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certificate was issued remain unchanged, such as small volume manufacturer status.

(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.

## §85.515 Exemption provisions for intermediate age vehicles/engines.

- (a) You are exempted from the tampering prohibition with respect to intermediate age vehicles/engines if you properly test, document and notify EPA that the conversion system complies with the emission standards specified in §85.525 as described in paragraph (b) of 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 liability, recordkeeping, and end of year reporting requirements in §85.535. You may also meet the requirements under this section by complying with the requirements in §85.510.
- (b) Documenting and notifying EPA under this section includes demonstrating compliance with all the provisions in this section and providing all notification information to EPA. You may notify us as described in this section instead of certifying the clean alternative fuel conversion system. You must demonstrate compliance with all exhaust and evaporative emissions standards by conducting all exhaust and evaporative emissions and durability testing as required for OEM certification subject to the exceptions and special provisions permitted in §85.510. This paragraph (b) provides additional special provisions applicable to intermediate age vehicles/engines. Paragraph (b) is applicable to all conversion manufacturers unless otherwise specified.
- (1) Conversion test groups for light-duty and heavy-duty chassis certified vehicles may be grouped together into an exhaust conversion test group using the criteria described in 485.510(b)(1)(i)(A), except that the same OBD group is not a criterion. Evaporative/refueling families may be

grouped together using the criteria described in §85.510(b)(1)(ii).

- (2) Conversion engine families for heavy-duty engines may be grouped together into an exhaust conversion engine family using the criteria described in §85.510(b)(2)(i)(A), except that the same OBD group is not a criterion. Evaporative/refueling families may be grouped together using the criteria described in §85.510(b)(2)(ii).
- (3) Conversion test groups/engine families may include vehicles/engines that are subject to different OEM emission standards; however, all vehicles/ engines in a single conversion test group/engine family are subject to the most stringent standards that apply for vehicles/engines included in the conversion test group/engine family. For example, if OEM vehicle test groups originally certified to Tier 2, Bin 4 and Bin 5 standards are in the same conversion test group for purposes of fuel conversion, all the vehicles in the conversion test group under this subpart are subject to the Tier 2, Bin 4 standards. This paragraph (b)(3) does not apply to conversions to dualfuel/mixed-fuel vehicles/engines, as provided in paragraph (b)(7).
- (4) EPA-established scaled assigned deterioration factors for both exhaust and evaporative emissions may be used for vehicles/engines with over 10,000 miles if the criteria for small volume manufacturer or qualified small volume test groups/engine families are met as defined in 40 CFR 86.1838-01, 40 CFR 86.098-14, or 40 CFR 86.096-24(e)(2), as appropriate. This deterioration factor will be adjusted according to vehicle/engine miles or hours of operation. The deterioration factor is intended to predict the vehicle/engine's emission level at the end of the useful life. EPA may adjust these scaled assigned deterioration factors if we find the rate of deterioration non-constant or if the rate differs by fuel type.
- (5) As part of the conversion system description required by paragraph (b)(10)(i) of this section, small volume conversion manufacturers and qualified small volume test groups/engine families using EPA assigned deterioration factors must present detailed information to confirm the durability of

all relevant new and existing components and explain why the conversion system will not harm the emission control system or degrade the emissions.

- (6) Durability testing is required unless the criteria for small volume manufacturer or qualified small volume test groups/engine families are met as defined in 40 CFR 86.1838-01, 40 CFR 86.098-14, or 40 CFR 86.096-24(e)(2), as applicable. Durability procedures for large volume conversion manufacturers of intermediate age light-duty and heavy-duty chassis certified vehicles that follow provisions in 40 CFR 86.1820-01 may eliminate precious metal composition and catalyst grouping statistic when creating clean alternative fuel conversion durability groupings.
- (7) 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/engine family. 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 mixedfuel vehicles/engines cannot include vehicles/engines that were originally certified to different evaporative emissions standards unless evaporative/refueling demonstrations are also conducted for the original fuel(s) demonstrating compliance with the most stringent standard represented in the evaporative/refueling family.
- (8) You must conduct all exhaust and all evaporative and refueling emissions testing with a worst-case vehicle/engine to show that the conversion test group/engine family complies with exhaust and evaporative/refueling emission standards, based on the certification procedures such as those speci-

fied in 40 CFR part 86, subparts A, B, and S and 40 CFR part 1065.

- (9) 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 operation 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/engineon 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 set. The MIL must not be commanded "On" or be illuminated. A MIL check must also be conducted in a key-on/engineoff 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)(9), you must submit to EPA the following statement of compliance, if the OEM vehicles/engines were required to

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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