## Air Resources Board



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Mail-Out #ECARS 17-03

TO:

All Interested Parties

DATE:

June 27, 2017

SUBJECT:

Guidance for On-Board Diagnostic II (OBD II) System Certification

Documentation Submitted to the California Air Resources Board

Document Management System

This guidance applies to manufacturers of light- and medium-duty vehicles and engines subject to the California on-board diagnostic II (OBD II) system regulation (title 13, California Code of Regulations (CCR) section 1968.2).

Title 13, CCR section 1968.2(i) requires manufacturers to submit specific information regarding OBD II systems to the California Air Resources Board (CARB) as part of the certification process for OBD II systems. Manufacturers should electronically submit such OBD II certification documentation through CARB's Electronic Document Management System (DMS). CARB's DMS homepage is accessed through the following website via the ARB\_OBD domain:

https://www.arb.ca.gov/msprog/dms/dms.htm. The website includes details regarding how to obtain manufacturer user accounts and provides tutorials, fact sheets, and user guides on how to use the CARB DMS. In addition, the website provides information on how manufacturers can participate in a monthly internet training session given by CARB staff to learn how to use the CARB DMS. For additional assistance not covered on the homepage, please contact the individual domain administrator listed on the homepage.

To expedite the OBD II system certification review process, staff has developed guidelines and templates for the information required to be included in the certification documentation. These guidelines/templates are intended to ensure that manufacturers have provided pertinent information in the application and to help staff quickly identify the relevant information when reviewing an OBD II system for compliance. Where applicable, the OBD II system certification information shall be submitted in accordance with these templates. Manufacturers should submit the information and name the DMS electronic files/workflows in the formats described in Attachments A through C of this mail-out by no later than October 1, 2017.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <a href="http://www.arb.ca.gov">http://www.arb.ca.gov</a>.

California Environmental Protection Agency

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Manufacturers that are unable to submit the required information in the provided guidelines and templates by October 1, 2017 should timely notify staff, and should further endeavor to utilize the guidelines and templates as soon as possible.

Attachment A, designated the "OBD II System Certification 'A-P' Document," is the main source of information that CARB staff will rely on when reviewing OBD II systems. This document must be provided in portable document format (PDF), and must include the information as specified in the OBD II regulation sections listed below. Manufacturers should submit the information required by sections 1968.2(i)(2.1) and (i)(2.3) (the monitoring strategy descriptions and flowcharts) as separate documents from the "OBD II System Certification 'A-P' Document."

- A. Cover Letter (sections 1968.2(i)(2.10), (2.14), (2.19), (2.22))
- B. Checklist (section 1968.2(i)(2.16))
- C. Summary Table (section 1968.2(i)(2.2))
- D. Durability Demonstration Vehicle (DDV) Data (section 1968.2(i)(2.4))
- E. Misfire Catalyst Damage, Disablement and Detection Charts, Probability of Detection (POD) Charts (section 1968.2(i)(2.5))
- F. Applicable Test Cycle and Adjustment Factor for each Monitor (sections 1968.2(i)(2.7), (2.29))
- G. Input Output Signals List (section 1968.2(i)(2.8))
- H. Closed Loop Description (section 1968.2(i)(2.9))
- I. Diagnostic Link Connector (DLC) Location and Connector Picture (section 1968.2(i)(2.12))
- J. Positive Crankcase Ventilation (PCV)/Crankcase Ventilation (CV) System Description (section 1968.2(i)(2.13))
- K. Auxiliary Emission Control Device (AECD) and Emission Increasing AECD (EI-AECD) Descriptions (section 1968.2(i)(2.15))
- L. Malfunction Indicator Light (MIL) Location and Image (section 1968.2(i)(3.2))
- M. Standardization Data (sections 1968.2(i)(2.11), (2.17), (2.18))
- N. Non-MIL/Non-OBD Components (sections 1968.2(i)(2.20), (2.21), (2.26), (2.27))
- O. Inducement Strategies Descriptions (section 1968.2(i)(2.25))
- P. Certification Documentation Remainder (sections 1968.2(i)(2.6), (2.23), (2.24), (2.28), (2.30))

Manufacturers must insert a bookmark for each section into this document, and name each bookmark using the bookmark titles shown in Attachment A (e.g., use "Cover Letter" for the bookmark name for section A, use "PCV/CV System Description" for the bookmark name for section J). For some sections, staff has provided examples of how the specific information shall be formatted and presented. Staff believes that each example in Attachment A is presented in a format that will make it easier for staff to

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review and determine if the OBD II system requirements are being met. Any variation of the format by a manufacturer must be approved by CARB before certification material is submitted. Staff will approve such variation if the proposed format provides for clear and comprehensive review of the information by CARB staff. It would be to manufacturers' benefit to include clear, accurate, and complete information for each section in order to help expedite the OBD II system review process.

Attachment B, designated the "OBD DMS File-Naming Convention Document," describes the required naming convention of the electronic files submitted by manufacturers through DMS, including files related to both pre- and post-OBD II system certification. This document lists the types of files required to be submitted and the prescribed method for naming each file. Similarly, Attachment C, designated the "OBD DMS Workflow-Naming Convention Document," describes the required naming convention of the workflows manufacturers input through DMS. By having every manufacturer use the same naming convention for bookmarks, files, and workflows, staff will be able to more quickly locate information when reviewing OBD II applications.

Manufacturers interested in receiving emails related to future changes to the OBD program should subscribe to the On-Board Diagnostics Program list at the following website: <a href="https://www.arb.ca.gov/listserv/listserv">https://www.arb.ca.gov/listserv/listserv</a> ind.php?listname=obdprog.

Manufacturers interested in receiving future emails regarding DMS status and updates should subscribe to the Certification Document Management System list at the following website: <a href="https://www.arb.ca.gov/listserv/listserv">https://www.arb.ca.gov/listserv/listserv</a> ind.php?listname=dms. By signing up for these list serves, subscribers will also receive a notice whenever changes are made to the CARB OBD program website or DMS. Questions regarding this guidance may be directed to Leela Rao, Manager, OBD Program Development Section at (626) 350-6469, or leela.rao@arb.ca.gov.

Sincerely,

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Attachment A: OBD II System Certification 'A-P' Document

B: OBD DMS File-Naming Convention Document

C: OBD DMS Workflow-Naming Convention Document

cc: Leela Rao, Manager

**OBD Program Development Section**