State of California

AIR RESOURCES BOARD

Resolution 76-16

March 31, 1976

WHEREAS, Section 39601 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 and 43104 of the Health and Safety Code authorize the Board to adopt exhaust emission standards and test procedures in order to control or eliminate air pollution caused by motor vehicles;

WHEREAS, Section 43104 of the Health and Safety Code requires the Board to base its test procedures on federal test procedures or on driving patterns typical in the urban areas of California;

WHEREAS, on February 11, 1976 the U.S. Environmental Protection Agency proposed regulations based upon evidence that motor vehicles which have manufacturer's maximum gross vehicle weight ratings between 6,000 pounds and 8,500 pounds operate in driving patterns which are more similar to the patterns of passenger cars and light-duty trucks than to those of heavyduty motor vehicles which have maximum gross vehicle weight ratings over 8,500 pounds;

WHEREAS, the Board has found that in recent years there has been an upward shift in the maximum gross vehicle weight rating of many vehicles which were formerly classified as light-duty trucks, thus reclassifying them as heavy-duty vehicles, although there has been no significant change in the basic use patterns of these vehicles during the same time period;

WHEREAS, the Board finds that vehicles which are currently classified as heavy-duty vehicles and which have maximum gross vehicle weight ratings of 8,500 pounds or less are more properly tested and controlled according to the same general test procedures now used for light-duty trucks;

WHEREAS, the Board finds that the emission control technology currently used on light-duty trucks can be readily applied to vehicles of less than 8,500 pounds gross vehicle weight rating; and 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 adopts the amendments to its regulations in Sections 1900, 1955.1, 1955.5, 1956, 1957, and 1959 in Chapter 3, Title 13, California Administrative Code, as shown in Attachments 1, 2, 3, 4, 5, and 6.

BE IT FURTHER ORDERED AND RESOLVED, that the Board adopts the "California Exhaust Emissions Standards and Test Procedures for 1975 Through 1978 Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles", the "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model-Year Gasoline-Fueled Heavy-Duty Engines and Vehicles," and the "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model-Year Diesel-Fueled Heavy-Duty Engines and Vehicles," all as amended March 31, 1976.

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Amendments to Section 1900, Title 13, California Administrative Code

- 1. Delete Section 1900.
- 2. Add Section 1900 which reads as follows:
  - 1900. Definitions.
    - (a) The definitions set forth in Chapter 2 (beginning with Section 39010), Part 26 of the Health and Safety Code shall govern the provisions of this chapter and are hereby incorporated by reference.
    - (b) In addition to the definitions incorporated under subdivision (a), the following definitions shall govern:
      - "Heavy-duty engine" means an engine which is used to propel a heavy-duty vehicle.
      - (2) "Heavy-duty vehicle" means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.
      - (3) "Light-duty truck" means any motor vehicle, rated at 6,000 pounds gross vehicle weight or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling offstreet or off-highway operation and use.
      - (4) "Medium-duty vehicle" means any heavy-duty vehicle having a manufacturer's gross vehicle weight rating of 8500 pounds or less.
      - (5) "Passenger car" means any motor vehicle designed primarily for transportation of persons and having a capacity of twelve persons or less.

# Amendment to Section 1955.1, Title 13, California Administrative Code

1955.1. <u>Exhaust Emission Standards and Test Procedures --</u> <u>1975 and Subsequent Model-Year Passenger Cars</u>. (a) The exhaust emissions from new 1975 and subsequent model-year passenger cars having an engine displacement of 50 cubic inches or greater, subject to registration and sold and registered in this state, shall not exceed:

# Exhaust Emission Standards (grams per mile)

Model-Year	Hydrocarbons	Carbon <u>Monoxide</u>	Oxides of <u>Nitrogen (NO<sub>2</sub>)</u>
1975	0.9*	9.0	2.0
1976	0.9*	9.0	2.0
1977	0.41	9.0	1.5

\*Hydrocarbon emissions from limited-production passenger cars shall not exceed 1.5 grams per mile.

"Limited-production"-vehicle-means-a-new-1975-model-year-motor vehicle-having-a-manufacturer's-gross-vehicle-weight-rating-of-under 6;001-pounds-that-is-manufactured-or-sold-in-this-state-in-quantities-of less-than-210-units-annually.

(b) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 and-Subsequent <u>through 1978</u> Model Gaseline-Powered Passenger Cars, and Light-Duty Trucks", <u>and Medium-Duty Vehicles</u>, adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975, April 16, 1975, and February 20, 1976, and March 31, 1976.

2.

Amendment to Section 1955.5, Title 13, California Administrative Code

1955.5

Exhaust Emission Standards and Test Procedures -

**1976** <u>1975</u> and Subsequent <u>Through 1978</u> Model-Year Light-Duty Trucks.

Exhaust Emission Standards (grams per mile)

(a) The exhaust emissions from new 1975 and subsequent through <u>1978</u> model-year gaseline-pewered light-duty trucks having an engine displacement of 50 cubic inches or greater, subject to registration and sold and registered in this state, shall not exceed:

Model Year	Hydrocarbons	Carbon <u>Monoxide</u>	Oxides of <u>Nitrogen (NO<sub>2</sub>)</u>
1975	2.0	20	2.0
1976	0.9	17	2.0
1977	0.9	17	2.0
<u>1978</u>	0.9	<u>17</u>	2.0

- (b) The standards shown in subdivision (a) above for the 1975 model year shall apply to 1975 and 1976 model "limitedproduction" light-duty trucks. Definition-of-"limitedproduction"-shall-be-the-same-as-in-Section-1955.1.
- (c) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent <u>Through 1978</u> Model Gaseline-Pewered Passenger Cars, and Light-Duty Trucks, and <u>Medium-Duty Vehicles</u>", adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975, April 16, 1975, and February 20, 1976 and <u>March 31, 1976.</u>

"Light-duty-truck"-means-any-motor-vehicle-rated-at-6,000pounds-gross-vehicle-weight-or-less,-which-is-designed-primarilyfor-purpose-of-transportation-of-properly-or-is-a-derivative--of-such-a-vehicle,-or-is-available-with-special-features-enabling off-street-or-off-highway-operation-and-use.

Amendments to Section 1956, Title 13, California Administrative Code

Amend Section (c) to read:

- 1956. (c) Exhaust emissions from new 1977 and later model-year gasoline-powered engines for use in heavy-duty motor vehicles (over-6,000-pounds,-manufacturer's-maximumgross-vehiele-weight) shall not exceed:
  - (1) Hydrocarbons plus oxides of nitrogen (as  $NO_2$ ) --

5 grams per brake horsepower hour

(2) Carbon monoxide -- 25 grams per brake horsepower hour

or

- (1) Hydrocarbons -- 1.0 gram per brake horsepower hour
- (2) Carbon Monoxide -- 25 grams per brake horsepower hour
- (3) Oxides of Nitrogen (as  $NO_2$ ) -- 7.5 grams per brake

horsepower hour

These two sets of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

The test procedures for determining compliance with these standards are those set forth in "California Exhaust Emission Standards, and Test and Approval Procedures for 1975 and Subsequest Model-Year Gasoline-Fueled Heavy-Duty Engines in Gasoline-Powered-Motor and Vehicles Over-6,000-Pounds- Gross-Vehicle-Weight," dated February 19, 1975, amended April 16, 1975, and July 15, 1975 and March 31, 1976.

Add Section (d) which reads:

- 1956. (d) Exhaust emissions from new 1978 and subsequent model-year gasoline-fueled heavy-duty engines and vehicles, except medium duty vehicles, shall not exceed:
  - (1) <u>Hydrocarbons plus oxides of nitrogen (as  $NO_2$ ) --</u>

5 grams per brake horsepower hour

(2) Carbon monoxide -- 25 grams per brake horsepower hour

5.

## Attachment 4 (cont'd)

or

(1) Hydrocarbons -- 1.0 gram per brake horsepower hour

(2) Carbon Monoxide -- 25 grams per brake horsepower hour

(3) Oxides of Nitrogen (as NO<sub>2</sub>) -- 7.5 grams per brake

horsepower hour

These two sets of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

The test procedures for determining compliance with these standards are those set forth in "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model-Year Gasoline-Fueled Heavy-Duty Engines and Vehicles," dated February 19, 1975, amended April 16, 1975, July 15, 1975, and March 31, 1976.

A manufacturer may elect to certify heavy-duty vehicles less than 10,000 pounds maximum gross vehicle weight rating as medium-duty vehicles under Section 1959 of this Chapter, in which event heavyduty emission standards and test procedures will not apply.

Amendments to Section 1957, Title 13, California Administrative Code

Amend Section (c) to read:

- 1957. (c) Exhaust emissions from new 1977 and later model-year diesel-powered engines for use in heavy-duty motor vehicles (over-6;000-pounds;-manufacturer's-maximum-gross-vehicle-weight) shall not exceed:
  - Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>) -- 5 grams per brake horsepower hour
  - (2) Carbon monoxide -- 25 grams per brake horsepower hour

or

- (1) Hydrocarbons -- 1.0 gram per brake horsepower hour
- (2) Carbon Monoxide -- 25 grams per brake horsepower hour
- (3) Oxides of Nitrogen (as NO<sub>2</sub>) -- 7.5 grams per brake horsepower hour

These two sets of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

The test procedures for determining compliance with these standards are those set forth in "California Exhaust Emission Standards, and Test and Approval Procedures for 1975 and Subsequent Model-Year <u>Diesel-Fueled Heavy-Duty</u> Engines in Diesel-Powered Motor and Vehicles Over-6,000-Pounds-Gross-Vehiele-Weight," dated December 19, 1973, amended August 8, 1974, April 16, 1975, and July 15, 1975 and March 31, 1976.

Add Section (d) which reads:

- 1957. (d) Exhaust emissions from new 1978 and subsequent model-year diesel-fueled heavy-duty engines and vehicles, except mediumduty vehicles, shall not exceed:
  - (1) Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>) --5 grams per brake horsepower hour

(2) Carbon monoxide -- 25 grams per brake horsepower hour

8.

(1) Hydrocarbons -- 1.0 gram per brake horsepower hour

(2) Carbon Monoxide -- 25 grams per brake horsepower hour

(3) Oxides of Nitrogen (as NO<sub>2</sub>) -- 7.5 grams per brake horsepower hour

These two sets of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

The test procedures for determining compliance with these standards are those set forth in "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model-Year Diesel-Fueled Heavy-Duty Engines and Vehicles," dated December 19, 1973, amended August 8, 1974, April 16, 1975, July 15, 1975, and March 31, 1976.

<u>A manufacturer may elect to certify heavy-duty vehicles less</u> <u>than 10,000 pounds maximum gross vehicle weight rating as medium-</u> <u>duty vehicles under Section 1959 of the Chapter, in which event</u> <u>heavy-duty emission standards and test procedures will not apply.</u>

Addition of Section 1959, Title 13, California Administrative Code

1959.

Exhaust Emission Standards and Test Procedures - 1978 Model Medium-Duty Vehicles.

 (a) The exhaust emissions from new 1978 medium-duty vehicles having an engine displacement of 50 cubic inches or greater, subject to registration and sold and registered in this state, shall not exceed:

# Exhaust Emission Standards<br/>(grams per mile)CarbonOxides of<br/>Nitrogen (NO2)Model YearHydrocarbonsMonoxideNitrogen (NO2)19780.9172.3

(b) The test procedures for determing compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 Through 1978 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975, April 16, 1975, February 20, 1976, and March 31, 1976.