



Winston H. Hickox
Agency Secretary

Air Resources Board

Alan C. Lloyd, Ph.D.
Chairman

9528 Telstar Avenue • P.O. Box 8001 • El Monte, California 91731 • www.arb.ca.gov



Gray Davis
Governor

Manufacturers' Advisory Correspondence

MAC #2000-03

June 14, 2000

To: ALL PASSENGER CAR MANUFACTURERS
ALL LIGHT-DUTY TRUCK MANUFACTURERS
ALL MEDIUM-DUTY VEHICLE MANUFACTURERS

Subject: Format for manufacturer quarterly assembly-line production reports for 2001 and subsequent model year passenger cars, light-duty trucks and medium-duty vehicles including full/partial zero emission vehicles.

Section A.5 and B.3 of the California Assembly-Line Test Procedures for 2001 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles, adopted August 5, 1999, requires vehicle manufacturers to submit their quarterly production and quality audit reports. This Manufacturers' Advisory Correspondence (MAC) provides vehicle manufacturers with the Air Resources Board required format and policy to be used to prepare these reports.

If you have questions regarding this matter, please contact Ms. Maggie Wilkinson, Manager, Vehicle/Engine Audit Section at (626) 575-7040 or Mr. Satya Devesh, Air Resources Engineer, at (626) 575-6704.

Sincerely,

R. B. Summerfield, Chief
Mobile Source Operations Division

Attachments

**State of California
Air Resources Board**

Manufacturers' Advisory Correspondence

MAC #2000-03

Subject: Format for manufacturer quarterly assembly-line production reports for 2001 and subsequent model-year passenger cars, light-duty trucks and medium-duty vehicles including full/partial zero emission vehicles.

Applicability: Manufacturers of 2001 and subsequent model-year passenger cars, light-duty trucks and medium-duty vehicles certified for sale in California.

References: Section 43210, Health and Safety Code (H&SC)

Section 2062, Title 13, California Code of Regulations (CCR), and incorporated California Assembly-Line Test Procedures for 2001 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles, adopted August 5, 1999 (ALTP).

Section 1960.1(k), Title 13, CCR and the incorporated California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles, adopted August 5, 1999.

Section 1962, Title 13, CCR and the incorporated California Exhaust Emission Standards and Test Procedures for 2003 and Subsequent Model Zero-Emission Vehicles, and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicle Classes, adopted August 5, 1999.

Background: In June 1997, the ARB issued Manufacturer Advisory Correspondence (MAC) #97-03 which provided the format for submitting quarterly assembly-line quality audit reports electronically and in hard copy required under the ALTP adopted June 24, 1996. In August 1999, the ARB adopted new California assembly-line test procedures for 2001 and subsequent model-year passenger cars, light-duty trucks and medium-duty vehicles which eliminated the requirement that manufacturers emission test a sample of their quarterly production.

In January 2000, the ARB issued MAC #00-01 which provided the format for submission of the quarterly production report for 2000 model-year early opt-in engine families certified to the CAP 2000 regulations.

Discussion: Beginning with the 2001 model year, all passenger car, light-duty truck and medium-duty vehicle manufacturers must submit their quarterly production reports electronically and in hard copy in the revised format specified by the ARB. The major change in the ALTP regulations for 2001 and subsequent MYs

is the elimination of manufacturer new vehicle emission testing at the end of the assembly line and the implementation of the requirement that manufacturers conduct in-use vehicle testing. The format for reporting in-use vehicle testing results will be provided to manufacturers in a separate mailing.

The ARB-specified electronic format required for submitting quarterly production information is provided in Attachment A. This Quarterly Production File is a combination of the Engine Family Information File and the Engine Family Data Per Quarter File formats required by MAC #97-03. Because vehicle testing is no longer required, the fields summarizing emission test data results have been eliminated and this file now includes the reporting of zero-emission vehicles (ZEVs). Attachment B provides the format for the ARB-required hard copy report.

Most manufacturers are planning to continue to emission test vehicles at the end of the assembly line for their own information. ARB encourages manufacturers to voluntarily submit this exhaust emission test data with their quarterly production reports

Policy:

As required by the ALTP regulations, Section A.5 and B.3, manufacturers must submit information each quarter on the production volumes for each California-certified engine family/test group and a statement signed by an officer of the company verifying that inspection/functional testing has been conducted on all California-certified passenger cars, light-duty trucks and medium-duty vehicles produced during the quarter. These quarterly production reports and the inspection/functional testing statements are due within 45 days after the end of each calendar quarter as has previously been required.

The Quarterly Production File provided in Attachment A meets the requirements of ALTP, Section A.5. The fields have been expanded to include information on LEV II and ZEV standards and technology. Minor additions and changes have also been made to the range and domain of specific fields to reflect current requirements and the addition of hybrid electric vehicles (HEVs) and ZEVs.

For manufacturers voluntarily providing assembly-line emission test data from production vehicles, ARB has included the Individual Data Per Quarter File from MAC #97-03 in this document as Attachment C. The format is unchanged from MAC #97-03. When reporting vehicle test data, the number of vehicles tested should be noted in the Quarterly Production File in the field titled "SAMPLE".

Guidance for Electronic Submittal of Data Files

Manufacturers must submit quarterly production reports electronically using all applicable fields with the domains as defined in Attachment A and a hardcopy as shown in Attachment B. Not all fields are expected to apply for an engine family/test group. Those fields that do not apply should be left blank (do not enter spaces please). Each file should be named using the format, YYYYMMMMQ.XXX, as defined below:

- YYYY = Model-Year (example: 2000, 2001, 2002, etc.)
- MMMM = Manufacturer code (see Attachment D)
- Q = Quarter number (example: 1 = Jan-Mar 2000 for a 2001 model-year)
- XXX = file extension
 - WK? for Lotus file
 - XLS for Excel file
 - WB? for Quattro Pro file
 - DBF for FoxPro file
 - DB? for Paradox file
 - TXT for comma delimited ASCII Text file
 - MDB for Access file

ARB is able to import all the above types of files. Please contact us if you cannot use a file format listed above. The electronic file formats provided in Attachments A and C describe each field in detail. The columns are:

- Sequence - Order of the data in the record
- Data Name - Name of the data field
- Type - Identifies type of the field
 - C = Characters (i.e. Alpha-Numeric)
 - N = Numeric
 - D = Date - **date format should be used**
- Length - Specifies the number of characters in each field. For numeric, specifies the number of digits including the decimal, if any.
- Range or Domain - Lists the possible inputs or format for the field.
- Description - Describes the field.
- Reference - Reference to the California Assembly-Line Test Procedures for 2001 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles, adopted August 5, 1999, and to previous manufacturers' advisory correspondences.

The ARB uses Microsoft Excel 7.0 and Microsoft Access 2.0 for acquisition and storage of data. Manufacturers are requested to cooperate with the ARB and provide data using software which allows the download of electronic data into ARB's emissions database which is maintained in Microsoft Access 2.0. The format for Attachments A, B and C are available on disk using Microsoft Excel 7.0 and/or Microsoft Access 2.0. To obtain a copy of the templates, please contact Mr. Satya Devesh, Air Resources Engineer, at (626) 575-6704, or visit the ARB website.