# State of California AIR RESOURCES BOARD

LICENSING REQUIREMENTS FOR VEHICLE EMISSION TEST LABORATORIES

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Adopted: January 8, 1988 Amended: <u>June 2, 1989</u>

#### LICENSING REQUIREMENTS FOR VEHICLE EMISSION TEST LABORATORIES

#### APPLICABILITY

These licensing requirements adopted pursuant to Chapter 6, Part 5, Division 25 of the Health and Safety Code shall apply to any laboratory performing emission tests for the certification of used modifier-certified motor vehicles.

### II. DEFINITIONS

- A. "Licensed Laboratory" means any test laboratory approved by the Air Resources Board, pursuant to the requirements contained herein, as capable of conducting emission tests for light-duty motor vehicles in accordance with the Federal Test Procedures.
- B. "Used modifier-certified motor vehicle" means any passenger car, light-duty truck, and medium-duty vehicle which was manufactured outside of the United States for which the original manufacturer did not obtain California or federal certification, which 's subsequently modified by persons other than the original vehicle manufacturer to meet California motor vehicle emission standards, and which is at least two years old. The model year designation of a vehicle shall be determined according to the provisions in Section II. B. of the "California Certification Procedures for 1975 and Later Model Year Used Modifier-Certified Motor Vehicles."
  - "Certificate of Conformance" means a document issued by the ARB through a licensed laboratory after a used modifier-certified motor vehicle is found to comply with the California emission standards

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and all other applicable requirements. Pursuant to Health and Safety Code Section 44202 and except as provided in Health and Safety Code Section 44210, a used modifier-certified vehicle may not be registered in California unless a Certificate of Conformance has been issued for the vehicle.

- D. "Correlation testing" is a means of evaluating the performance of a laboratory by performing actual vehicle emission tests following established test methods and comparing the results to those of the reference laboratory. For the purposes of correlation testing, the Air Resources Board's Haagen-Smit Laboratory (HSL) shall be considered the reference laboratory. The ARB may designate another laboratory as the reference laboratory provided correlation between the laboratory and HSL has been demonstrated.
- E. "Contractor" means a private entity which may be assigned by the Air Resources Board to evaluate applications for licensing and to oversee quality control and correlation testing of licensed laboratories.
- III. FUNCTIONS OF LICENSED LABORATORIES
  - A. A licensed laboratory shall perform the following functions:
    - Verify the model year of used modifier-certified motor vehicles.
    - 2. Conduct exhaust and evaporative emission testing of used modifier-certified motor vehicles in accordance with the applicable model year emission test procedures as specified under the federal test procedures, Title 40, Code of Federal Regulations, Part 86, Subpart 8, as they existed on July 1,

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1985 as set forth in Appendix I; other pertinent provisions under the "California Emission Standards and Test Procedures for 1981 and Subsequent Hodel Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as incorporated in Section 1960.1, Title 13, California Administrative Code; and California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Hodel Liquefied Petroleum Gas or Gasoline-Powered Hotor Vehicles" as incorporated in Section 1976, Title 13, California Administrative Code.

3. Verify that the emission control components on used modifier-certified motor vehicles are properly installed and operational with the laboratory manager attesting that the emission control system installed on the vehicle has no obvious engineering or installation defects at the time of inspection. A licensed laboratory shall verify that the labels and the emission control components listed in the cwner's manual correspond with the emission control system installed. Furthermore, a licensed laboratory shall verify that the fill pipe, the opening of the fuel tank and the mechanism for air/fuel adjustment installed in the vehicle comply with the requirements specified under Section IV, "California Certification Procedures for 1975 and Later Hodel Year Used Modifier-Certified Motor Vehicles."

Issue Certificates of Conformance to used modifier-certified motor vehicles which are in compliance with the California emission standards and other certification requirements listed

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under Section IV, "California Certification Procedures for 1975 and Later Hodel Year Used Hodifier-Certified Hotor Vehicles."

- 5. Obtain Smog Check Certificates of Compliance from Smog Check referee stations for vehicles which receive Certificates of Conformance.
- E. Emission test results from a licensed laboratory shall be used solely to determine if vehicles conform with the California emission standards. This information shall not be presented as a product endorsement for an emission control system hardware or design.

## IV. LICENSING PROTOCOL

A. FEES .

A non-refundable annual fee of \$5,500 payable in advance to the Air Resources Board (ARB) shall be charged for each application for Ticense or renewal. Licenses shall be renewed annually.

- B. APPLICATION FORMS
  - A laboratory applying for initial licensing shall submit an application form to ARB consisting of:
    - a. A completed ARB laboratory questionnaire certified by the laboratory supervisor and the owner or a corporate officer which provides identifying and technical information concering the laboratory personnel and test facilities, test materials, equipment and procedures; a sample vehicle test data packet for each type of vehicle (gasoline or diesel) tested by the laboratory based on

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actual vehicle tests and which includes all information necessary to verify emissions calculations; photographs of the laboratory's soak area, dynamometer(s), analyzes, SHED(s), test fuel conditions and storage area, gas cylinders and storage area, and fuel tank temperature probes; and a copy of the laboratory's test procedures.

- A quality control test plan in accordance with paragraph
  IV.C.I.b. of this document.
- c. Copies of current calibration data for laboratory equipment.
- d. Other supplementary information as specified in the laboratory questionnaire.
- 2. Renewal applications shall be in the same format as the initial application and shall reflect any and all changes in laboratory personnel, laboratory location, ownership, and emission test equipment.

### C. REQUIREMENTS

1. Technicai Evaluation Criteria

Each application for laboratory licensing shall be evaluated by ARS or its contractor in accordance with the following technical evaluation criteria:

- a. Equipment and quality control requirements shall comply with Sections 86.106 to 86.126, Title 40, Code of Federal Regulations.
- b. Material handling techniques used for test fuels and analytical gases shall comply with requirements listed in

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Sections 86.113 and 86.114, Title 40, Code of Federal Regulations, and Section 3.h. of the "California Emission Standards and Test Procedures for 1981 and Subsequent Model Passenger Cars, Light-duty Trucks and Hedium-duty Vehicles" as incorporated in Section 1960.1, Title 13, California Administrative Code.

- c. Test procedures being practiced shall comply with Sections 86.127 to 86.140, and 85.143, Title 40, Code of Federal Regulations, Sections 3.1., 3.n., and 3.o., of the "California Emission Standards and Test Procedures for 1981 and Subsequent Hodel Passenger Cars, Light-duty Trucks, and Medium-duty Vehicles" as incorporated in Section 1960.1, Title 13, California Administrative Code and Section 6. of the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Liquefied Petroleum Gas- or Gasoline Powered Hotor Vehicles" as incorporated in Section 1976, Title 13, California Administrative Code.
- 2. Other Requirements

Each laboratory applying for a license shall agree to the following conditions:

- a. The laboratory shall furnish ARB with a copy of each Certificate of Conformance issued within 30 days of its issuance.
- b. Each laboratory shall perform all functions specified under Section III of this regulation.

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- c. The laboratory shall perform correlation testing and quality control consisting of:
  - Calibrations and checks as specified in Sections 85.115 through 86.125, Title 40, Code of Federal Regulations.
  - (2) A correlation test program at intervals to be specified by ARB or its contractor which may include:
    - Exhaust emission tests
    - Evaporative emission tests
    - Coast down tests
    - Steady-state tests

(For the tests above, the test vehicle shall be provided by ARB.)

- CVS system verification (propane tests)
- CVS flow and response checks
- Gas cylinder checks
- Manual checks on soak temperature,

lumidity and barometer checks

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- NOx converter efficiency checks

- CO2/H20 interference checks
- Back pressure checks
- d. The laboratory shall permit the ARE or its contractor to randomly inspect laboratory facilities and any vehicles on the premises of the laboratory for purposes of laboratory quality assessment or vehicle inspection.

- Each laboratory shall hold all vehicles and certificates at the laboratory for five calendar days following testing to assure availability of vehicles for inspection and confirmatory testing. Upon request by ARB, a laboratory shall further agree to hold vehicles up to a maximum of additional five calendar days. Immediately after vehicle selection for confirmatory testing, ARB will seal the hoods of vehicles chosen. The laboratory shall deliver these vehicles to ARB. Following delivery of a vehicle, the ARB may retain the vehicle for testing for up to five working days.
- f. The laboratory shall maintain the following records of emission testing and quality control in a format prescribed by ARB:
  - Submit vehicle test records monthly to ARB, identified by vehicle identification number, which include:
    - (a) CVS data sheet, showing exhaust emission results in grams/mile, input values, full vehicle information, and start and stop times for vehicle test segments.
    - (b) Exhaust emissions mass calculation sheet.
    - (c) Evaporative emission data sheet, showing evaporative emissions in grams.
    - (d) Evaporative emission mass calculation sheet.
    - (e) Driver's trace.
    - (f) Fuel analysis for fuel used in test.
    - (g) Cold soak temperature chart.

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- (h) Photographs of major emission control components including the unleaded fuel inlet restrictor and unleaded label on the area surrounding the fuel inlet restrictors.
- (i) Particulate emission data sheets for diesel vehicles.
- (j) Records submitted by the modifier of additional repairs or modifications on the modified vehicle and the reasons for doing such repairs.
- (2) Maintain records of test conditions and emission test results as specified under Section 86.142, Title 40, Code of Federal Regulations as well as records of calibration and quality control test data and have these records available for review upon ARB's request. These records shall be retained by the licensed laboratory for a period not less than seven years after the records have been generated.
- (3) Maintain a continuous log of testing uctivities containing vehicle descriptions, type of test, reason for tests, start time, end time, and raw test data.
- 9. All laboratory personnel involved in the inspection and emission testing of motor vehicle emission control systems shall complete training in the certification procedures and the laboratory licensing requirements provided by the ARB or its contractor. This training is required for all laboratory test personnel prior to the initial issuance of a license and, for new personnel hired after a license is issued, within 6

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months of the date they were hired. The required training shall be conducted a minimum of twice annually. The laboratory shall maintain records of the training attended by its personnel.

D. Evaluation of Application

Each application for laboratory licensing shall be evaluated based on the information from the completed questionnaire, and an on-site assessment by the ARB or its contractor. The results of the evaluation shall be submitted to the Executive Officer with a recommendation on whether to issue a license. An Executive Order shall be issued to each laboratory meeting the requirements for licensing under IV.C. of this document. The application process shall be governed by the time limits set forth in Section 60030, Title 17, California Administrative Code.

- V. REVOCATION, SUSPENSION, OR DENIAL OF A LABORATORY LICENSE
  - A. A laboratory license may be revoked, suspended, denied, or withheld if:
    - 1. The laboratory submits false or incomplete information in its application.
    - 2. The laboratory renders false or inaccurate emission test data.
    - 3. The laboratory fails to comply with the requirements of this regulation.
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The Executive Officer may deny an application and refuse to issue a license for reasonable cause. A laboratory denied licensing shall be formally advised of the reasons for denial. In any case where a license is denied or withheld, the laboratory may request the

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Executive Officer for reconsideration of the decision. The request shall be in writing, signed by an authorized representative of the laboratory and shall include a statement specifying the laboratory's objections to the Executive Officer's decision and data in support of such objections. After a review of the request and supporting data, the Executive Officer may schedule a hearing, if or she finds that the request raises substantial issued.

- C. All proceedings for the suspension or revocation of a license shall be conducted pursuant to the administrative adjudication procedures of Sections 60040-60053, Title 17, California Code of Regulations.
- D. Any laboratory which knowingly submits false or inaccurate information, renders inaccurate or invalid test data, or commits any other fraudulent acts related to the certification of used modifier-certified motor vehicles shall be subject to penalties under Section 44209, Health and Safety Code.
- E. A licensed laboratory may apply for reinstatement of its license after revocation but no sooner than one year after the date of revocation. A laboratory applying for reinstatement shall follow all of the procedures and comply with all of the requirements for the initial licensing of a laboratory.
- F. Upon revocation or suspension, any unused certificates of conformance shall be returned to the ARb upon request.
- G. A licensed laboratory with certified vehicle(s) failing confirmatory tests shall submit to ARB its reasons for the emission test failure along with supporting data within 30 calendar days of

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receipt of written notification from the Executive Officer. Upon reveiw by the Executive Officer, the license of a laboratory found to be certifying imported vehicles that do not conform with the requirements specified in this regulation, may be suspended or revoked. A licensed laboratory may be subject to the penalties listed under Section 43016 of the Health and Safety Code for certification of noncomplying vehicles for the period starting with the most recent confirmatory or quality control cross check with ARB and ending with the vehicle(s) failing the confirmatory test.

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#### APPENDIX I.

List of Sections of Subpart 8, Part 86, Title 40, Code of Federal Regulations, Incorporated by Reference

This Appendix sets forth the sections of Subpart B, Part 86, Title 40, Code of Federal Regulations, as adopted or amended by the United States Environmental Protection Agency on the date listed for each section, which are incorporated by reference in "Licensing Requirements for Vehicle Emisson Test Laboratories."

Equipment required; overview, March 5, 1980. \$85.106-82 §85.107-78 Sampling and analytical system; evaporative emissions, June 28, 1977 \$86.108-79 Dynamometer, September 12, 1977. \$85.109-82 Exhaust gas sampling system; gasoline-fueled vehicles, Harch 5, 1980. \$85.110-82 Exhaust gas sampling system; diesel vehicles, October 13, \$85.111-82 Exhaust gas analytical system, March 5, 1980. \$86.112-82 Heighing chamber (or room) and microgram balance specifications, March 5, 1980. \$85.113-82 Fuel specifications, December 10, 1984 \$85.114-79 Analytical gases, November 14, 1978. \$85,115-78 EPA urban dynamometer driving schedule, June 28, 1977. 525.116-82 Calibrations, frequency and overview, March 5, 1980 \$35.117-78 Evaporative emission enclosure calibrations, June 28, \$85.118-78 Dynamometer calibration, June 28, 1977. \$85.119-78 CVS calibration, June 28, 1977. \$\$5.120-82 Gas meter or flow instrumentation calibration, particulate measurement, Harch 5, 1960. 585.121-82 Hydrocarbon analyzer calibration, March 5, 1980. \$85.122-78 Carbon monoxide analyzer calibration, June 28, 1977. \$35.123-78 Oxides of nitrogen analyzer calibration, September 12, 1977, \$85.124-78 Carbon dioxide analyzer calibration, June 28, 1977. \$86.126-78 Calibration of other equipment, June 28, 1977. Test procedures; overview, March 5, 1980. \$85.127-82 Transmissions, November 14, 1978. Road load power test weight and inertia weight class determination, November 14, 1978. \$85.128-79 \$86.129-80 \$36.130-78 Test sequence; general requirements, November 14, 1978. Vehicle preparation, June 28, 1977. \$36.131-78 Vehicle preconditioning, March 5, 1980. Diurnal breathing loss test, November 16, 1983. Dynamometer procedure, December 10, 1984. \$86.132-82 \$85.133-78 \$25.135-82 Engine starting and restarting, March 5, 1980. \$36.136.82 Dynamometer test run, gaseous and particulate emissions, \$35.137.82 March 5, 1980. \$25.138.78 Hot-soak test, June 28, 1977. Diesel particulate filter handling and weighing, Karch 5, \$25,139,82 1980. \$85.140.82 Exhaust sample analysis, Harch 5, 1980. CRE 147 02