State of California
AIR RESOURCES BOARD

Resolution 89-61

June 8, 1989

Agenda Item No.: 89-10-2

WHEREAS, Sections 39002 and 39003 of the Health and Safety Code, charge the Air Resources Board (the "Board") with the responsibility for systematically attacking the serious air pollution problem caused by motor vehicles;

WHEREAS, Sections 39600 and 39601 of the Health and Safety Code authorize 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, in Section 43000 of the Health and Safety Code, the Legislature has declared that the emission of air pollutants from motor vehicles is the primary cause of air pollution in many parts of the state;

WHEREAS, in Section 43000.5 of the Health and Safety Code, enacted as part of the California Clean Air Act of 1988 (Stats. 1988, ch. 1568), the Legislature has declared that while significant reductions in vehicle emissions have been achieved in recent years, continued growth in population and vehicle miles traveled throughout the state have the potential not only to prevent attainment of the state standards, but in some cases to result in worsening of air quality;

WHEREAS, in Section 43000.5 of the Health and Safety Code, the Legislature further declared that the attainment and maintenance of the state air quality standards will necessitate the achievement of substantial reductions in new vehicle emissions and substantial improvements in the durability of vehicle emissions systems;

WHEREAS, Sections 43013, 43101 and 43104 of the Health and Safety Code authorize the Board to adopt emission standards and test procedures applicable to new motor vehicles which it finds to be necessary cost-effective and technologically feasible;

WHEREAS, Section 43018 of the Health and Safety Code, enacted as part of the California Clean Air Act of 1988, directs the Board endeavor to achieve the maximum degree of emission reduction possible from motor vehicles to accomplish the attainment of the state standards at the earliest practicable date;

WHEREAS, Section 43018 of the Health and Safety Code further directs the Board to take whatever actions are necessary, cost-effective and technologically feasible in order to achieve, no later than December 31, 2000, a reduction in the actual emissions of reactive organic gases and oxides of nitrogen of 55% and 15%, respectively, from motor vehicles based on emissions in 1987, and to achieve the maximum feasible reductions in particulates, carbon monoxide and toxic air contaminants from vehicular sources;

WHEREAS, Section 43018 of the Health and Safety Code further directs the Board to achieve the specified emission reductions by requiring the most cost-effective combination of control measures for motor vehicles and motor vehicle fuels, and for this purpose specifically requires the Board to consider, no later than November 15, 1989, revisions to light-duty vehicle exhaust emission standards and revisions to the standards for new vehicle certification and durability to reflect current driving conditions and useful vehicle life;

WHEREAS, Section 39667 of the Health and Safety Code requires the Board to adopt emission standards for new motor vehicles to achieve the maximum reduction in public exposure to toxic air contaminants based upon the most advanced technology feasible for the model year;

WHEREAS, the Board has adopted "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," incorporated by reference in Section 1960.1, Title 13, California Code of Regulations ("CCR"), which currently specify exhaust emission standards of 0.41 grams per mile (g/mi) hydrocarbon (HC) or 0.39 g/mi non-methane hydrocarbon (NMHC) and 7.0 g/mi carbon monoxide (CO) for passenger cars, 0.41 g/mi HC or 0.39 g/mi NMHC and 9.0 g/mi CO for light-duty trucks (0-3750 lbs. LVW), and 0.50 g/mi HC and 9.0 g/mi CO for larger light-duty trucks (3751-5750 lbs. LVW);

WHEREAS, in Section 93000, Title 17, CCR, the Board has identified benzene, a compound emitted by motor vehicles, as a toxic air contaminant and has listed for evaluation pursuant to Health and Safety Code Sections 39650 et seq. other constituents of motor vehicle hydrocarbon emissions including 1,3 butadiene and formaldehyde;

WHEREAS, the staff has proposed amendments to the exhaust emission standards to lower the standards for passenger cars and light-duty trucks (0-3750 lbs. LVW.) to 0.25 g/mi NMHC and 3.4 g/mi CO applicable for 50,000 miles and 0.31 g/mi NMHC and 4.2 g/mi CO applicable for 100,000 miles, and for the larger light-duty trucks (3751-5750 lbs. LVW) to 0.32 g/mi NMHC and 4.4 g/mi CO applicable for 50,000 miles and 0.40 g/mi NMHC and 5.5 g/mi CO applicable for 100,000 miles;

WHEREAS, the proposed NMHC emission standards will result in reductions in emissions of toxic air contaminants including benzene, 1,3 butadiene and formaldehyde;

WHEREAS, the staff has proposed that the standards be phased-in over a three year period beginning with the 1993 model year and that during the first two years of certification to the new standards manufacturers would be subject to less stringent in-use compliance standards;

WHEREAS, staff has proposed a delay of two years in the compliance schedule for vehicles produced by small volume manufacturers;

WHEREAS, the staff has proposed amendments to Sections 1960.5 and 2061, Title 13, CCR, and the incorporated "Guidelines for Certification of 1983 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles" (hereinafter the "AB 965 Program") to reduce by fifty percent the credits available to manufacturers under the program for certification of federally certified light-duty vehicles for sale in California;

WHEREAS, the staff has proposed an amendment to Section 2112, Title 13, CCR, and the incorporated "California In-Use Emissions-Related Recall Procedures for 1982 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, Medium-Duty Vehicles, Heavy-Duty Vehicles and Engines, and Motorcycles" to provide that in-use compliance period for vehicles subject to the 100,000 mile NMHC and CO standards is 75,000 miles;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project having significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available which would substantially reduce or avoid 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 proposed NMHC and CO exhaust emission standards for passenger cars and light-duty trucks (0-5750 lbs. LVW) are necessary to achieve the maximum reduction in emissions from motor vehicles in order to attain state ambient air quality standards at the earliest practicable date;
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> The proposed NMHC standards are necessary to achieve, by December 31, 2000, a 55% reduction in emissions of

reactive organic gases from motor vehicles (based on a 1987 baseline);

The proposed NMHC and CO standards are necessary to achieve the maximum feasible reductions in emissions of CO and toxic air contaminants from vehicular sources;

The proposed NMHC and CO standards with 100,000 mile applicability will result in substantial improvements in the durability and performance of emission control systems;

The proposed standards are technologically feasible for implementation in the period from 1993 to 1995;

Staging full implementation of the proposed standards over a period of three years, from 1993 to 1995 inclusive, will provide sufficient lead time to enable manufacturers to comply with the more stringent standards at the time of certification and will allow manufacturers to spread the costs of recertifying vehicles to the new standards over the three year period;

The proposed standards are cost-effective and, together with existing and anticipated standards and regulations for all classes of motor vehicles and for motor vehicle fuels, reflect the most cost-effective combination of control measures to reduce air pollution caused by motor vehicles;

The proposed interim in-use standards applicable for the first two years an engine family is certified to the proposed standards is necessary because some manufacturers will require additional time after initial implementation of the proposed standards to evaluate the durability of emission control systems and make the changes necessary to assure compliance with the standards in customer use;

The proposed alternative durability testing for the 100,0000 mile standards, which requires mileage accumulation of at least 75,000 miles, will provide manufacturers with additional flexibility in designing certification programs where alternative testing programs provide a durability demonstration equivalent to a demonstration based on accumulation of 100,000 miles;

The proposed in-use compliance period is necessary to assure consistency with Health and Safety Code Sections 43105 and 43106;

Some small volume manufacturers of passenger cars and light-duty trucks will require up to two additional years beyond 1993 to develop or acquire from outside sources the technology necessary to meet the proposed exhaust emission standards;

The use of certification emissions and durability test vehicles designed to meet applicable California exhaust emission standards is necessary to assure the relevancy of data used to support certification because of the significant difference which will exist between state and federal emission standards upon implementation of the proposed state standards;

Requiring manufacturers to demonstrate compliance with the Inspection and Maintenance ("Smog Check") requirements as a condition of certification will eliminate inconvenience and other problems for consumers caused by vehicles which as designed improperly fail Smog Check;

It is necessary to adjust the credits allowed under the AB 965 Program to account for the decrease in model unavailability and to allow offsetting for hydrocarbon emissions as a result of the proposed hydrocarbon exhaust emission standards;

WHEREAS, the Board further finds:

The proposed amendments will result in reductions of ambient levels of ozone as a result of reductions in emissions of HC, and of CO, both as an effect of the lower standards and increased emission control system durability;

The proposed NMHC standards will result in the reduction of toxic air contaminants such as benzene, a known human carcinogen, 1, 3 butadiene and formaldehyde; and

There will be no significant adverse environmental impacts as a result of the adoption of the proposed amendments.

NOW, THEREFORE BE IT RESOLVED, that the Board hereby approves the proposed amendments to Sections 1960.1, 1960.5, 2061 and 2112, Title 13, California Code of Regulations, and the incorporated documents, as set forth in Attachments A through C hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt Sections 1960.1, 1960.5, 2061 and 2112, Title 13, California Code of Regulations, and the incorporated documents, as set forth in Attachments A through C, after making

them available to the public for a period of at least 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

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 regulations to the Environmental Protection Agency with a request for a waiver or for confirmation that the amendments are within the scope of an existing waiver, as appropriate, pursuant to Section 209(b)(1) of the Clean Air Act.

I hereby certify that the above is a true and correct copy of Resolution 89-61, as adopted by the Air Resources Board.

Cary Allison

Cary Allison, Board Secretary