Administrator may deem appropriate, which may include test data, to establish the conversion system is for the purpose of conversion to a clean alternative fuel.

(7) Conversion systems must be properly installed and adjusted such that the vehicle/engine operates consistent with the principles of good engineering judgment and in accordance with all applicable regulations.

(8) EPA may ask for any documentation and/or ask you to conduct emission testing to demonstrate the conversion is for the purpose of a clean alternative fuel.

**§ 85.524 Legacy standards.**

Prior to April 8, 2011, the following emission standards applied for conversions of vehicles/engines with an original model year of 1992 or earlier:

(a) *Exhaust hydrocarbons.* Light-duty vehicles must meet the Tier 0 hydrocarbon standard specified in 40 CFR 86.094-8. Light-duty trucks must meet the Tier 0 hydrocarbon standard specified in 40 CFR 86.094-9. Otto-cycle heavy-duty engines must meet the hydrocarbon standard specified in 40 CFR 86.096-10. Diesel heavy-duty engines