

State of California
AIR RESOURCES BOARD

Resolution 80-10

April 23, 1980

WHEREAS, Section 39601 of the Health and Safety Code authorizes the Air Resources Board to adopt standards, rules, and regulations necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law:

WHEREAS, Sections 43101, 43104, and 43210 of the Health and Safety Code authorize the Board to adopt vehicle emission standards and test procedures in order to control or eliminate air pollution caused by motor vehicles;

WHEREAS, the Board's certification procedures for new heavy-duty engines and vehicles currently require a manufacturer to demonstrate that gasoline-powered certification engine or vehicle emissions will remain below the emissions standards adopted by the Board for at least 50,000 miles:

WHEREAS, recent data analyzed by the Board and by the U. S. Environmental Protection Agency indicate that late model gasoline-powered heavy-duty vehicles exceed on average the applicable emission standards long before 50,000 miles have been accumulated:

WHEREAS, these same data indicate that many vehicle owners are either not following the manufacturer's recommended maintenance practices or are disabling or defeating the exhaust emission control systems on their vehicles:

WHEREAS, the Board believes that heavy-duty engine and heavy-duty vehicle manufacturers must take reasonable steps to ensure that their vehicles are not easily susceptible to maladjustment or tampering;

WHEREAS, the Board finds that regulations which minimize the susceptibility of emissions-related components to tampering and maladjustment are, commencing with the 1982 model-year for gasoline-powered heavy-duty engines and vehicles, technologically feasible and necessary to carry out the Legislature's mandate that the Board control and reduce air pollution caused by motor vehicles; and

WHEREAS, the California Environmental Quality Act and Board regulations require that an activity not be adopted as proposed where the activity will have significant adverse environmental impacts and alternatives or feasible mitigation measures to the proposed activity exist;

WHEREAS, the Board finds that this action will have no significant adverse environmental effects;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby amends, Section 1956.7, Article 2, Subchapter 1, Chapter 3 of Title 13, California Administrative Code as follows:

Subsection (a) - no change

Amend subsection (b) and (c) and add subsection (d)

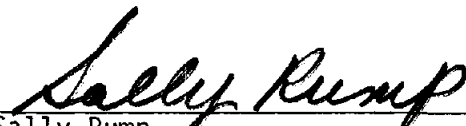
- (b) The test procedures for determining compliance with 1981 standards are set forth in the "California Exhaust Emission Standards and Test Procedures for 1981 Model Heavy-Duty Engines and Vehicles," adopted April 23, 1980.
- (c) The test procedures for determining compliance with standards applicable to 1982 and subsequent are set forth in the "California Exhaust Emission Standards and Test Procedures for 1982 and Subsequent Model Heavy-Duty Engines and Vehicles", adopted October 5, 1976, as last amended April 23, 1980.
- (d) A manufacturer may elect to certify heavy-duty vehicles of less than 10,000 pounds maximum gross vehicle weight rating as medium-duty vehicles under Section 1960.1 of this Chapter, in which event heavy-duty emission standards and test procedures shall not apply.

BE IT FURTHER RESOLVED, that the Board hereby adopts the "California Exhaust Emission Standards and Test Procedures for 1981 Model Year Heavy-Duty Engines and Vehicles," adopted April 23, 1980.

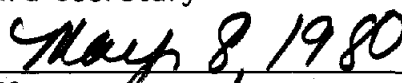
BE IT FURTHER RESOLVED, that the Board hereby adopts the "California Exhaust Emission Standards and Test Procedures for 1982 and Subsequent Model Heavy-Duty Engines and Vehicles", adopted October 5, 1976, as amended April 23, 1980.

BE IT FURTHER RESOLVED, that the Board hereby determines that the exhaust emission standards and test procedures adopted herein are, in the aggregate, at least as protective of public health and welfare as applicable federal standards.

I certify that the above is a true and correct copy of Resolution 80-10, as adopted by the Air Resources Board



Sally Rump
Board Secretary



Date

CALIFORNIA EXHAUST EMISSION STANDARDS AND
TEST PROCEDURES 1981 MODEL YEAR
HEAVY-DUTY ENGINES AND VEHICLES

The provisions of Subparts A and D, Part 86, Title 40, Code of Federal Regulations, as they pertain to heavy-duty engines and vehicles, and as they existed on April 15, 1977 are hereby adopted as the California Exhaust Emission Standards and Test Procedures for 1981 Model Year Heavy-Duty Engines and Vehicles, with the following exceptions and additions:

1. This procedure is applicable to new 1981 model year heavy-duty engines and vehicles. A manufacturer may elect to certify heavy-duty vehicles of 10,000 pounds maximum gross vehicle rating or less as medium-duty vehicles, in which event heavy-duty standards and test procedures will not apply.
2. Definitions.
 - a. "Administrator" means the Executive Officer of the Air Resources Board.
 - b. "Certificate of Conformity" means "Executive Order" certifying vehicles for sale in California.
 - c. "Certification" means certification as defined in Section 39018 of the Health and Safety Code.
 - d. "Heavy-duty engine" means an engine which is used to propel a heavy-duty vehicle.
 - e. "Heavy-duty vehicle" means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.
 - f. "Medium-duty vehicle" means any heavy-duty vehicle having a manufacturer's gross vehicle weight rating of 8500 pounds or less.
3. Any reference to vehicle or engine sales throughout the United States shall mean vehicle or engine sales in California.

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TEST PROCEDURES 1981 MODEL YEAR
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3. Any reference to vehicle or engine sales throughout the United States shall mean vehicle or engine sales in California.

4. Regulations concerning EPA hearings, EPA inspections, and specific language on the Certificate of Conformity, shall not be applicable to these procedures.

5. For diesel engines and vehicles:

No durability fleet or smoke emission test will be required and any reference to durability testing shall be optional. No deterioration factor shall be used for calculating the emission test results. The 125 hour test shall be used to determine compliance with the emission standards.

Evidence must be submitted to the Executive Officer to demonstrate the durability of the emission control system. Such evidence may include durability test data and/or an engineering evaluation of the system. This evaluation shall be based on previous experience and/or similarity to previously certified systems.

6. Durability data submitted pursuant to subparagraph 86.079-24(f) may be from engines previously certified by EPA or ARB.

7. The requirement in subparagraph 86.079-28(b)(4)(i)(B) (durability engines must meet emission standards) shall refer to federal emission standards.

8. Labeling required pursuant to paragraph 86.079-35 and Section 1965, Chapter 3, Title 13 of the California Administrative Code shall conform with the requirements specified in the "California Motor Vehicle Tune-Up Label Specifications."

9. A statement must be supplied that the production engines shall be in all material respects the same as those for which certification was granted.

10. If a gasoline engine manufacturer requires the use of unleaded fuel, a statement will be required that the engine and transmission combinations for which certification is requested are designed to operate satisfactorily on a gasoline having a research octane number not greater than 91.

11. The average brake horsepower at each mode shall be reported for all emission tests.

12. A vehicle manufacturer shall provide the following in its application:
- a. Identification and description of the vehicle models for which certification is requested.
 - b. Identification and description of the engines to be used in these vehicle models.
 - c. Reference to the engine manufacturer's Executive Order certifying these engines.
13. The following standards represent the maximum projected exhaust emissions from new heavy-duty gasoline engines and the maximum 125-hour test exhaust emissions from new heavy-duty diesel engines:

Exhaust Emission Standards
(grams per brake horsepower hour)

<u>Model Year</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Hydrocarbons Plus Oxides of Nitrogen (NO₂)</u>
1981	1.0	25	6.0
OR*	-	25	5

*The two sets of standards for each model year are alternatives. A manufacturer has the option for each engine family of showing compliance with either set.

Separate deterioration factors shall be established, where applicable, for HC, CO, NO_x and/or the combined emissions of HC and NO_x.

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Separate deterioration factors shall be established, where applicable, for HC, CO, NO_x and/or the combined emissions of HC and NO_x.

14. Engine manufacturers may apply durability and/or emission test data from 1979 and earlier model years towards certification for 1981 and subsequent models for similar engines, notwithstanding differences in the instrumentation. In the event that hydrocarbon emission data based on measurements from a nondispersive infrared analyzer are used pursuant to this section, such data shall be multiplied by a factor of 1.5 prior to comparison with the standards.
15. Vehicle manufacturers shall affix a decal on each production vehicle in accordance with Section 43200 of the California Health and Safety Code.

State of California
AIR RESOURCES BOARD

Note: These procedures are printed in a style to indicate the adopted changes. New text is underlined and deleted portions are noted.

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES
FOR ~~1981~~ 1982 AND SUBSEQUENT MODEL
HEAVY-DUTY ENGINES AND VEHICLES

Adopted: October 5, 1976
Amended: November 21, 1977
Amended: March 1, 1978
Amended: May 24, 1978
Amended: April 23, 1980

CALIFORNIA EXHAUST EMISSION STANDARDS
AND TEST PROCEDURES-FOR 1981
1982 AND SUBSEQUENT MODEL
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OR*	-	25	5
1982	1.0	25	6.0
OR*	-	25	5
1983 and subsequent	0.5	25	4.5

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15. Vehicle manufacturers shall affix a decal on each production vehicle in accordance with Section 43200 of the California Health and Safety Code.
16. For gasoline engines and vehicles:
 - a. The mechanism for adjusting the idle air/fuel mixture, if any, shall be designed so that either:
 - i. The mixture adjustment mechanism is not visible, even with the air cleaner removed, and special tools and/or procedures are required to make adjustments; or
 - ii. In the alternative, the Executive Officer may, upon reasonable notice to the manufacturer, require that a certification test of an engine or vehicle be conducted with the idle air/fuel mixture at any setting which the Executive Officer finds corresponds to settings likely to be encountered in actual use. The Executive Officer, in making this finding, shall consider the difficulty of making adjustments, damage to the carburetor in the event of any effort to make an improper adjustment, and the need to replace parts following the adjustment.
 - b. The manufacturer shall submit for approval by the Executive Officer the proposed method of compliance with this requirement in its preliminary application for certification.
 - c. The Executive Officer may, on a case-by-case basis, exempt from the requirements of this section engines which use carburetors substantially different in design from carburetors used on light or medium-duty vehicles and which the manufacturer demonstrates cannot be made to comply with this section within the available lead time. Such exemptions shall only apply to the 1982 model year.

State of California
AIR RESOURCES BOARD

Response to Significant Environmental Issues

Item: Public Hearing to Consider Amendments to Title 13, California
Administrative Code, Regarding Parameter Adjustment of Idle
Air/Fuel Mixtures on Heavy Duty Engines.

Public Hearing Date: April 23, 1980

Response Date: April 23, 1980

Issuing Authority: Air Resources Board

Comment: None

Response: N/A

Certified: Sally Lump

Date: May 8, 1980

Memorandum

To : Huey D. Johnson
Secretary
Resources Agency

Date : May 8, 1980

Subject : Filing of Notice
of Decision of the
Air Resources Board

From : Air Resources Board

Pursuant to Title 17, Section 60007(b), and in compliance with Air Resources Board certification under section 21080.5 of the Public Resources Code, the Air Resources Board hereby forwards for posting the attached notice of decision and response to environmental comments raised during the comment period.



Sally Rump
BOARD SECRETARY

attachments
Resolution 80-6
Resolution 80-8
~~Resolution 80-8~~
Resolution 80-25