

## **Heavy Duty Intermediate Age Vehicle/Engine Notification Package: Instructions for Clean Alternative Fuel Conversion Manufacturers**

This workbook contains data forms and compliance statements to be used by clean alternative fuel conversion manufacturers submitting a heavy duty Intermediate Age Vehicle/Engine notification package to EPA. The notification package includes test data, compliance statements, and all other information necessary to support the intermediate useful life engine demonstration requirements set forth in 40 CFR Part 85, Subpart F. Please refer to the regulations for detailed compliance requirements. Intermediate age vehicles/engines are defined as being of a model year that is at least as old as the current calendar year minus two (MY < CY-2), yet still within their regulatory useful life at the time of conversion. Please refer to 40 CFR 86.004-2 for current heavy-duty useful life. A conversion system becomes eligible for exemption from the Clean Air Act tampering prohibition upon EPA receipt of a complete notification Package. Please note that the intermediate age notification process does NOT result in the issuance of a certificate of conformity.

### Excel Macros

This form uses Excel macros. Please make sure that macros are enabled on your computer before trying to fill out the form. Different versions of Excel require different steps to enable macros. Please search the Excel help function for "Enable Macros" to get instructions on how to enable the interactive elements of this form.

### Entering Data on the 'Data Form' Worksheet

On the worksheet labeled "Data Form", fill out all grey-bordered fields that are not shaded green.

Each notification package is identified by a unique conversion ID number. To generate a conversion ID number, click the "Generate Conversion ID Number" button the first time you fill out the data form. If a previous submission needs to be corrected and resubmitted, do not generate a new Conversion ID number, but use the same number as in the original submission so that the corrected form will be recognized as a replacement for the original submission.

### Entering Information on the 'Applicability' Worksheet

After the 'Data Form' worksheet is complete, use the 'Applicability' worksheet to enter the engine families and evaporative/refueling families, if applicable, that these data will be applied to. You must follow the regulations in 40 CFR 85.515(b)(2) to determine appropriate combinations.

### Compliance Statements

The submission form will generate compliance statements based on the conversion type and conversion fuel selections on the 'Data Form' worksheet. These statements appear on the 'Compliance Statements' worksheet. Review the compliance statements and electronically sign and date that sheet by typing in your name and the date. Note that if your selection for conversion type and conversion fuel changes, the compliance statements may change. In this case, any signatures would be erased and would have to be re-entered.

A complete notification package must include the appropriate justifications for these compliance statements as well as all requirements in 40 CFR Part 85 Subpart F **[40 CFR 85.515]**

### **Embedding related/supporting documents**

All documents required to be submitted as part of the data submission process must be embedded in this worksheet (see 40 CFR Part 85 subpart F for required documents). To embed a file, generally you would need to go to Insert -> Object -> Create From File (check the "Display as icon" box, but NOT the "Link to File" box). After browsing for the appropriate file, an icon representing the file should appear on this

page. Click and drag the icon into the box below. A submission without all necessary documents will be considered incomplete.

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. For more details on emissions testing refer to 40 CFR part 86, subparts A, B, and S and 40 CFR part 1065.

Embedded documents go here

Paper Work Reduction Act Notice

The public reporting and recordkeeping burden for this collection is estimated to average 877 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, Washington, DC, 20460 and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-1800), Washington, D.C. 20503. Include the OMB control number(s) in any correspondence. Do not send the completed form to this address.

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Expires on 3/31/2023 EPA  
Form 5900-338



**Heavy Duty Intermediate Age Vehicle/Engine Notification Package:  
Clean Alternative Fuel Conversion Data Form**

**Conversion Information**

Help

Converter Name:

Conversion ID #

Generate Conversion ID Number

Conversion Type:  Dedicated  Dual Fuel  Mixed Fuel      Original Fuel:

Converting to use:  E85  CNG  LPG  Other, please specify:

Additional Information

EPA Form Number

Expires 8/31/2014

## **Heavy Duty Engine/Intermediate Useful Life Notification Package: Clean Alternative Fuel Conversion Compliance Statements**

**By electronically signing my name, I confirm/attest that I comply with applicable regulations in 40 CFR Part 85, Subpart F. I also confirm/attest:**

- > I have submitted a document that describes how the conversion system qualifies as a clean alternative fuel conversion. 40 CFR 85.515(b)(10)(i).
- > I have submitted an OBD scan tool report, as applicable, showing results from the procedure set forth in 40 CFR 85.515(b)(9)(ii). The results do not demonstrate a failed test. I have included the EIN of the test engine on the report. 40 CFR 85.515(b)(9)(ii).
- > The engine family converted to an alternative fuel has fully functional OBD systems (if the OEM engines are required to be OBD equipped) and therefore meets the OBD requirements in 40 CFR 86, subpart S when operating on the alternative fuel. The OBD system properly detects and identifies 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 converted engine is aliased, removed, bypassed, or turned off. No MILs are illuminated after the conversion. Readiness flags are properly set for all monitors that identify any malfunction for all monitored components. 40 CFR 85.515(b)(9)(i) and (iii).
- > I attest that I have taken steps to ensure that fuel conversion systems will be properly installed and adjusted such that the engine operates consistent with the principles of good engineering judgment and are expected to maintain or improve upon emission levels in a worst-case engine. 40 CFR 85.515(b)(10)(i) and (13).
- > I have submitted a document that describes the conversion engine family and evaporative family, if applicable, that is covered by this notification. 40 CFR 85.515(b)(10)(ii).
- > I have submitted detailed information confirming the durability of all relevant new and existing components and explaining why the conversion system will not harm the emission control system or degrade the emissions. 40 CFR 85.515(b)(6).
- > I have submitted examples of all labeling and warranty information. 40 CFR 85.530(d).
- > I attest that the test group converted to an alternative fuel has properly exercised the optional and applicable statements of compliance or waivers in the certification regulations in 40 CFR part 86, subparts B, and S and 40 CFR part 1065. 40 CFR 85.515(b)(10)(iii)(A).
- > I attest that based on an engineering evaluation of appropriate high-altitude emission testing, the vehicles in this test group comply with emission standards at high-altitude. 40 CFR 86.1829-01(b)(1)(ii)(B).
- > I attest that based on previous emission tests, development tests, or other appropriate information, vehicles in this test group comply with the particulate matter emission standard as applicable. 40 CFR 86.1829-01(b)(1)(iii)(B).

- > I attest that the engine family does not unnecessarily reduce emission control effectiveness of vehicles operating at high altitude. 40 CFR 86.001-21(b)(1)(i)(c)
- > I attest that a closed fuel system, as applicable, has been installed in accordance with current standard industry practice using the principles of good engineering judgment, and is leak free. 40 CFR 85.515(b)(13).
- > I attest that a gaseous fuel filling receptacle on the converted engine, as applicable, meets current industry standard practice using principles of good engineering judgment. 40 CFR 85.515(b)(13).
- > I attest that the 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 engine was originally certified. 40 CFR 85.515(b)(10)(iii)(B).
- > I attest that the engine family converted to dual-fuel or mixed fuel operation retains all the functionality of the OEM OBD system (if required to be so equipped) when operating on the fuel with which the engine was originally certified. 40 CFR 85.515(b)(10)(iii)(C).
- > I attest that the engine family converted to dual-fuel or mixed fuel operation properly purges hydrocarbon vapor from the evaporative emission canister when the engines are operating on the alternative fuel. 40 CFR 85.515(b)(10)(iii)(D).

**Signed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

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