

State of California  
AIR RESOURCES BOARD

Resolution 77-24  
June 22, 1977

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 and 43104 of the Health and Safety Code authorize the Board to adopt vehicle emission standards in order to control or eliminate air pollution caused by motor vehicles;

WHEREAS, the Board has found that more stringent exhaust emission standards for passenger cars, light-duty trucks, and medium-duty vehicles are needed to achieve the ambient air quality standards in the South Coast Air Basin and in other areas of the State;

WHEREAS, on October 7 and 8, 1976 the Air Resources Board staff conducted a workshop with representatives of motor vehicle manufacturers to discuss the costs and technological feasibility of more stringent exhaust emission standards for passenger cars, light-duty trucks, and medium-duty vehicles, and to discuss needed changes to the Board's test procedures for such vehicles;

WHEREAS, on January 6 and 7, 1977 the Air Resources Board conducted a workshop with representatives of motor vehicle manufacturers, independent research organizations and the academic community to discuss photochemistry and transport phenomena related to air quality in the South Coast Air Basin;

WHEREAS, the Board has held previous public hearings on the issue of more stringent exhaust emission standards for oxides of nitrogen for light-duty and medium-duty vehicles on November 23, 1976 and January 25, 1977, to discuss proposals similar or identical to those under consideration today;

WHEREAS, based on information presented to the Board and the Board's staff at the above described meetings and public hearings, and on information previously submitted to the Board and to the U.S. Environmental Protection Agency, the Board has found that more stringent exhaust emission standards for passenger cars, light-duty trucks, and medium-duty vehicles are, commencing with the 1982 model-year, both technologically feasible and cost/effective; 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 following exhaust emission standards for 1980 and subsequent model passenger cars, light-duty trucks, and medium-duty vehicles:

Model Year	Vehicles	Equivalent Inertia Weight (lbs.)	Exhaust Emission Standards (grams per mile)		
			Non Methane Hydrocarbons	Carbon Monoxide	Oxides of Nitrogen (NO <sub>2</sub> )*
1980	Passenger Cars (PC)	All	0.39**	9.0	1.0 (1.5)
	Light-Duty Trucks (LDT)	0-3999	0.39**	9.0	1.5
	Light-Duty Trucks (LDT)	4000-5999	0.50	9.0	2.0
	Medium-Duty Vehicles (MDV)	All	0.9	17	2.3
1981	PC	All	0.39**	9.0	1.0 (1.5)
	LDT and MDV	0-3999	0.39**	9.0	1.0 (1.5)
	LDT and MDV	4000-5999	0.50	9.0	1.5 (2.0)
	MDV	6000 and larger	0.60	9.0	2.0 (2.3)
1982	PC	All	0.39**	9.0	0.4 (1.0)
	LDT and MDV	0-3999	0.39**	9.0	1.0 (1.5)
	LDT and MDV	4000-5999	0.50	9.0	1.5 (2.0)
	MDV	6000 and larger	0.60	9.0	2.0 (2.3)
1983 and Subsequent	PC	All	0.39**	9.0	0.4 (1.0)
	LDT and MDV	0-3999	0.39**	9.0	0.4 (1.0)
	LDT and MDV	4000-5999	0.50	9.0	1.0 (1.5)
	MDV	6000 and larger	0.60	9.0	1.5 (2.0)

\*NOx standards in parentheses are applicable to engine families which are certified under the "Optional 100,000 Mile Certification Procedure."

\*\*If a methane content correction factor is used, the standard shall be 0.41 grams per vehicle mile.

BE IT FURTHER RESOLVED, that the "Optional 100,000 Mile Certification Procedure," described in Attachment III to staff report 77-13-2, is hereby adopted.

BE IT FURTHER RESOLVED, that the Executive Officer shall make the necessary changes to the Board's test procedures and regulations in Section 1960, Title 13, California Administrative Code to incorporate the above standards and "Optional 100,000 Mile Certification Procedure."

Attachment III

Optional 100,000 Mile Certification Procedure

Commencing with 1982 model passenger cars and 1983 model light-duty trucks and medium-duty vehicles, the alternate NOx emission standards shown in paragraph (4) above shall apply to any engine family which meets all of the following additional requirements:

a. Each exhaust emission durability data vehicle shall be driven, with all emission control systems installed and operating, for 100,000 miles or such lesser distance as the Executive Officer may agree to as meeting the objectives of this procedure. Compliance with the emission standards shall be based on the projected emission levels at 100,000 miles. All references in test procedures to "useful life", 5 years, and 50,000 miles shall mean "total life", 10 years, and 100,000 miles respectively.

b. Only the following scheduled maintenance shall be allowed under paragraph 86.078-25(a)(1)(i).

25(a)(1)(i)(A). For gasoline-fueled and Diesel-fueled vehicles, the following items may be inspected, replaced, cleaned, adjusted, and/or serviced as required:

- (1) Drive belt tension on engine accessories (no more frequently than once every 30,000 miles).
- (2) Valve lash (no more frequently than once every 15,000 miles).
- (3) Air Filter (no more frequently than once every 30,000 miles).
- (4) Fuel Filter (no more frequently than once every 30,000 miles).
- (5) Idle Speed (no more frequently than once every 30,000 miles).

25(a)(1)(i)(B). Deleted.

c. The manufacturer agrees to apply to vehicles certified under this paragraph the provisions of Section 43204 of the California Health and Safety Code for a period of ten years or 100,000 miles, whichever first occurs.