State of California
AIR RESOURCES BOARD

Resolution 86-44

April 25, 1986

Agenda Item No.: 86-5-2

WHEREAS, Sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the "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 43013, 43101, and 43104 of the Health and Safety Code authorize the Board to adopt emission standards and test procedures to control air pollution caused by motor vehicles;

WHEREAS, Section 1956.7, Title 13, California Administrative Code, establishes exhaust emission standards and test procedures for 1982 and subsequent model heavy-duty gasoline-powered engines and vehicles (hereinafter the "Heavy-Duty Gasoline Standards and Test Procedures");

WHEREAS, the Heavy-Duty Gasoline Standards and Test Procedures incorporate a steady-state test procedure originally prescribed by the United States Environmental Protection Agency (EPA) to determine compliance with its heavy-duty emission standards for 1984 and earlier model years;

WHEREAS, in 1983 the EPA promulgated catalyst-forcing hydrocarbon (HC) and carbon monoxide (CO) emission standards of 1.1 and 14.4 grams per brake horsepower-hour (b/bhp-hr), respectively, for 1987 and subsequent model "light" heavy-duty gasoline engines up to 14,000 pounds gross vehicle weight rating (GVWR), and non-catalyst HC and CO emission standards of 1.9 and 37.1 g/bhp-hr, respectively, for 1987 and subsequent "heavy" heavy-duty gasoline engines greater than 14,000 pounds GVWR;

WHEREAS, in 1983 the EPA also amended its heavy-duty engine test procedures to include a new transient test cycle for gasoline engines, and changed the federal useful life period for heavy-duty gasoline engines to a new assigned "full-life useful-life" period of eight years/110,000 miles;

WHEREAS, in 1985 the EPA promulgated revised oxides of nitrogen (NOx) heavy-duty gasoline engine and vehicle emission standards of 10.6 g/bhp-hr for 1987 models, 6.0 g/bhp-hr for 1988 through 1990 models, and 5.0 g/bhp-hr for the 1991 and subsequent model years;

WHEREAS, the staff has proposed amendments to the Board's regulations which would generally align exhaust emission standards and test procedures for 1987 and subsequent model heavy-duty gasoline engines and vehicles with the corresponding federal standards and test procedures, adopt the federal full-life useful-life period for emissions compliance, engine durability and recall, allow a one-year carryover of the existing 1986 standards and test procedures to the 1987 model year for existing engines certified to the 1986 standards, and make related changes;

WHEREAS, the California Environmental Quality Act and Board regulations require that an action not be adopted as proposed where it will have significant adverse environmental impacts and alternatives or feasible mitigation measures to the proposed action are available which would substantially reduce such impacts;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of Chapter 3.5 (commencing with Section 11340), Part 1, Division 3, Title 2 of the Government Code;

WHEREAS, the Board finds that:

The standards and test procedures contained in the proposed amendments, including the catalyst-forcing standards for "light" heavy-duty gasoline engines, are technologically feasible and cost effective;

The proposed optional one-year carryover of the 1986 standards to the 1987 model year for existing engines certified to the 1986 standards is necessary to provide manufacturers who planned to use the steady-state standards for 1987 certification with lead time to comply with the transient cycle standards;

The proposed amendments set forth in Attachments A and B are consistent with the revised federal test procedures, and are appropriate to avoid unnecessary and costly additional testing by manufacturers and to ensure the continuation of the waiver of federal preemption under Clean Air Act Section 209;

Amending the defined useful-life period for California heavy-duty gasoline-powered engines and vehicles to be the same as the standardized federal full-life useful-life for purposes of emissions compliance, engine durability and recall will provide an incentive to build more durable emissions control systems;

The proposed amendments will result in significant emissions reductions of HC, CO and benzene commencing in 1987, and concomitant reductions in ozone, CO and benzene levels;

The 1991 and subsequent model year NOx standards in the proposed amendments will result in long-term NOx emissions reductions and concomitant reductions in ozone levels in the areas of highest ozone levels, and reductions in particulate matter, nitrogen dioxide, visibility impairment, and acid deposition;

The proposed amendments will result in a significant adverse environmental impact, in that NOx emissions from 1987-1990 model year engines will increase; this impact will be partially mitigated by the long-term NOx reductions stemming from the 1991 and subsequent model standards;

The HC, CO and benzene emissions reductions from 1987-1990 heavy-duty gasoline engines, when balanced with the NOx emissions increases from such vehicles, will result in an overall net health benefit; there are no feasible mitigation measures or alternatives available which would substantially reduce the adverse impact from the NOx emissions increase while maintaining the benefits of the HC, CO and benzene emissions reductions;

NOW, THEREFORE, BE IT RESOLVED that the Board hereby adopts the amendments to Sections 1956.7, 1956.8, 1965, and 2111, of Title 13, California Administrative Code, and the documents incorporated therein, as set forth in Attachments A and B hereto.

BE IT FURTHER RESOLVED that the Board hereby determines that the amendments approved herein will not cause the California emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards, will not cause the California requirements to be inconsistent with Section 202(a) of the Clean Air Act, and raise no new issues affecting previous waiver determinations of the Administrator of the Environmental Protection Agency pursuant to Section 209(b) of the Clean Air Act.

BE IT FURTHER RESOLVED that the Executive Officer shall forward the amended regulation to the Environmental Protection Agency with a request either for confirmation that the amendments are within the scope of an existing waiver or for issuance of a new waiver, pursuant to Section 209(b)(1) of the Clean Air Act.

BE IT FURTHER RESOLVED that the Board hereby directs the staff to evaluate further the need for and feasibility of more stringent standards for 1991 and later heavy-duty gasoline engines, and to report back to the Board with its recommendations as soon as feasible.

BE IT FURTHER RESOLVED that the staff is directed to take appropriate action to credit the emission reductions provided by this action to California's commitment to reasonable extra efforts to attain the national ambient air quality standards for ozone and carbon monoxide. Credits for nitrogen oxides are to be applied in the South Coast Air Basin, Ventura County, and other parts of the state for which it is shown that reductions in the emissions of nitrogen oxides will reduce ambient ozone concentrations.

I hereby certify that the above is a true and correct copy of Resolution 86-44, as adopted by the Air Resources Board.

Harold Holmes

Harold Holmes, Board Secretary

Amend Title 13, California Administrative Code, Section 1956.7, subsections (a) and (c) and section title to read as follows:[1/]

1956.7 Exhaust Emission Standards and Test Procedures - 1981 ~~and Subsequent~~ through 1986 Model Heavy-Duty Gasoline-Powered Engines and Vehicles and 1981 through 1984 Model Heavy-Duty Diesel-Powered Engines and Vehicles.

(a) The exhaust emissions from new 1981 ~~and subsequent~~ through 1986 model heavy-duty gasoline-powered engines and new 1981 through 1984 model heavy-duty diesel-powered engines, except engines used in medium-duty vehicles, shall not exceed:

Primary Exhaust Emission Standards
(grams per brake horsepower hour)

Model Year	Gasoline or Diesel-Powered	Hydrocarbons	Carbon Monoxide	Hydrocarbons plus Oxides of Nitrogen
1981-1983	Both	1.0	25	6.0
OR*	Both	-	25	5
1984	Both	0.5	25	4.5
~~1985 and subsequent~~ 1985-1986	Gasoline Only	0.5	25	4.5

* 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, NOx and/or the combined emissions of HC and NOx.

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1. Sections 1956.7(b), (d), and (e) are not changed by the above proposal.

The following optional exhaust emission standards are applicable to engines tested pursuant to the optional federal test procedures and regulations for 1984 model heavy-duty engines. These standards replace the federal standards in Code of Federal Regulations Sections 86.084-10 and 86.084-11 for hydrocarbons, carbon monoxide and oxides of nitrogen only.**

Optional Exhaust Emission Standards
(grams per brake horsepower hour)

Model Year	Hydrocarbons	Carbon Monoxide	Oxides of Nitrogen
1984	1.3	15.5	5.1

** The federal 13-mode optional standards for 1984 model-year diesel-powered engines do not apply. In addition, the engine crankcase emission control requirement in Subparagraph 86.084-11(b)(2)(c) shall not apply for the 1984 model year.

(c) The test procedures for determining compliance with standards applicable to 1982 ~~and subsequent~~ through 1986 models are set forth in the "California Exhaust Emission Standards and Test Procedures for 1982 ~~and Subsequent~~ through 1986 Model Heavy-Duty Gasoline-Powered Engines and Vehicles and 1982 through 1984 Model Heavy-Duty Diesel-Powered Engines and Vehicles," adopted October 5, 1976, as last amended ~~April 8, 1985~~ _____.

NOTE: Authority cited: Section 39600 and 39601, Health and Safety Code. Reference: Sections 39002, 39003, 43000, 43013, 43100, 43101 and 43104, Health and Safety Code.

Amend Title 13, California Administrative Code, Section 1956.8, to read as follows:[2/]

1956.8 Exhaust Emission Standards and Test Procedures--1985 and Subsequent Model Heavy-Duty Engines and Vehicles.

(a) The exhaust emissions from new 1985 and subsequent model heavy-duty diesel-powered engines, except engines used in medium-duty vehicles, shall not exceed:

Exhaust Emission Standards
(grams per brake horsepower-hour)

Model Year	Hydrocarbons	Carbon Monoxide	Oxides of Nitrogen
1985 and subsequent	1.3	15.5	5.1

(b) The test procedures for determining compliance with standards applicable to 1985 and subsequent heavy-duty diesel models are set forth in the "California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel-Powered Engines and Vehicles," adopted April 8, 1985.

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2. The Board is also scheduled to consider on April 24, 1986 separately noticed amendments to Section 1956.8(a) and (b), regarding heavy-duty diesel-powered engines and vehicles. Any amendments to those subsections would be included in the regulation.

(c) The exhaust emissions from new 1987 and subsequent model heavy-duty gasoline-powered engines, except engines used in medium-duty vehicles, shall not exceed:

Exhaust Emission Standards
(grams per brake horsepower-hour)

Model Year	Hydrocarbons	Carbon Monoxide[A]	Oxides of Nitrogen
1987[B]	1.1[C] 1.9[D]	14.4[C] 37.1[D]	10.6 10.6
1988-1990	1.1[C] 1.9[D]	14.4[C] 37.1[D]	6.0 6.0
1991 and Subsequent	1.1[C] 1.9[D]	14.4[C] 37.1[D]	5.0 5.0

A Carbon Monoxide emissions from engines utilizing exhaust aftertreatment technology shall also not exceed 0.5 percent of the exhaust gas flow at curb idle.

B Manufacturers with existing heavy-duty gasoline-powered engines certified to the California 1986 steady-state emission standards and test procedures may as an option certify those engines, for the 1987 model year only, in accordance with the standards and test procedures for 1986 heavy-duty gasoline-powered engines established in Section 1956.7.

C These standards are applicable to gasoline-powered engines intended for use in all heavy-duty vehicles.

D Applicable to heavy-duty gasoline-powered engines intended for use only in vehicles with a gross vehicle weight rating greater than 14,000 pounds. Also, as an option, a manufacturer may certify one or more gasoline-powered heavy-duty engine configurations intended for use in all heavy-duty vehicles to these emission standards, provided, that the total model year sales of such configuration(s) being certified to these emission standards represent no more than 5 percent of total model year sales of all gasoline-powered heavy-duty engines intended for use in vehicles with a Gross Vehicle Weight Rating of up to 14,000 pounds by the manufacturer.

(d) The test procedures for determining compliance with standards applicable to 1987 and subsequent heavy-duty gasoline-powered engines are set forth in the "California Exhaust Emission Standards and Test Procedures for 1987 and Subsequent Model Heavy-Duty Gasoline-Powered Engines and Vehicles," adopted _____.

~~(c)~~(e) A manufacturer may elect to certify heavy-duty ~~diesel~~ 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 the heavy-duty emission standards and test procedures in this section shall not apply.

~~(d)~~(f)(1) In 1985 and future years, the executive officer may authorize use of engines certified to meet federal emission standards, or which are demonstrated to meet appropriate federal emission standards, in up to a total of 100 heavy-duty vehicles, including both gasoline- and diesel-powered heavy-duty vehicles, in any one calendar year when the executive officer has determined that no engine certified to meet California emission standards exists which is suitable for use in the vehicles.

(2) In order to qualify for an exemption, the vehicle manufacturer shall submit, in writing, to the executive officer the justification for such exemption. The exemption request shall show that, due to circumstances beyond the control of the vehicle manufacturer, California certified engines are unavailable for use in the vehicle. The request shall further show that redesign or discontinuation of the vehicle will result in extreme cost penalties and disruption of business. In evaluating a request for an exemption, the executive officer shall consider all relevant factors, including the number of individual vehicles covered by the request and the

anti-competitive effect, if any, of granting the request. If a request is denied, the executive officer shall state in writing the reasons for the denial.

(3) In the event the executive officer determines that an applicant may meet the criteria for an exemption under this subsection, but that granting the exemption will, together with previous exemptions granted, result in over 100 vehicles being permitted under this subsection to use non-California engines in heavy-duty vehicles in any one calendar year, the exemption may be granted only by the state board, under the criteria set forth herein.

NOTE: Authority cited: Section 39600 and 39601, Health and Safety Code. Reference: Sections 39002, 39003, 43000, 43013, 43100, 43101 and 43104, Health and Safety Code.

Amend Title 13, California Administrative Code, Section 1965 to read as follows:

1965. Tune-Up Labels--1979 and Subsequent Model Year Motor Vehicles.

In addition to all other requirements, tune-up labels required by California certification procedures shall conform to the "California Motor Vehicle Tune-Up Label Specifications," adopted March 1, 1978, as last amended ~~April 8, 1985~~ _____.

NOTE: Authority cited: Sections 39600 and 39601, Health and Safety Code. Reference: Sections 39002, 39003, 43000, 43013, 43100, 43101, 43102, 43104, 43107 and 43200, Health and Safety Code.

Amend Title 13, California Administrative Code, Section 2111 to read as follows:

2111. In-Use Vehicle Emissions-Related Defects Reporting Procedures.

All 1978 and subsequent model-year passenger cars, light-duty trucks, medium- and heavy-duty vehicles, and motorcycles, certified for sale and registered in California, shall be subject to the "California Vehicle Emissions-Related Defects Reporting Procedures for 1978 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, Medium and Heavy-Duty Vehicles, and Motorcycles," adopted March 16, 1983, as amended ~~April 8, 1985~~ _____.

NOTE: Authority cited: Sections 39601, 43105 and 43213, Health and Safety Code. Reference: Sections 43000, 43105, 43106, and 43211-43213, Health and Safety Code.

State of California
AIR RESOURCES BOARD

PROPOSED

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR 1982 -AND-~~SUBSEQUENT~~ THROUGH 1986 MODEL HEAVY-DUTY GASOLINE-POWERED ENGINES AND VEHICLES AND 1982 THROUGH 1984 MODEL HEAVY-DUTY DIESEL-POWERED ENGINES AND VEHICLES

Adopted: October 5, 1976
Amended: November 21, 1977
Amended: March 1, 1978
Amended: May 24, 1978
Amended: April 23, 1980
Amended: May 22, 1980
Amended: January 21, 1981
Amended: August 25, 1983
Amended: April 8, 1985
Amended: _____

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

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR 1982 -AND-~~SUBSEQUENT~~ THROUGH 1986 MODEL HEAVY-DUTY GASOLINE-POWERED ENGINES AND VEHICLES AND 1982 THROUGH 1984 MODEL HEAVY-DUTY DIESEL-POWERED 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 primary California Exhaust Emission Standards and Test Procedures for 1982 ~~and Subsequent~~ Through 1986 Model Heavy-Duty Engines and Vehicles. For manufacturers that elect to certify heavy-duty engines pursuant to the federal transient cycle test procedures and regulations for the 1984 ~~and subsequent~~ model years, the provisions of Subparts A and N, Part 86, Code of Federal Regulations promulgated January 21, 1980, are hereby adopted as optional "California Exhaust Emission Test Procedures and Regulations for 1984 and Subsequent Model Heavy-Duty Engines and Vehicles." The federal procedures are applicable with the following exceptions and additions:

A. Subsection A of this procedure is applicable to new 1982 and subsequent model heavy-duty engines and vehicles tested pursuant to the primary and optional test procedures and standards.

1. A manufacturer may elect to certify heavy-duty vehicles of 10,000 pounds maximum gross vehicles weight 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.

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

5. Labeling required pursuant to paragraph 86.079-35 for steady-state certification, labeling required pursuant to paragraph 86.084-35 for transient certification, and pursuant to 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".

6. Vehicle manufacturers shall affix a decal on each 1982 through 1984 model year production vehicle in accordance with Section 43200 of the California Health and Safety Code.

B. Subsection B of this procedure is applicable to the primary test procedures and standards for all heavy-duty engines and vehicles:

1. For gasoline and diesel-powered engines and vehicles:

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

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

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

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

   e. Engine manufacturers may apply durability and/or emission test data from 1979 and earlier model years towards certification for 1982 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.

2. For gasoline-powered engines and vehicles only:

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.

   The manufacturer shall submit for approval by the Executive Officer the proposed method of compliance with this requirement in its preliminary application for certification.

   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.

b. A gasoline-powered vehicle manufacturer shall provide with the application:

   i. Identification and description of the vehicle models for which certification is requested.

   ii. Identification and description of the engines to be used in those vehicle models.

   iii. Reference to the engine manufacturer's Executive Order certifying these engines.

c. If a gasoline-powered engine manufacturer requires the use of unleaded fuel for 1982 through 1984 model year engines, 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.

3. For diesel-powered heavy-duty engines only:

   a. 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.

   b. 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.

C. Exhaust Emission Standards:

1. The following primary exhaust emission standards represent the maximum projected emissions from new heavy-duty gasoline engines and the maximum 125-hour test exhaust emissions from new heavy-duty diesel engines:

Primary Exhaust Emission Standards
(grams per brake horsepower hour)

Model Year	Gasoline or Diesel-Powered	Hydrocarbons	Carbon Monoxide	Hydrocarbons Plus Oxides of Nitrogen
1982 - 1983	Both	1.0	25	6.0
OR*	Both	-	25	5
1984	Both	0.5	25	4.5
~~1985 and subsequent~~ 1985-1986	Gasoline only	0.5	25	4.5

*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, NOx, and/or the combined emissions of HC and NOx.

2. The following optional exhaust emission standards are applicable pursuant to the federal test procedure and regulations for 1984 model heavy-duty engines. These standards replace the federal standards in CFR Sections 86.084-10, and 86.084-11 for hydrocarbons, carbon monoxide, and oxides of nitrogen, only.**

Optional Exhaust Emission Standards
(grams per brake-horsepower-hour)

Model Year	Hydrocarbons	Carbon Monoxide	Oxides of Nitrogen
1984	1.3	15.5	5.1

** The federal 13-mode optional standards for diesel-powered engines for 1984 only are not applicable to California. In addition, the engine crankcase emission control requirement in Subparagraph 86.084-11(b)(2)(c) shall not apply for the 1984 model year.

Proposed

State of California
AIR RESOURCES BOARD

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR 1987 AND SUBSEQUENT MODEL HEAVY-DUTY GASOLINE-POWERED ENGINES AND VEHICLES

Adopted: _____

NOTE: This is a new document proposed for adoption. It incorporates by reference various sections of the Code of Federal Regulations, some with modifications. All proposed language is underlined.

The procedures are printed in a style that identifies proposed terms which vary from the federal provisions. Proposed modifications to the federal regulations are indicated by strike-out for deleted terms and double-underline for new terms. New California provisions which would replace specific federal provisions are denoted by the words "DELETE" for the federal language and "REPLACE WITH" for the new California language. The symbols "*****" and "..." mean that the remainder of the federal text for a specific section, which is not shown in these procedures, has been included by reference. Federal regulation sections which are not listed have not been proposed as part of the procedures.

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR 1987 AND SUBSEQUENT MODEL HEAVY-DUTY GASOLINE-POWERED ENGINES AND VEHICLES

The following provisions of Subparts A, N, and P, Part 86, Title 40, Code of Federal Regulations, as adopted or amended by the U.S. Environmental Protection Agency on the date listed, and only to the extent they pertain to the testing and compliance of exhaust emissions from heavy-duty gasoline-powered engines and vehicles, are adopted and incorporated herein by this reference as the California Exhaust Emission Standards and Test Procedures for 1987 and Subsequent Model Heavy-Duty Gasoline-Powered Engines and Vehicles, except as altered or replaced by the provisions set forth below.

The federal regulations contained in the subparts identified above which pertain to evaporative emissions and oxides of nitrogen emission averaging shall not be applicable to these procedures.

Subpart A, General Provisions for Emission Regulations for 1977 and Later Model Year New Light-Duty Vehicles, 1977 and Later Model Year New Light-Duty Trucks, and for 1977 and Later Model Year New Heavy-Duty Engines.

§86.085-1 General Applicability. March 15, 1985.

* * * * *

(b) ...GVWR or less to the ~~light-duty-truck~~ medium-duty vehicle ...

* * * * *

(e) ... projected combined U.S. California sales of ~~light-duty-vehicles~~ passenger cars, light-duty trucks, medium-duty vehicles and heavy-duty engines in its product line are fewer than ~~10,000~~ 3000 units for the model...

* * * * *

§86.085-2 Definitions. November 16, 1983.

* * * * *

"Administrator" DELETE
REPLACE WITH:
"Administrator" means the Executive Officer of the Air Resources Board.

* * * * *

"Certificate of Conformity" DELETE
REPLACE WITH:
"Certificate of Conformity" means "Executive Order" certifying vehicles for sale in California.

"Certification" DELETE
REPLACE WITH:
"Certification" means certification as defined in Section 39018 of the Health and Safety Code.

* * * * *

"Heavy-Duty Engine" DELETE
REPLACE WITH:
"Heavy-duty engine" means an engine which is used to propel a heavy-duty vehicle.
"Heavy-Duty Vehicle" DELETE
REPLACE WITH:
"Heavy-duty vehicle" means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.

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"Medium-Duty Vehicle" means any heavy-duty vehicle having a manufacturer's gross vehicle weight rating of 8500 pounds or less.

* * * * *

§86.088-2 Definitions. March 15, 1985.

§86.091-2 Definitions. March 15, 1985.

§86.078-3 Abbreviations. January 21, 1980.

§86.084-4 Section numbering; construction. September 25, 1980.

§86.084-5 General Standards; increase in emissions; unsafe conditions. November 2, 1982.

§86.078-7 Maintenance of records; submittal of information; right of entry. November 2, 1982.

§86.087-10 Emission standards for 1987 and later model year gasoline-fueled heavy-duty engines and vehicles. November 16, 1983.

§86.088-10 Emission standards for 1988 and later model year gasoline-fueled heavy-duty engines and vehicles. March 15, 1985.

§86.091-10 Emission standards for 1991 and later model year gasoline-fueled heavy-duty engines and vehicles. March 15, 1985.

§86.080-12 Alternative certification procedures. April 17, 1980.

§86.084-14 Small-volume manufacturers certification procedures. January 31, 1985.

* * * * *

(b)(1) ... produced by manufacturers with ~~U.S.~~ California sales (for the model year in which certification is sought) of fewer than ~~10,000~~ 3,000 units (~~LDV~~ PC, LDT, MDV, and HDE combined).

* * * * *

(c)(4) DELETE
REPLACE WITH:
(c)(4) The manufacturer shall include in its records all of the information that EPA requires in §86.084-21 of this subpart. This information will be considered part of the manufacturer's application for certification.

* * * * *

(c)(7)(i)(C) ... determines and prescribes based on design specifications or sufficient control over design specifications, development data, in-house testing procedures, and in-use experience. However, ...

* * * * *

(c)(11)(ii)(D)(1)...We project the total ~~U.S.~~ California sales of vehicles (engines) subject to this subpart to be fewer than ~~10,000~~ 3,000 units.

* * * * *

(c)(13)(ii)...affect vehicle emissions. All running changes which do not adversely affect emissions or the emissions control system durability are deemed approved unless disapproved by the Executive Officer within 30 days of the implementation of the running change. This ...

* * * * *

§86.085-20 Incomplete vehicles, classification. January 12, 1983.

§86.087-21 Application for certification. November 16, 1983.

§86.088-21 Application for certification. March 15, 1985.

§86.091-21 Application for certification. March 15, 1985.

§86.085-22 Approval of application for certification; test fleet selections; determinations of parameters subject to adjustment for certification and Selective Enforcement Audit, adequacy of limits, and physically adjustable ranges. August 30, 1985.

DELETE any reference to Selective Enforcement Audit.

§86.087-23 Required data. March 15, 1985.

* * * * *

(b)(1)(ii) ... useful life of the engine. Such data shall be submitted to the executive officer for review. If the durability test method is accepted by EPA, it shall also be accepted by ARB, subject to the following condition. If, after certification for the first model year in which the method is used, the executive officer determines that a manufacturer's durability test procedures do not conform with good engineering practices, the executive officer may require changes to that manufacturer's durability test procedures for subsequent model years. The manufacturer's revised durability test procedures shall be submitted to the executive officer for review and approval.

* * * * *

§86.088-23 Required data. July 19, 1985.

* * * * *

(b)(1)(ii) ... useful life of the engine. Such data shall be submitted to the executive officer for review. If the durability test method is accepted by EPA, it shall also be accepted by ARB, subject to the following condition. If, after certification for the first model year in which the method is used, the executive officer determines that a manufacturer's durability test procedures do not conform with good engineering practices, the executive officer may require changes to that manufacturer's durability test procedures for subsequent model years. The manufacturer's revised durability test procedures shall be submitted to the executive officer for review and approval.

* * * * *

§86.091-23 Required data. July 19, 1985.

* * * * *

(b)(1)(ii) ... useful life of the engine. Such data shall be submitted to the executive officer for review. If the durability test method is accepted by EPA, it shall also be accepted by ARB, subject to the following condition. If, after certification for the first model year in which the method is used, the executive officer determines that a manufacturer's durability test procedures do not conform with good engineering practices, the executive officer may require changes to that manufacturer's durability test procedures for subsequent model years. The manufacturer's revised durability test procedures shall be submitted to the executive officer for review and approval.

* * * * *

§86.085-24 Test vehicles and engines. January 31, 1985.

* * * * *

(e)(1)(i) DELETE
REPLACE WITH:
(e)(1)(i) a combined total of 3000 California passenger cars, light-duty trucks, medium-duty vehicles, and heavy-duty engines,
(e)(1)(ii) DELETE
(e)(1)(iii) DELETE
(e)(1)(iv) DELETE
(e)(1)(v) DELETE
(e)(1)(vi) DELETE
(e)(2)...total sales of fewer than ~~10,000~~ 3,000...

* * * * *

(f) ...submitted. Durability data submitted may be from engines previously certified by the EPA or the Air Resources Board.

* * * * *

§86.087-25 Maintenance. March 15, 1985.

§86.088-25 Maintenance. March 15, 1985.

§86.084-26 Mileage and service accumulation; emission measurements. October 19, 1983.

§86.085-27 Special test procedures. January 12, 1983.

§86.087-28 Compliance with emission standards. March 15, 1985.

§86.088-28 Compliance with emission standards. March 15, 1985.

§86.091-28 Compliance with emission standards. March 15, 1985.

§86.087-29 Testing by the Administrator. January 24, 1984.

§86.088-29 Testing by the Administrator. March 15, 1985.

§86.091-29 Testing by the Administrator. March 15, 1985.

§86.087-30 Certification. August 30, 1985.

§86.088-30 Certification. March 15, 1985.

§86.091-30 Certification. March 15, 1985.

§86.079-31 Separate certification. September 8, 1977.

§86.079-32 Addition of a vehicle or engine after certification. September 8, 1977.

§86.079-33 Changes to a vehicle or engine covered by certification. September 8, 1977.

§86.082-34 Alternative procedure for notification of additions and changes. November 2, 1982.

§86.087-35 Labeling. Labels shall comply with the requirements set forth in the "California Tune-Up Label Specifications", as last amended _____.

§86.085-37 Production vehicles and engines. January 12, 1983.

§86.087-38 Maintenance instructions. March 15, 1985.

§86.084-40 Automatic expiration of reporting and recordkeeping requirements. September 25, 1980.

Subpart N, Emission Regulations for New Gasoline- and Diesel-Fueled Heavy-Duty Engines; Gaseous Exhaust Test Procedures

§86.1301-84 Scope; applicability. November 16, 1983.

§86.1301-88 Scope; applicability. March 15, 1985.

§86.1302-84 Definitions. November 16, 1983.

§86.1303-84 Abbreviations. November 16, 1983.

§86.1304-84 Section numbering; construction. November 16, 1983.

§86.1305-84 Introduction; structure of subpart. November 16, 1983.

§86.1306-84 Equipment required and specifications; overview. November 16, 1983.

§86.1306-88 Equipment required and specifications; overview. March 15, 1985.

§86.1308-84 Dynamometer and engine equipment specifications. December 10, 1984.

§86.1309-84 Exhaust gas sampling system; gasoline-fueled engines. November 16, 1983.

§86.1311-84 Exhaust gas analytical system; CVS bag sample. November 16, 1983.

§86.1313-84 Fuel specifications. December 10, 1984.

§86.1314-84 Analytical gases. December 10, 1984.

§86.1316-84 Calibration; frequency and overview. December 10, 1984.

§86.1318-84 Engine dynamometer system calibrations. November 16, 1983.

§86.1319-84 CVS calibration. December 10, 1984.

§86.1321-84 Hydrocarbon analyzer calibration. December 10, 1984.

§86.1322-84 Carbon monoxide analyzer calibration. November 16, 1983.

§86.1323-84 Oxides of nitrogen analyzer calibration. December 10, 1984.

§86.1324-84 Carbon dioxide analyzer calibration. November 16, 1983.

§86.1326-84 Calibration of other equipment. November 16, 1983.

§86.1327-84 Engine dynamometer test procedures; overview. December 10, 1984.

§86.1327-88 Engine dynamometer test procedures; overview. March 15, 1985.

§86.1330-84 Test sequence, general requirements. November 16, 1983.

§86.1332-84 Engine mapping procedures. December 10, 1984.

§86.1333-84 Transient test cycle generation. November 16, 1983.

§86.1334-84 Pre-test engine and dynamometer preparation. December 10, 1984.

§86.1335-84 Optional forced cool-down procedure. December 10, 1984.

§86.1336-84 Engine starting and restarting. March 15, 1985.

§86.1337-84 Engine dynamometer test run. November 16, 1983.

§86.1337-88 Engine dynamometer test run. March 15, 1985.

§86.1338-84 Emission measurement accuracy. November 16, 1983.

§86.1340-84 Exhaust sample analysis. December 10, 1984.

§86.1341-84 Test cycle validation criteria. March 15, 1985.

§86.1342-84 Calculations; exhaust emissions. March 15, 1985.

§86.1344-84 Required information. November 16, 1983.

§86.1344-88 Required information. March 15, 1983.

Subpart P - Emission Regulations for New Gasoline-Fueled Heavy-Duty Engines and New Gasoline-Fueled Light-Duty Trucks; Idle Test Procedures

§86.1501-84 Scope, applicability. December 10, 1984.

§86.1502-84 Definitions. November 16, 1983.

§86.1503-84 Abbreviations. November 16, 1983.

§86.1504-84 Section numbering; construction. November 16, 1983.

§86.1505-84 Introduction; structure of subpart. November 16, 1983.

§86.1506-84 Equipment required and specifications; overview. November 16, 1983.

§86.1509-84 Exhaust gas sampling system. November 16, 1983.

§86.1511-84 Exhaust gas analysis system. November 16, 1983.

§86.1513-84 Fuel specifications. November 16, 1983.

§86.1514-84 Analytical gases. November 16, 1983.

§86.1516-84 Calibration; frequency and overview. November 16, 1983.

§86.1519-84 CVS calibration. November 16, 1983.

§86.1522-84 Carbon monoxide analyzer calibration. November 16, 1983.

§86.1524-84 Carbon dioxide analyzer calibration. November 16, 1983.

§86.1526-84 Calibration of other equipment. November 16, 1983.

§86.1527-84 Idle test procedure; overview. November 16, 1983.

§86.1530-84 Test sequence; general requirements. November 16, 1983.

§86.1537-84 Idle test run. November 16, 1983.

§86.1540-84 Idle exhaust sample analysis. November 16, 1983.

§86.1542-84 Information required. December 10, 1984.

§86.1544-84 Calculation; idle exhaust emissions. March 15, 1985.

Appendix I-Urban Dynamometer Schedules.

(f)(1) EPA Engine Dynamometer Schedule for Heavy-Duty Gasoline-Fueled Engines. December 10, 1984.

Additional Requirements

1. Any reference to vehicle or engine sales throughout the United States shall mean vehicle or engine sales in California.

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

State of California
AIR RESOURCES BOARD

California Motor Vehicle Tune-Up
Label Specifications

1. Purpose. The Air Resources Board recognizes that certain emissions-critical or emissions-related parts must be properly adjusted in order for vehicles and engines to meet the applicable emission standards. The purpose of these specifications is to require motor vehicle or motor vehicle engine manufacturers to affix a label on each production vehicle in order to provide the vehicle owner with information necessary for the proper adjustment of these parts.

2. Applicability. These specifications shall apply to each new 1979 and subsequent model-year passenger car, light-duty truck, medium-duty vehicle, heavy-duty gasoline-fueled engine, and heavy-duty diesel-fueled engine, and to each new 1982 and subsequent model year motorcycle sold or offered for sale in California. Any vehicles or classes of vehicles exempt from exhaust emission standards pursuant to Article 2, Chapter 3, Title 13 of the California Administrative Code shall also be exempt from the requirements of these specifications. The responsibility for compliance with these specifications shall rest with the motorcycle, light-duty vehicle, medium-duty vehicle, or heavy-duty engine manufacturer who certified such vehicles or engines.

3. Label Content and Location

   (a) A plastic or metal label shall be welded, riveted or otherwise permanently attached to an area within the engine compartment (if any) or to the engine in such a way that it will be readily visible to the average person after installation of the engine in a vehicle.

In selecting an acceptable location, the manufacturer shall consider the possibility of accidental damage (e.g., possibility of tools or sharp instruments coming in contact with the label). The label shall be affixed in such a manner that it cannot be removed without destroying or defacing the label, and shall not be affixed to any part which is likely to be replaced during the vehicle's useful life. For motorcycles, passenger cars, light-duty trucks, and medium-duty vehicles, the label shall not be affixed to any equipment which is easily detached from the vehicle.

(b) The label shall contain the following information lettered in the English language in block letters and numerals which shall be of a color that contrasts with the background of the label:

i. The label heading: "Emission Control Information."

ii. Full corporate name and trademark of the manufacturer.

iii Engine family identification, model designation (for heavy-duty diesels), and engine displacement (in cubic inches, cubic centimeters or liters).

iv. Exhaust Emission Control System: Initials may be used such as EM - engine modification, AI - air injection, FI - fuel injection.

v. Engine tune-up specifications and adjustments as recommended by the manufacturer, including but not limited to valve lash, ignition dwell, ignition timing, idle air fuel mixture setting procedure and valve (e.g., idle CO, idle speed drop), high idle speed, and, for diesels, initial injection timing, advertised horsepower, and fuel rate (in mm^3/stroke) at advertised horsepower (all as applicable). These

specifications shall indicate the proper transmission position during tune-up and what accessories, if any (e.g. air conditioner), should be in operation, and what systems, if any (e.g. vacuum advance, air pump), should be disconnected during the tune-up. For gasoline-fueled vehicles, the instructions for tune-up adjustments shall be sufficiently clear on the label so as to preclude the need for a mechanic or vehicle owner to refer to another document in order to correctly perform the adjustments.

vi. A vacuum hose routing diagram showing all emissions-related and emissions-critical parts that are actuated by vacuum and the correct routing of vacuum hoses. This diagram shall contain no more than two different vacuum hose routing patterns; however, if there are two routings on a single diagram each routing must be easily understandable. The hose diagram may be separated from the "Emission Control Information" label provided that the vacuum hose diagram is placed in a visible and accessible position.

vii. For motorcycles only, any specific fuel or engine lubricant requirements (e.g., lead content, research octane number, engine lubricant type).

viii. For heavy-duty engines, the date of engine manufacture (month and year).

ix. An unconditional statement of compliance with the appropriate model year California regulations; for example, "This vehicle (or engine, as applicable) conforms to California regulations applicable to _____ model year new _____ (specify

motorcycles, passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty gasoline engines, or heavy-duty diesel engines, as applicable)." For federally certified vehicles certified for sale in California the statement must include the phrase "conforms to federal regulations and is certified for sale in California". For Class III motorcycles for sale in California, the statement must include the phrase "is certified to HC engine family exhaust emission standard in California." For incomplete light-duty truck and incomplete medium-duty vehicles the label shall contain the following statement in lieu of the above:

"This vehicle conforms to California regulations applicable to _____ model-year new vehicles when completed at a maximum curb weight of ____ pounds and a maximum frontal area of _____ square feet."

x. For 1985 and subsequent model year heavy-duty diesel-powered engines and 1987 and subsequent model year heavy-duty gasoline-powered engines, if the manufacturer is provided an alternate useful life period under the provisions of 40 CFR 86.085-21(f), the prominent statement: "This vehicle has been certified to meet California standards for a useful life period of __ years or _____ miles of operation, whichever occurs first. This vehicle's actual life may vary depending on its service application." The manufacturer may alter this statement only to express the assigned alternate useful life in terms other than years or miles (e.g., hours, or miles only).

xi. For 1985 and subsequent model year heavy-duty diesel-powered engines, the prominent statement: "This engine has a primary intended service application as a _____ heavy-duty diesel-powered engine." (The primary intended service applications are light, medium, and heavy, as defined in 40 CFR 86.085-2.)

xii. For 1987 and subsequent model year heavy-duty gasoline-powered engines, one of the following prominent statements as applicable:

(1) For engines certified to the emission standards which are set forth in the table in Title 13, California Administrative Code, Section 1956.8(c) and are subject to footnote C of that table, the statement: "This engine is certified for use in all heavy-duty vehicles."

(2) For engines certified in accordance with the second sentence of footnote D of the table in Title 13, California Administrative Code, Section 1956.8(c), the statement, "This engine is certified for use in all heavy-duty vehicles. It is certified to the emission standards applicable to heavy-duty vehicles with a gross vehicle weight rating greater than 14,000 lbs."

(3) For engines certified in accordance with the first sentence of footnote D of the table in Title 13, California Administrative Code, Section 1956.8(c), the statement: "This engine is certified for use only in heavy-duty vehicles with a gross vehicle weight rating greater than 14,000 lbs."

Such statements shall not be used on labels placed on vehicles or engines which, in fact, do not comply with all applicable California regulations, including assembly-line test requirements, if any.

4. The provisions of these specifications shall not prevent a manufacturer from also reciting on the label that such vehicle or engine conforms to any applicable federal emission standards for new motor vehicles or new motor vehicle engines or any other information that such manufacturer deems necessary for, or useful to, the proper operation and satisfactory maintenance of the vehicle or engine.

5. As used in these specifications, readily visible to the average person shall mean that the label shall be readable from a distance of eighteen inches (46 centimeters) without any obstructions from vehicle or engine parts (including all manufacturer available optional equipment) except for flexible parts (e.g., vacuum hoses, ignition wires). Alternatively, information required by these specifications to be printed on the label shall be no smaller than 8 point type size provided that no vehicle or engine parts, (including all manufacturer available optional equipment), except for flexible parts, obstruct the label.

6. The label and any adhesives used shall be designed to withstand for the vehicle's total expected life, typical vehicle environmental conditions in the area where the label is attached. Typical vehicle environmental conditions shall include, but are not limited to, exposure to engine lubricants and coolants (e.g. gasoline, motor oil, brake fluids, water, ethylene glycol), underhood temperatures, steam cleaning, and paints or paint solvents. The manufacturer shall submit, with its certification application, a statement attesting that its labels comply with this requirement.

7. The manufacturer shall obtain approval from the Executive Officer for all label formats and locations prior to use. Approval of the specific tune-up settings is not required; however, the format for all such settings and tolerances, if any, is subject to review. If the Executive Officer finds that the information on the label is vague or subject to misinterpretation, or that the location does not comply with these specifications, he or she may require that the label or its location be modified accordingly.

8. Samples of all actual production labels used within an engine family shall be submitted to the Executive Officer within thirty days after the start of production.

9. (a) The Executive Officer may, upon request, waive or modify any part of the requirements of these specifications for the 1979 model year if a vehicle or engine manufacturer does not have adequate lead time to comply with the aforementioned requirements.

   (b) The Executive Officer may approve alternate label locations or may, upon request, waive or modify the label content requirements provided that the intent of these specifications are met.

PROPOSED

State of California
AIR RESOURCES BOARD

California Vehicle Emissions-Related Defects Reporting Procedures For 1978 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, Medium and Heavy-Duty Vehicles, and Motorcycles

Adopted: December 9, 1982
Amended: April 8, 1985
Amended: _____

NOTE: These procedures are printed in a style to indicate the proposed changes. New text is underlined, and deleted portions are noted by strike-out.

State of California
AIR RESOURCES BOARD

CALIFORNIA VEHICLE EMISSIONS-RELATED DEFECTS REPORTING PROCEDURES FOR 1978 AND SUBSEQUENT MODEL-YEAR PASSENGER CARS, LIGHT-DUTY TRUCKS, MEDIUM AND HEAVY-DUTY VEHICLES, AND MOTORCYCLES

A. GENERAL PROVISIONS

(1) These procedures shall apply to:

(a) California certified 1978 and subsequent model-year passenger cars, light-duty trucks, medium-duty and heavy-duty vehicles, and motorcycles.

(b) California certified motor vehicle engines used in such vehicles.

(2) The requirement to report emissions-related defects affecting a given class or category of vehicles or engines shall remain applicable for the useful life of the vehicles or engines.

(3) For the purposes of these procedures, the following definitions shall apply:

(a) "Useful Life" means:

(i) In the case of Class I motorcycles and motorcycle engines (50 to 169 cc or 3.1 to 10.4 cu. in.), a period of use of five years or 12,000 kilometers (7,456 miles), whichever first occurs.

(ii) In the case of Class II motorcycles and motorcycle engines (170 to 279 cc or 10.4 to 17.1 cu. in.), a period of use of five years or 18,000 kilometers (11,185 miles), whichever first occurs.

(iii) In the case of Class III motorcycles and motorcycle engines (280 cc and larger or 17.1 cu. in. and larger), a period of use of five years or 30,000 kilometers (18,641 miles), whichever first occurs.

(iv) In the case of 1978 through 1984 model year diesel-powered heavy-duty vehicles (except medium-duty vehicles), and 1978 through 1984 model year motor vehicle engines used in such vehicles, a period of use of five years, 100,000 miles, or 3000 hours of operation, whichever first occurs.

(v) In the case of 1978 through 1987 model year gasoline-powered heavy-duty vehicles (except medium-duty vehicles) certified using the steady-state emission standards and test procedures, and 1978 through 1987 model year heavy-duty motor vehicle engines certified using the steady-state emission standards and test procedures, a period of use of five years or 50,000 miles, whichever first occurs.

(vi) In the case of 1987 and subsequent model year gasoline-powered heavy-duty vehicles (except medium-duty vehicles) certified to the transient emission standards and test procedures, and 1987 and subsequent model year heavy-duty motor vehicle engines certified using the transient emission standards and test procedures, a period of use of eight years or 110,000 miles, whichever first occurs.

~~(v)~~(vii) In the case of 1985 and subsequent model year diesel-powered heavy-duty vehicles (except medium-duty vehicles), and 1985 and subsequent model year motor vehicle engines used in such vehicles, a period of use of eight years or 110,000 miles, whichever first occurs, for light, heavy-duty diesel-powered vehicles; eight years or 185,000 miles, whichever first occurs, for medium, heavy-duty diesel-powered vehicles; and eight years or 290,000 miles, whichever first occurs, for heavy, heavy-duty diesel-powered vehicles; or any alternative useful life period approved by the Executive Officer. (The classes of light, medium, and heavy, heavy-duty diesel-powered vehicles are defined in 40 CFR 86.085-2.)

~~(vi)~~(viii) In the case of light-duty and medium-duty vehicles certified under the Optional 100,000 Mile Certification Procedure, and motor vehicle engines used in such vehicles, a period of use of ten years or 100,000 miles, whichever first occurs.

~~(vii)~~(ix) In the case of all other light-duty~~,~~ and medium-duty ~~and heavy-duty~~ vehicles, and motor vehicle engines used in such vehicles, a period of use of five years or 50,000 miles, whichever first occurs. For those passenger cars, light-duty trucks and medium-duty vehicles certified pursuant to Title 13, California Administrative Code, Section 1960.15, the useful life shall be seven years, or 75,000 miles, whichever first occurs; however, the manufacturer's reporting and recall responsibility beyond 5 years or 50,000 miles shall be limited, as provided in Section 1960.15.

(b) "Emissions-Related Defect" shall mean a defect in design, materials, or workmanship in a device, system, or assembly described in the approved application for certification which affects any parameter, specification, or component enumerated in Appendix I. Excepted are defects in devices, systems and assemblies which the Executive Officer has deleted from the manufacturer's list of warranted parts pursuant to Section 2036(f), Title 13, California Administrative Code.

(c) Quarterly reports shall refer to the following calendar periods: January 1 - March 31, April 1 -June 30, July 1 -September 30, October 1 -December 31.

(d) "Days" shall mean normal working days when computing any period of time, unless otherwise noted.

(e) "Vehicle or engine manufacturer" means the manufacturer granted certification for a motor vehicle or motor vehicle engine. In the case of motor vehicles for which certification of the exhaust and evaporative emission control systems is granted to different manufacturers, the defect reporting responsibility shall be assigned accordingly.

(f) "Voluntary Emissions Recall" shall mean an inspection, repair, adjustment, or modification program voluntarily initiated and conducted by a manufacturer to remedy any emissions-related defect or nonconformity for which direct notification of vehicle or engine owners has been provided.

(g) "Ordered Emissions Recall" shall mean an inspection, repair, adjustment, or modification program required by the Board and conducted by the manufacturer to remedy any emissions-related defect or nonconformity for which direct notification of vehicle or engine owners has been provided.

(h) "Ultimate purchaser" shall be defined as provided in Section 39055.5 of the Health and Safety Code.

B. DEFECT INFORMATION REPORTS

(1) A manufacturer shall file a defect information report whenever:

(a) On the basis of data obtained subsequent to the effective date of these regulations, the manufacturer determines in accordance with procedures established by the manufacturer to identify safety-related defects (pursuant to 15 U.S.C. 1381 et seq., as amended) that a specific emissions-related defect exists in twenty-five or more vehicles or engines of the same model year; or

(b) The Executive Officer, with cause, requests such report, irrespective of when the defects were detected.

(2) No report shall be filed under these procedures for any emissions-related defect corrected prior to the sale of the affected vehicles or engines to an ultimate purchaser.

(3) Defect information reports required under subsection B.(1)(a) of these procedures shall be submitted not more than 15 working days after an emissions-related defect is found to affect twenty-five vehicles or engines of the same model year. Defect information reports requested under subsection B.(1)(b) of these procedures shall be submitted not more that 30 working days after the request is received. Items of information required by subsection B (4) of these procedures that are either not available within that period or are significantly revised shall be submitted as they become available.

(4) Except as provided in subsection B (3) of these procedures, each defect report shall contain the following information in substantially the format outlined below:

(a) The manufacturer's corporate name.

(b) A description of the defect.

(c) A description of each class or category of vehicles or engines potentially affected by the defect including make, model, model year, and such other information as may be required to identify the vehicles or engines affected.

(d) For each class or category of vehicle or engine described in response to subsection B (4)(c) of these procedures, the following shall also be provided:

(i) The number of vehicles or engines known or estimated to have the defect and an explanation of the means by which this number was determined.

(ii) The address of the plant(s) at which the potentially defective vehicles or engines were produced.

(e) An evaluation of the emissions impact of the defect and a description of any driveability problems which a defective vehicle might exhibit.

(f) Available emissions data which relate to the defect.

(g) An indication of any anticipated manufacturer follow-up.

C. VOLUNTARY EMISSIONS-RELATED RECALL

(1) When any manufacturer initiates a voluntary emissions recall campaign involving twenty-five or more vehicles or engines, the manufacturer shall submit a report describing the manufacturer's voluntary emissions recall plan as prescribed by these procedures within 15 working days of the date owner notification was begun. The report shall contain the following:

(a) A description of each class or category of vehicle or engine recalled including the number of vehicles to be recalled, the model year, the make, the model, and such other information as may be required to identify the vehicles or engines recalled.

(b) A description of the specific modifications, alterations, repairs, corrections, adjustments, or other changes to be made to correct the vehicles or engines affected by the emissions-related defect.

(c) A description of the method by which the manufacturer will determine the names and addresses of vehicle or engine owners and the method by which they will be notified.

(d) A description of the procedure to be followed by vehicle or engine owners to obtain correction of the nonconformity. This shall include designation of the date on or after which the owner can have the nonconformity remedied, the time reasonably necessary to perform the labor to remedy the defect, and the designation of facilities at which the defect can be remedied.

(e) If some or all of the nonconforming vehicles or engines are to be remedied by persons other than dealers or authorized warranty agents of the manufacturer, a description of the class of persons other than dealers and authorized warranty agents of the manufacturer who will remedy the defect.

(f) Three copies of the letters of notification to be sent to vehicle or engine owners.

(g) A description of the system by which the manufacturer will assure that an adequate supply of parts will be available to perform the repair under the remedial plan including the date by which an adequate supply of parts will be available to initiate the repair campaign, the percentage of the total parts requirement of each person who is to perform the repair under the remedial plan to be shipped to initiate the campaign, and the method to be used to assure the supply remains both adequate and responsive to owner demand.

(h) Three copies of all necessary instructions to be sent to those persons who are to perform the repair under the remedial plan.

(i) A description of the impact of the proposed changes on fuel consumption, driveability, and safety of each class or category of vehicles or engines to be recalled.

(2) The manufacturer shall not condition eligibility for repair on the proper maintenance or use of the vehicle except for strong and compelling reasons and with the approval of the Executive Officer; however, the manufacturer shall not be obligated to repair a component which has been removed or altered so that the remedial action cannot be performed without additional cost.

(3) The manufacturer shall require those who perform the repair under the voluntary recall to affix a label to each vehicle or engine repaired, or, when required, inspected under the voluntary recall.

(a) The label shall be placed in such location as aproved by the Executive Officer consistent with State law and shall be fabricated of a material suitable for the location in which it is installed and which is not readily removable intact.

(b) The label shall contain:

(i) the voluntary recall campaign number; and

(ii) A code designating the campaign facility at which the repair, or inspection for repair, was performed.

(4) The notification of vehicle or engine owners shall contain the following statement, "Your (vehicle or engine) (is or may be) releasing air pollutants which exceed (California or California and Federal) standards".

(5) Unless otherwise specified by the Executive Officer, the manufacturer shall report on the progress of the voluntary recall campaign by submitting subsequent reports for six consecutive quarters commencing with the quarter after the voluntary emissions recall campaign actually begins. Such reports shall be submitted no later than 25 working days after the close of each

calendar quarter. For each class or category of vehicle or engine subject to the voluntary emissions recall campaign, the quarterly report shall contain the:

(a) Emissions recall campaign number designated by the manufacturer.

(b) Date owner notification was begun, and date completed.

(c) Number of vehicles or engines involved in the voluntary emissions recall campaign.

(d) Number of vehicles or engines known or estimated to be affected by the emissions-related defect and an explanation of the means by which this number was determined.

(e) Number of vehicles or engines inspected pursuant to the voluntary emissions recall plan.

(f) Number of inspected vehicles found to be affected by the emissions-related defect.

(g) Number of vehicles actually receiving repair under the remedial plan.

(h) Number of vehicles determined to be unavailable for inspection or repair under the remedial plan due to exportation, theft, scrapping, or for other reasons (specify).

(i) Number of vehicles or engines determined to be ineligible for remedial action due to removed or altered components.

(j) Three copies of any service bulletins transmitted to dealers which relate to the defect to be corrected and which have not previously been reported.

(k) Three copies of all communications transmitted to vehicle or engine owners which relate to the defect to be corrected and which have not previously been submitted.

(6) If the manufacturer determines that any of the information requested in B (4) of these procedures has changed or was incorrect, revised information and an explanatory note shall be submitted. Answers to paragraphs C (5) (c), (d), (e), (f), (g), (h), and (i) of these procedures shall be cumulative totals.

(7) The manufacturer shall maintain in a form suitable for inspection, such as computer information storage devices or card files, the names and addresses of vehicle or engine owners:

(a) To whom notification was given;

(b) Who received remedial repair or inspection under the remedial plan; and

(c) Who were determined not to qualify for such remedial action when eligibility is denied due to removed or altered components.

(8) The records described in subsection C (7) of these procedures shall be made available to the Executive Officer or his or her authorized representative upon request.

(9) The reports required by these procedures shall be sent to: Chief, Mobile Source ~~Control~~ Division, 9528 Telstar Avenue, El Monte, California 91731.

(10) The information gathered by the manufacturer to compile the reports required by these procedures shall be retained for not less than one year beyond the useful life of the vehicles or engines and shall be made available to authorized personnel of the Air Resources Board upon request.

(11) The filing of any report under the provisions of these procedures shall not affect a manufacturer's responsibility to file reports or applications, obtain approval, or give notice under any provisions of law.

(12) The act of filing an Emissions Defect Information Report pursuant to these procedures is inconclusive as to the existence of a defect subject to Section 43204 of the Health and Safety Code and its implementing regulations. A manufacturer may include on each page of its Emissions Defect Information Report a disclaimer stating that the filing of a Defect Information Report pursuant to these regulations is not conclusive as to the applicability of Section 43204 of the Health and Safety Code and its implementing regulations.

State of California

86-44

Memorandum

To : Harold Holmes
Board Secretary

Date : July 21, 1986

Subject : Nonsubstantial Modification to April 25, 1986 Amendments to Title 13, California Administrative Code, Section 1956.8

From : James D. Boyd
Executive Officer
Air Resources Board

This is to memorialize that I have made a nonsubstantial modification to the April 25, 1986 amendments to Title 13, California Administrative Code, Section 1956.8.

As a minor aspect of broader comments regarding the standards applicable to heavy-duty trucks certified as medium-duty vehicles, General Motors (GM) recommended that the provisions allowing medium-duty vehicle certification of trucks "less than 10,000 pounds" gross vehicle weight rating (GVWR) should be expanded to cover trucks "not exceeding 10,000 pounds" GVWR. GM indicated that the change would enable a manufacturer to certify a heavy-duty truck to the medium-duty standard and simultaneously call it a 10,000-pound truck rather than a 9,999-pound truck.

Following the April 24, 1986 Board hearing, the staff compared the "less than 10,000 pounds" GVWR language in present Section 1956.8(c) to the analogous language in the United States Environmental Protection Agency (EPA) regulations, 40 CFR Section 86.085-1(b). The EPA regulation is among those incorporated by reference by the Board's test procedures. 40 CFR Section 86.085-1(b) permits light-duty truck certification of heavy-duty vehicles "10,000 pounds GVWR or less."

I have concluded that, particularly in light of the overall goal of the regulatory package to align more closely the California regulations with the federal regulations, it is appropriate for the ARB regulations to define the weight categories of heavy-duty trucks eligible for treatment as medium-duty vehicles in the same manner as the EPA regulations. The existing slight divergence appears to have resulted from a drafting oversight. Therefore, I have made a nonsubstantial change to Title 13, California Administrative Code, Section 1956.8(e) as amended to provide that medium-duty vehicle certification is permitted for trucks of "10,000 pounds or less" maximum GVWR.

cc: Board Members

State of California

Memorandum

To : Gordon Van Vleck
Secretary
Resources Agency

Date : August 27, 1986

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

From : Harold Holmes
Board Secretary
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 decisions and response to environmental comments raised during the comment period.

ATTACHMENTS
85-77
85-78
85-80
86-4
86-25
86-43
86-44
86-45