

State of California
AIR RESOURCES BOARD

Resolution 96-60

December 12, 1996

Agenda Item No.: 96-10 -2

WHEREAS, sections 39002 and 39003 of the Health and Safety Code charge the Air Resources Board (“ARB” or “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 and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, in sections 43000 and 43000.5 of the Health and Safety Code, the Legislature declared that the emission of air pollutants from motor vehicles is the primary cause of air pollution in many parts of the state and that despite significant reductions in vehicle emissions in recent years, continued growth in population and vehicle miles traveled throughout California have the potential not only to prevent attainment of the state standards, but in some cases, to result in worsening of air quality;

WHEREAS, section 43004 provides that unless expressly exempted, the exhaust emissions for gasoline-powered motor vehicles shall apply to motor vehicles that have been modified or altered to use a fuel other than gasoline or diesel;

WHEREAS, section 43006 provides that the ARB may certify the fuel system of any motor vehicle powered by a fuel other than gasoline or diesel that meets the standards specified by section 43004 and adopt test procedures for such certification;

WHEREAS, section 43013 of the Health and Safety Code authorizes the Board to adopt motor vehicle emission standards and in-use performance standards that it finds to be necessary, cost-effective, and technologically feasible;

WHEREAS, section 43018 of the Health and Safety Code directs the Board to achieve the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to accomplish the attainment of state standards at the earliest possible date;

WHEREAS, section 44036.2 of the Health and Safety Code directs the Board to require motor vehicle manufacturers to provide service information necessary to properly inspect, test and repair motor vehicles;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that the Board may delegate any duty to the Executive Officer which the Board deems appropriate and that any power, duty, purpose, function, or jurisdiction which the Board may lawfully delegate shall be conclusively presumed to have been delegated to the Executive Officer unless the Board has expressly reserved such authority onto itself;

WHEREAS, in July 1990, the Board adopted and the Office of Administrative Law subsequently approved regulations regarding "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines," (OBD II), which are codified at Title 13, CCR, section 1968.1, and which set forth requirements for (1) monitoring catalyst efficiency, engine misfire, evaporative system integrity, secondary air injection, and chlorofluorocarbon (CFC) containment; (2) improving current monitoring of the fuel system, oxygen sensor, EGR system, and other emission-related components of the on-board diagnostic system; and (3) standardizing fault codes, diagnostic repair equipment, the vehicle connector used for attaching the repair equipment to the vehicle, and the protocol for downloading repair information in order to improve the effectiveness of emission control system repairs;

WHEREAS, the Board adopted amendments to the OBD II regulations in 1991, 1993, and 1994, which were approved by the Office of Administrative Law;

WHEREAS, the staff has now proposed adoption of additional amendments to Title 13, CCR, section 1968.1 that, among other things, provide manufacturers with additional flexibility in complying with the malfunction and diagnostic requirements of the regulations including misfire detection, catalyst monitoring, evaporative system monitoring, and tamper resistance, and would require manufacturers to implement monitoring systems to detect positive crankcase ventilation malfunctions and thermostat malfunctions;

WHEREAS, the staff has further proposed that Title 13, CCR, section 1968.1 be amended to require manufacturers to provide service information in a standardized electronic format, to require electronic access to on-board computer software identifiers, and to provide for verification of software integrity;

WHEREAS, the California Environmental Quality Act (CEQA), section 21080.5 of the Public Resources Code and Board regulations at Title 17, CCR, section 60006 require that no project which may have significant adverse environmental impacts may be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, pursuant to section 43013(e) of the Health and Safety Code and section 11346.3 of the Government Code, the Board has considered and assessed the effects of the proposed amendments to the regulations on the economy of the state;

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:

With the introduction of 1996 model year vehicles, manufacturers have incorporated OBD II systems into nearly all of their vehicle models, and indications are that the systems are largely functioning properly in detecting emission related malfunctions in-use;

The proposed amendments to Title 13, CCR, section 1968.1 would further help to ensure that all OBD II systems function properly in-use by providing for additional compliance flexibility, by clarifying certain requirements that have been perceived by industry as being ambiguous, and by making other minor changes to the requirements that specifically address the problem of premature or false malfunction indications while maintaining system effectiveness in detecting actual and repeatable malfunctions;

Positive crankcase ventilation system malfunctions can contribute significantly to excess in-use emissions by causing crankcase vapors to be vented directly to the atmosphere, and, therefore, monitoring for such malfunctions would result in significant in-use emission reductions;

Thermostat malfunctions can cause excess in-use emissions due to prolonged vehicle warm-up and disablement of existing OBD II monitoring strategies, and, therefore, monitoring would result in a significant in-use emission reduction and further ensure proper OBD II system performance;

Vehicle manufacturers have indicated that they will employ techniques on their own initiative to make on-board computers resistant to tampering and, as such, the specific requirements of Section 1968.1 (d), Title 13, CCR, for electronically reprogrammable computers are unnecessary and could be burdensome and restrictive.

Studies indicate that the majority of vehicle repairs are conducted by independent service facilities, particularly once vehicles are out of warranty; improved access to vehicle service and repair information by the independent service industry would provide more effective and efficient repair of emission-related malfunctions;

The proposed amendments to Title 13, CCR, section 1968.1 are necessary, cost-effective, and technologically feasible to carry out the purposes of the California Clean Air Act; and

The proposed amendments to Title 13, CCR, section 1968.1 do not affect the Board's earlier findings that the full implementation of the regulation will result in emission reductions that will help attain and maintain national and air quality standards for ozone, carbon monoxide and nitrogen dioxide;

The economic and cost impacts of the amendments to Title 13, CCR, section 1968.1 have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the Initial Statement of Reasons for this regulatory action;

The reporting requirements of Title 13, CCR, section 1968.1 applicable to businesses are necessary for the health, safety, and welfare of the people of the State;

The requirements of Title 13, CCR, section 1968.1 establishing monitoring requirements for on-board computer monitoring systems and provisions for distribution of service information, address issues similar to those which are addressed in federal regulations; however, the provisions of Title 13, CCR, section 1968.1 differ from the federal regulations codified at 40 CFR Part 86, section 86.094-2 et seq.

The different state provisions are justified in that they are authorized by state law and the cost of the different state provisions is justified by the benefit to human health, public safety, public welfare, or the environment.

WHEREAS, with respect to the requirements of CEQA and Title 17, CCR, section 60006, the Board further finds:

Title 13, CCR, section 1968.1(b)(3.3) presently provides that phase-in of systems to detect misfire continuously and under all positive torque engine speeds and conditions be completed by the 2000 model year; however, staff has determined, and the Board finds, that some additional lead time and other minor adjustments to the requirements will provide manufacturers an opportunity to refine and produce more efficient and cost-effective monitoring systems;

Section 1968.1 (b)(1), Title 13, CCR, currently requires that phase-in of catalyst monitoring systems capable of detecting catalyst deterioration before hydrocarbon emissions marginally exceed the applicable standard be completed by the 2000 model year; however, the staff has determined, and the Board finds, that additional lead time and a

slight increase in the emission level at which a malfunction must be indicated will better ensure timely detection of catalyst malfunctions without significant risk of malfunction detection on vehicles still meeting applicable standards, and will be more cost-effective;

Although the additional lead time provided to manufacturers to fully phase-in monitoring strategies capable of detecting catalyst damage before emissions marginally exceed applicable standards and for the detection of misfire over the full range of operating may have some short-term adverse environmental impacts in relation to the regulations presently in effect, overriding considerations exist justifying the amendments;

Strict enforcement of the existing regulations could result in the implementation of monitoring strategies that in some instances may not be fully reliable and thus may, in and of themselves, have some adverse environmental consequences;

During the additional lead time period, the possible adverse impacts of the amendments identified above should be mitigated because vehicles not meeting the enhanced catalyst and misfire detection requirements would still be required to monitor for malfunctions, though not at the levels of the enhanced requirements;

The additional lead time would allow for development of more cost-effective and reliable systems, which will assure greater long-term emission reductions from both the enhanced catalyst and misfire monitoring requirements;

The amendments, in the aggregate, will assure greater total emission reductions than provided under the present regulation: the adoption of monitoring requirements for positive crankcase ventilation systems, engine coolant thermostats, and improved access to service information will provide for greater emission reductions than any anticipated loss in reductions from the amendments for catalyst and misfire detection requirements;

There are no other feasible mitigation measures that would reduce the potential environmental impacts while at the same time providing manufacturers with the time necessary to produce more efficient and cost effective monitoring systems.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the amendments to section 1968.1, Title 13, California Code of Regulations as set forth in Attachment A hereto, with the modifications described in Attachment B also attached hereto;

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt section 1968.1, Title 13, California Code of Regulations, after making the modified regulatory language and any additional supporting documents and information available for public comment for a period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modification and additional supporting documents and information 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 or she determines that this is warranted;

BE IT FURTHER RESOLVED that the Board hereby determines that pursuant to section 209(b) of the Clean Air Act the amendments adopted herein will not cause California motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards or California requirements to be inconsistent with section 202(a) of the Clean Air Act, and does not raise any new issues;

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the amended subsections to Title 13, CCR, section 1968.1 to the Administrator of the Environmental Protection Agency with a request that these amendments be found to be within the scope of the existing waiver that has been granted under section 209(b) of the Clean Air Act for Title 13, CCR, section 1968.1;

BE IT FURTHER RESOLVED that the Board directs the staff to continue to closely monitor vehicle manufacturers in complying with the requirements of section 1968.1, Title 13, CCR, and to report to the Board in 1998 if further amendments to the regulations are necessary for future model year vehicles.

I hereby certify that the above is a true and correct copy of Resolution 96-60, as adopted by the Air Resources Board.

Pat Hutchens, Clerk of the Board