

State of California

AIR RESOURCES BOARD

Resolution 74-51

September 11, 1974

WHEREAS, Section 39051 (c) of the Health and Safety Code gives the State Air Resources Board authority to adopt regulations to implement, interpret, or make specific Section 39118 of the Health and Safety Code;

WHEREAS, Sections 27157 and 27157.5 of the Vehicle Code and Section 39118 of the Health and Safety Code require the State Air Resources Board to set highway vehicle emission standards and vehicle emission inspection standards; and

WHEREAS, a public hearing and other 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 Air Resources Board hereby amends Title 13, Chapter 3, Subchapter 3 of the California Administrative Code to read as follows:

Subchapter 3. Highway and Mandatory Inspection Emission Standards

2175. Highway Exhaust Emissions--Light-Duty Vehicles. The State Air Resources Board finds the standards for exhaust emissions set forth below to be the maximum allowable emissions of pollutants from gasoline-powered light-duty vehicles (under 6001 lbs. GVW) at California Highway Patrol road inspection lanes. The inspection shall consist of emission measurements from a hot idling engine with the transmission set in neutral. No vehicle tested under the conditions above shall exceed the standards specified in the following table:

| Vehicle model-year | Number of cylinders | Hydrocarbons* ppm hexane by volume | | Carbon Monoxide* percent by volume | |
|-------------------------|---------------------|--|-----------|---------------------------------------|-----------|
| | | AI** | Others*** | AI** | Others*** |
| 1965 & Earlier | 4 | 1900 | | 8.0 | |
| | 6 & 8 | 1200 | | 8.0 | |
| 1966 through 1970 | 4 | 500 | 650 | 5.5 | 7.0 |
| | 6 & 8 | 400 | 500 | 5.5 | 7.0 |
| 1971 & Later | 4 | 450 | 600 | 3.5 | 5.0 |
| | 6 & 8 | 250 | 350 | 3.0 | 4.0 |

* As measured by a nondispersive infrared instrument.

** Air injection emission control system.

*** Any emission control system other than air injection.

2176. Mandatory Inspection Exhaust Emissions--Light-Duty Vehicles.

The State Air Resources Board finds the standards for exhaust emissions set forth below to be the maximum allowable emissions from gasoline-powered light-duty vehicles (under 6001 lbs. GVW) subject to inspection pursuant to Chapter 20.4 (commencing with Section 9889.50) of Division 3 of the Business and Professions Code.

The inspection shall consist of emission measurements of vehicles made on a dynamometer with the engine at normal operating temperature and under the following driving modes and conditions:

Idle Mode - Transmission shall be in neutral.

Driving conditions for Low Cruise Mode and High Cruise Mode are set forth in the following table:

| Vehicle Curb Weight plus 300 lbs. | Driving Cycle (Speed-Load Combination) | |
|-----------------------------------|--|----------------------|
| | Low Cruise | High Cruise |
| 3,801 lb. & up | 32-35 mph @ 10-12 hp | 48-50 mph @ 27-30 hp |
| 2,801-3,800 lb. | 29-32 mph @ 8-10 hp | 44-46 mph @ 21-24 hp |
| 2,000-2,800 lb. | 22-25 mph @ 4-6 hp | 36-38 mph @ 13-15 hp |

When the vehicles are inspected by this procedure the concentrations of exhaust emissions sampled during each of the above three test modes shall not exceed the levels given in the following table.

| Vehicle Year | | Idle | | | | Low Cruise | | | High Cruise | |
|------------------|----------|----------------|--------|--------|--------|------------|--------|------|-------------|-----|
| No. of cylinders | HC (ppm) | CO (%) | | HC ppm | CO % | NOx ppm | HC ppm | CO % | | |
| | | 1965 & Earlier | 4 | 1900 | 8.0 | 1200 | 7.0 | 2500 | 1200 | 6.5 |
| 6 & 8 | 1200 | 8.0 | 1000 | 6.0 | 2500 | 1000 | 5.5 | | | |
| 1966-1970 | 4 | AI | others | AI | others | ✓ | ✓ | ✓ | ✓ | |
| | | 500 | 650 | 5.5 | 7.0 | 600 | 5.0 | 2500 | 600 | 4.5 |
| 6 & 8 | 400 | 500 | 5.5 | 7.0 | 500 | 4.5 | 2500 | 500 | 4.0 | |
| 1971 and Later | 4 | 450 | 600 | 3.5 | 5.0 | 500 | 4.0 | 2500 | 500 | 3.5 |
| | 6 & 8 | 250 | 350 | 3.0 | 4.0 | 400 | 3.0 | 2500 | 400 | 2.5 |

In the above table, HC refers to parts per million by volume of hydrocarbons measured as hexane with a non-dispersive infrared instrument; CO refers to percent by volume of carbon monoxide; NOx refers to parts per million by volume of oxides of nitrogen; AI designates air injection emission control system. "Others" refers to any emission control system other than air injection.

The Air Resources Board has determined that the foregoing regulations create no cost to local government under Section 2231 of the Revenue and Taxation Code.