State of California
AIR RESOURCES BOARD

TECHNICAL STATUS AND PROPOSED REVISIONS TO ON-BOARD DIAGNOSTIC SYSTEM REQUIREMENTS AND ASSOCIATED ENFORCEMENT PROVISIONS FOR PASSENGER CARS, LIGHT-DUTY TRUCKS, AND MEDIUM-DUTY VEHICLES AND ENGINES (OBD II).

Resolution 15-44

September 25, 2015

Agenda Item No.: 15-7-8

WHEREAS, Health and Safety Code sections 39600 and 39601 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, Health and Safety Code sections 39002 and 39003 charge the Air Resources Board (ARB or the Board) with the responsibility for systematically attacking the serious air pollution problem caused by motor vehicles;

WHEREAS, Health and Safety Code sections 39515 and 39516 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, Health and Safety Code sections 39010 and 39601 provide that a definition in Chapter 2 of Division 26 of the Health and Safety Code shall govern the construction of the division unless rules and regulations are adopted by the Board that revise such definition, that the Board may revise such definition to conform to definitions to federal laws and rules and regulations, and that the Board may adopt rules and regulations necessary for the proper execution of the powers and duties granted to, and imposed upon the Board by Division 26 of the Health and Safety Code and by any other provision of law;

WHEREAS, in Health and Safety Code sections 43000 and 43000.5(a) 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, Health and Safety Code section 43000.5(c) provides that the burden for achieving needed reductions in vehicle emissions should be distributed equitably among various classes of vehicles to accomplish improvements in both the emissions level and in-use performance and durability of all new motor vehicles;

WHEREAS, Health and Safety Code section 43004 provides that unless expressly exempted, the exhaust emission standards 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, Health and Safety Code section 43006 provides that 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, Health and Safety Code sections 43013(a) and (b) authorize the Board to adopt emission standards and in-use performance standards and other regulations for light-duty and medium-duty vehicles it finds to be necessary, cost-effective, and technologically feasible;

WHEREAS, Health and Safety Code section 43013(h) states it is the intent of the Legislature that the Board act as expeditiously as feasible to reduce oxides of nitrogen (NOx) emissions from diesel vehicles and other categories of vehicular sources which significantly contribute to air pollution problems;

WHEREAS, the Legislature adopted and the Governor signed Senate Bill 1028 in October 2007, codified in part at Health and Safety Code section 39602.5, which identified that several areas within California have not attained national ambient air quality standards (NAAQS) for ozone and particulate matter (PM) of 2.5 microns or less, and which directed the Board to adopt every feasible rule and regulation that are sufficient, with other applicable measures, to achieve and maintain the NAAQS by the applicable deadlines;

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

WHEREAS, Health and Safety Code section 43018(c) further directs the Board that in carrying out the directives of section 43018(a), the Board shall adopt standards and regulations that will result in the most cost-effective combination of control measures on all classes of motor vehicles, including but not limited to, reductions in exhaust and evaporative emissions and reductions in in-use emissions through improvements in motor vehicle emission system durability and performance;

WHEREAS, Health and Safety Code section 39602.5(a) directs the Board to adopt rules and regulations under section 43013 that, with other measures adopted by the

Board, air pollution control districts, and the United States Environmental Protection Agency (U.S. EPA), will achieve ambient air quality standards required by the federal Clean Air Act (CAA) (42 U.S.C. section 7401 et seq.) in all areas of the state by the applicable attainment date, and to maintain such standards thereafter, and provides that the Board shall adopt such measures if they are necessary, technologically feasible, and cost effective, consistent with section 43013. Health and Safety Code section 39602.5(b) provides that if necessary to carry its duties under this section, the Board shall adopt and enforce rules and regulations that anticipate the development of new technologies and such rules and regulations shall require standards that the Board finds and determines can likely be achieved by the compliance date in the rule;

WHEREAS, Health and Safety Code section 43101 directs the Board to adopt and implement emission standards for new motor vehicles for the control of emissions that are necessary and technologically feasible;

WHEREAS, Health and Safety Code section 43102 provides that the Board shall not certify a new motor vehicle or motor vehicle engine unless the vehicle or engine meets the emission standards adopted by ARB under Part 5 of the Health and Safety Code under test procedures adopted under section 43104;

WHEREAS, Health and Safety Code section 43104 provides that the Board shall adopt test procedures and any other procedures necessary to determine whether vehicles and engines comply with the emissions standards established under Part 5 of the Health and Safety Code;

WHEREAS, Health and Safety Code section 43105 provides that no new motor vehicle or engine required under Part 5 of the Health and Safety Code to meet emission standards shall be sold to the ultimate purchaser, ordered or delivered for sale to the ultimate purchaser, or registered in this state if the manufacturer has violated emission standards or test procedures and has failed to take corrective action, which may include recall of vehicles or engines, specified by the Board under its regulations; and provides that the Board shall establish procedures for determining, and the facts constituting, compliance or failure of compliance under section 43105;

WHEREAS, Health and Safety Code sections 43105.5 directs the Board to require motor vehicle manufacturers to provide service information necessary to properly inspect, test, and repair motor vehicles;

WHEREAS, Health and Safety Code sections 43016, 43154, 43211, and 43212 provide that penalties may be assessed against motor vehicle manufacturers for noncompliance with ARB emission standards, other certification requirements, or other rules and regulations of the Board;

WHEREAS, the California Global Warming Solutions Act of 2006 (Assembly Bill 32 (AB 32); Stats 2006, ch. 488, Health and Safety Code section 38500 et seq.) declares

that global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California;

WHEREAS, AB 32 added Health and Safety Code section 38501, which expresses the Legislature's intent that the Board coordinate with State agencies and consult with the environmental justice community, industry sectors, business groups, academic institutions, environmental organizations, and other stakeholders in implementing AB 32; and design emissions reduction measures to meet the statewide emissions limits for greenhouse gases (GHG) in a manner that minimizes costs and maximizes benefits for California's economy, and maximizes additional environmental and economic co-benefits for California, and complements the State's efforts to improve air quality;

WHEREAS, Health and Safety Code section 38505 defines GHGs as including carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride;

WHEREAS, Health and Safety Code section 38510 designates ARB as the state agency charged with monitoring and regulating sources of GHG emissions to reduce these emissions;

WHEREAS, in *Engine Manufacturers Association v. California Air Resources Board* (2014) 231 Cal.App.4th 1022, the California Court of Appeal, Third Appellate District, held that ARB's adoption of the in-use testing and recall provisions of the California heavy-duty OBD enforcement regulation was consistent with the broad scope of authority the Legislature has granted ARB to reduce air pollution caused by motor vehicle emissions;

WHEREAS, the ARB adopted the heavy-duty OBD enforcement regulation in 2010, and that regulation was based on the enforcement regulation applicable to light-duty and medium-duty vehicles subject to the OBD II regulation, which was previously adopted in 2002;

WHEREAS, in July 1990, the ARB adopted and the Office of Administrative Law (OAL) 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 California Code of Regulations, title 13, section 1968.1 (section 1968.1), and which set forth requirements for: (1) monitoring catalyst efficiency, engine misfire, evaporative system integrity, secondary air injection, and chlorofluorocarbon containment; (2) improving current monitoring of the fuel system, oxygen sensor, exhaust gas recirculation system, and other emission-related components of the OBD II 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 to improve the effectiveness of emission control system repairs;

WHEREAS, the ARB adopted amendments to section 1968.1 in 1991, 1993, 1994, and 1996, which were respectively approved by OAL;

WHEREAS, U.S. EPA on October 3, 1996, approved California's request for a waiver of preemption under section 209(b) of the federal Clean Air Act for the OBD II regulation (61 Fed. Reg. 53371 (October 11, 1996));

WHEREAS, in 1998, the ARB adopted stringent new tailpipe and evaporative emission standards for low emission vehicles (LEV II);

WHEREAS, in April 2002, the ARB adopted and OAL approved regulations regarding "Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines," which are codified at California Code of Regulations, title 13, section 1968.2 (section 1968.2), and which (1) carried over most requirements of section 1968.1; (2) revised several monitoring requirements including, among other things, the requirements for catalyst monitoring, misfire monitoring, and oxygen sensor monitoring; and (3) established several new requirements including requirements for cold start emission reduction strategy monitoring, direct ozone reduction monitoring, production vehicle evaluation and verification testing, and standardized measurement of real world monitoring performance;

WHEREAS, in April 2002, the ARB also adopted and OAL approved an enforcement regulation regarding OBD II compliance, "Enforcement of Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines," (OBD II enforcement regulation), which is codified at California Code of Regulations, title 13, section 1968.5 and which sets specific protocols for enforcement and remedying OBD II noncompliance;

WHEREAS, the ARB adopted and OAL approved amendments to section 1968.2 in 2006, 2009, 2012, and 2013, and ARB requested that U.S. EPA take appropriate action under CAA section 209 in granting California a waiver of preemption;

WHEREAS, in 2005, the ARB adopted regulations that established the first GHG emission standards from 2009-2016 model year passenger cars, light-duty trucks, and medium-duty passenger vehicles;

WHEREAS, in 2012, the ARB adopted regulations that primarily established GHG emission standards for 2017 and subsequent model year passenger cars, light-duty trucks, and medium-duty passenger vehicles based on a footprint-based approach to reduce emissions from new light-duty vehicles and medium-duty passenger vehicles;

WHEREAS, in 2012, the ARB adopted California's LEV III program, which establishes emissions standards that are significantly more stringent than the LEV II emissions

standards, and primarily reduce the fleet average emissions of new light-duty vehicles to super ultra-low-emission vehicle (SULEV) levels by 2025, an approximate 75 percent reduction from 2010 levels; establish additional emission standard categories, such as ULEV70, ULEV50, and SULEV20 to provide additional options for compliance with the SULEV fleet average; increase full useful life durability requirements from 120,000 miles to 150,000 miles, and establish more stringent PM standards for light- and medium-duty vehicles. The LEV III program also establishes more stringent exhaust and evaporative emission requirements for medium-duty vehicles, and requires, for the first time, medium-duty vehicles to comply with supplemental federal test procedure standards;

WHEREAS, staff has proposed amendments to sections 1900, 1968.2, and 1968.5, as set forth in Appendices A through C to the Staff Report: Initial Statement of Reasons: "Technical Status and Proposed Revisions to On-Board Diagnostic System Requirements and Associated Enforcement Provisions for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines (OBD II)" released to the public on August 4, 2015, and modified regulatory language developed in response to comments received since the Initial State of Reasons was released, as set forth in Attachment B to this resolution;

WHEREAS, the proposed amendments to section 1900 would revise the definition of "emissions-related part" to incorporate the most current version of the "Emission-Related Parts List", which was most recently updated on June 1, 1990;

WHEREAS, the proposed amendments to section 1968.2 would, among other things, establish emission malfunction thresholds for light- duty vehicles and medium-duty vehicles and engines subject to LEV III program requirements, include modifications to align light-duty diesel monitoring requirements with those required for medium-duty diesel vehicles, and require OBD II systems to incorporate additional data stream parameters used to characterize vehicle CO_2 emissions beginning in the 2019 model year;

WHEREAS, the proposed amendments to section 1968.5 would primarily align the OBD II enforcement regulation with the proposed changes to the OBD II regulation;

WHEREAS, ARB's regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans has been certified by the Secretary for Natural Resources under Public Resources Code section 21080.5 of the California Environmental Quality Act (CEQA); California Code of Regulations, title 14, section 15251(d)), and ARB conducts its CEQA review according to this certified program (California Code of Regulations, title 17, sections 60000-60007);

WHEREAS, staff has determined the proposed amendments are exempt from CEQA under California Code of Regulations, title 14, section 15308 ("Class 8" exemption: Actions Taken by Regulatory Agencies for Protection of the Environment) because the record evidence shows that the amendments will enhance the environment by better

protecting the public from health impacts associated with exposure to hydrocarbon (HC), NOx, carbon monoxide (CO), and PM emissions, the regulatory process involves procedures for protection of the environment, and the amendments will not result in any significant adverse environmental impacts as described in Chapter III of the Staff Report;

WHEREAS, under Health and Safety Code section 43101 and Government Code section 11346.3, the Board must consider and assess the effects of the proposed regulations on the economy of the state;

WHEREAS, a public hearing and other administrative proceedings have been held according to Chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, the Board finds regarding the proposed amendments to section 1900 that:

> Proposed amendments to the definition of "emissions-related part" are necessary to incorporate the most current version of the "Emissions-Related Parts List," specifically the version updated on June 1, 1990, and to meet the statutory requirements that the Board adopt rules and regulations to properly execute the powers and duties granted to, and imposed upon the Board by Division 26 of the Health and Safety Code and by any other provision of law, as identified in Health and Safety Code section 39601;

WHEREAS, the Board finds regarding the proposed amendments to section 1968.2 that:

> Since the adoption of amendments to section 1968.2 in 2013, it has become apparent that additional monitoring requirements and revisions to existing requirements to the OBD II regulations are necessary to improve emission-control system monitoring and compliance because of input from manufacturers, increasingly stringent tailpipe emission standards, and the need to better serve automotive repair technicians and to incorporate the use of OBD II systems into the State inspection and maintenance program;
>
> Revisions to the OBD II regulation are especially needed to account for and accommodate the emissions standards and other emission-related requirements associated with the LEV III program adopted in 2012, which primarily reduces the fleet average emissions of new light-duty vehicles to SULEV levels by 2025, an approximate 75 percent reduction from 2010 levels; establishes additional emission standard categories, such as ULEV70, ULEV50, and SULEV20 to provide additional options for compliance with the SULEV fleet average; increases full useful life durability requirements from 120,000 miles to 150,000 miles; and establishes more stringent PM standards for light- and medium-duty vehicles;

Vehicle manufacturers are increasingly introducing technologies to better control GHG emissions from light- and medium-duty vehicles that may ultimately not perform in the real world in the same manner as represented during certification, and consequently ARB must continue to assess the ability of such new technologies to control the GHG emissions from such vehicles;

Information from data stream parameters used to characterize vehicle CO_2 emissions and fuel usage in the real world will assist ARB staff in verifying that the advanced vehicle and powertrain technologies being deployed to meet California's stringent GHG emission standards actually deliver expected GHG benefits and consumer fuel savings in the real world, and will assist staff in considering the development of future CO_2 tailpipe standards, evaluation of off-cycle credits, developing future plug-in hybrid electric vehicle regulations, and improving CO_2 inventory models; and

Revisions to section 1968.2 are needed to ensure that malfunctions that result in high increased emissions are detected and timely repaired to ensure that emission benefits of the LEV programs are achieved.

Proposed amendments to section 1968.2 include:

New emission malfunction thresholds applicable to light- and medium-duty vehicles and engines subject to California's LEV III program;

Higher interim malfunction thresholds for air-fuel ratio cylinder imbalance monitoring on gasoline vehicles;

Revisions to the evaporative system purge flow monitoring requirements and crankcase ventilation system monitoring requirements;

Revisions to the misfire and PM filter monitoring requirements for light-duty diesel vehicles to make them more consistent with those currently required for medium-duty diesel vehicles;

Revisions to the requirements allowing manufacturers to be exempt from monitoring certain components that have no significant emissions impact;

Revisions to extend the use of the interim minimum in-use performance ratio of 0.100 for three additional years for monitors on plug-in hybrid electric vehicles;

Revisions to the standardization requirements to assist the service and repair industry in the repair of emission-related malfunctions and to better allow ARB staff to determine compliance;

Additional information that must be submitted as part of the OBD II system certification application by the manufacturer;

Additional requirements and revisions to existing provisions to ensure that light- and medium-duty motor vehicles and engines certified to the LEV II and LEV III emission standards will continue to operate in-use at or near certification levels throughout the motor vehicle's life; and

Amendments to ensure that all OBD II systems meet their stated purpose of detecting malfunctions, notifying vehicle operators of such malfunctions in a timely manner, and assisting the service and repair industry in repairing such malfunctions.

The proposed amendments to section 1968.2 meet the statutory requirements that the Board adopt rules and regulations to properly execute the powers and duties granted to, and imposed upon the Board by Division 26 of the Health and Safety Code and by any other provision of law, as identified in Health and Safety Code section 39601;

The proposed amendments to section 1968.2 meet the statutory requirements to accomplish improvements in both the emissions levels and in-use performance and durability of all new motor vehicles, as identified in Health and Safety Code section 43000.5(c);

The proposed amendments to section 1968.2 meet the statutory requirements that ARB adopt emission standards, in-use performance standards and other regulations for light-duty and medium-duty vehicles that are necessary, cost-effective and technologically feasible, as identified in Health and Safety Code sections 43013(a) and (b);

The proposed amendments to section 1968.2 meet the statutory requirement that ARB reduce NOx emissions from diesel vehicles and other categories of vehicular sources which significantly contribute to air pollution problems as expeditiously as possible, as identified in Health and Safety Code section 43013(h);

The proposed amendments to section 1968.2 meet the statutory requirement that ARB adopt necessary, technologically feasible, and cost effective measures under Health and Safety Code section 43013 that, with other applicable measures, will achieve and maintain ambient air quality standards required by the federal Clean Air Act by applicable deadlines, as identified in Health and Safety Code section 39602.5;

The proposed amendments to section 1968.2 meet the statutory requirement that ARB adopt standards and regulations that will result in the most cost-effective combination of control measures on all classes of motor vehicles, including reductions in in-use emissions through improvements in motor vehicle emission system durability and performance, and that will achieve the maximum degree of emissions reductions possible from vehicular sources to attain state standards at the earliest practicable date, as identified in Health and Safety Code section 43018;

The proposed amendments to section 1968.2 meet the statutory requirement that ARB adopt and implement emission standards for new motor vehicles for the control of emissions therefrom that are necessary and technologically feasible, as identified in Health and Safety Code section 43101;

The proposed amendments to section 1968.2 meet the statutory requirement that ARB adopt test procedures and other procedures necessary to determine whether vehicles and engines comply with the emissions standards established under Part 5 of the Health and Safety Code, as identified in Health and Safety Code section 43104;

The proposed amendments to section 1968.2 meet the statutory requirement that ARB establish procedures for determining, and the facts constituting, compliance or failure of compliance of new motor vehicles or new motor vehicle engines with emission standards or test procedures, as identified in Health and Safety Code section 43105;

The proposed amendments to section 1968.2 meet the statutory requirement that ARB require motor vehicle manufacturers provide service information necessary to properly inspect, test and repair motor vehicles, as identified in Health and Safety Code section 43105.5; and

The proposed amendments to section 1968.2 meet the statutory requirements that ARB monitor sources of greenhouse gas emissions, including CO_2, and consult with industry sectors, business groups and other stakeholders in implementing Division 25.5 of the Health and Safety Code (AB 32) as identified in Health and Safety Code sections 38501, 38505, and 38510.

WHEREAS, the Board finds regarding the proposed amendments to section 1968.5 that:

Changes are needed to section 1968.5 to align with the proposed amendments to section 1968.2; and

More appropriate in-use criteria and thresholds (i.e., criteria and thresholds at which a vehicle would be found to have a nonconforming OBD system and would be subject to possible enforcement action) are needed to reflect gasoline and diesel vehicles and engines certified to the proposed revised in-use monitor performance requirements and higher interim OBD malfunction thresholds.

Proposed amendments to section 1968.5 include:

More appropriate criteria to determine if mandatory recall is applicable during the interim model years for the gasoline air-fuel ratio cylinder imbalance monitor;

More appropriate criteria to determine if mandatory recall is applicable during the interim model years for LEV III ULEV70 and ULEV50 vehicles

to account for the more stringent tailpipe standards the vehicles are certified to;

More appropriate criteria to determine if mandatory recall is applicable to gasoline and diesel misfire monitors to account for the revised gasoline and diesel misfire monitor requirements; and

More appropriate criteria to determine if mandatory recall is applicable to PM filter monitors are needed for light-duty diesel vehicles to ensure monitors that cannot detect PM filters with missing substrates are subject to remedial action.

The proposed amendments to section 1968.5 meet the statutory requirements that ARB adopt rules and regulations to properly execute the powers and duties granted to, and imposed by Division 26 of the Health and Safety Code and by any other provision of law as identified in Health and Safety Code section 39601;

The proposed amendments to section 1968.5 meet the statutory requirements that ARB adopt necessary, technologically feasible, and cost effective measures under Health and Safety Code section 43013 that, with other applicable measures, will achieve and maintain ambient air quality standards required by the federal Clean Air Act by applicable deadlines, as identified in Health and Safety Code section 39602.5;

The proposed amendments to section 1968.5 meet the statutory requirements to accomplish improvements in both the emissions levels and in-use performance and durability of all new motor vehicles, as identified in Health and Safety Code section 43000.5(c);

The proposed amendments to section 1968.5 meet the statutory requirements that ARB adopt emission standards, in-use performance standards and other regulations for light-duty and medium-duty vehicles that are necessary, cost-effective and technologically feasible, as identified in Health and Safety Code sections 43013(a) and (b);

The proposed amendments to section 1968.5 meet the statutory requirement that ARB reduce NOx emissions from diesel vehicles and other categories of vehicular sources, which significantly contribute to air pollution problems as expeditiously as possible, as identified in Health and Safety Code section 43013(h);

The proposed amendments to section 1968.5 meet the statutory requirement that ARB adopt standards and regulations that will result in the most cost-effective combination of control measures on all classes of motor vehicles, including reductions in in-use emissions through improvements in motor vehicle emission system durability and performance, and that will achieve the maximum emissions reductions possible from vehicular sources to attain state standards at the earliest practicable date, as identified in Health and Safety Code section 43018;

The proposed amendments to section 1968.5 meet the statutory requirement that ARB adopt test procedures and other procedures necessary to determine whether vehicles and engines comply with the emissions standards established under Part 5 of the Health and Safety Code, as identified in Health and Safety Code section 43104; and

The proposed amendments to section 1968.5 meet the statutory requirement that ARB establish procedures for determining, and the facts constituting, compliance or failure of compliance of new motor vehicles or new motor vehicle engines with emission standards or test procedures, as identified in Health and Safety Code section 43105.

WHEREAS, the Board further finds regarding the proposed amendments to sections 1900, 1968.2, and 1968.5 that:

The economic and cost impacts of proposed amendments to sections 1900, 1968.2, and 1968.5 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 sections 1968.2 and 1968.5 that apply to businesses are necessary for the health, safety, and welfare of the people of the state;

The requirements of sections 1968.2 and 1968.5 are similar but not identical to requirements addressed in federal regulations; different California regulations are authorized by the Health and Safety Code and the cost of the different state provisions is justified by the benefit to human health, public safety, public welfare, or the environment;

The proposed amendments were developed in an open public process, in consultation with affected parties, through numerous public workshops, individual meetings, and other outreach efforts, and these efforts are expected to continue;

No reasonable alternatives to the amendments considered, or that have otherwise been identified and brought to the attention of ARB, would be more effective at carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected entities than the proposed regulation; and

The proposed amendments are consistent with ARB's environmental justice policies and do not disproportionately impact people of any race, culture, or income.

The proposed amendments are exempt from CEQA under California Code of Regulations, title 14, section 15308 because substantial evidence in the record shows it will enhance the environment by better protecting the public from health impacts associated with exposure to HC, NOx, CO, and PM emissions, the

regulatory process involves procedures for protection of the environment, and the proposal will not result in any significant adverse environmental impacts.

NOW, THEREFORE, BE IT RESOLVED that the Board approves for adoption amendments to sections 1900, 1968.2, and 1968.5, title 13, California Code of Regulations, as set forth in Attachments A through C, as modified by Attachment D, Staff's Suggested Modifications to the Original Proposal.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to make the modified regulatory language in Attachment D, and any additional conforming modifications that are appropriate, available for public comment, with any additional supporting documents and information, for a period of at least 15 days. The Executive Officer shall consider written comments submitted during the public review period and make any further modifications that are appropriate available for public comment for at least 15 days. The Executive Officer may present the regulation to the Board for further consideration if warranted, and if not, the Executive Officer shall take final action to adopt the regulation after addressing all appropriate modifications.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, submit the proposed regulatory action to U.S. EPA for approval as a revision to the California State Implementation Plan (SIP) as required by the federal CAA. The adopted regulatory action would be submitted as a SIP revision because it amends regulations intending to reduce emissions of air pollutants to attain and maintain the NAAQS promulgated by U.S. EPA under the CAA.

BE IT FURTHER RESOLVED that the Board determines that the regulations approved for adoption 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.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the regulations to the U.S. EPA with a request for a waiver or confirmation that the regulations are within the scope of an existing waiver of federal preemption under section 209(b) of the CAA as appropriate.

BE IT FURTHER RESOLVED that to the extent a new waiver is required, the Board determines that California continues to need its own motor vehicle emission reductions program to meet compelling and extraordinary environmental conditions.

BE IT FURTHER RESOLVED that the Board finds that the California emission standards and test procedures as approved for adoption will not cause the California requirements to be inconsistent with section 202(a) of the CAA and raise no new issues affecting previous waiver determinations of the Administrator of the U.S. EPA under section 209(b) of the CAA.

BE IT FURTHER RESOLVED that the Board directs the staff to continue to closely monitor vehicle and engine manufacturers in complying with the requirements of sections 1968.2 and 1968.5, title 13, California Code of Regulations, and to report to the Board in approximately 2 years, if amendments to the regulations are necessary.

I hereby certify that the above is a true and correct copy of Resolution 15-44 as adopted by the Air Resources Board.

Tracy Jensen

Tracy Jensen, Clerk of the Board

Resolution 15-44

September 25, 2015

Identification of Attachments to the Board Resolution

Attachment A: Proposed Amendments to the Regulation for Malfunction and Diagnostic System Requirements -- 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines, California Code of Regulations, Title 13, section 1968.2, as set forth in Appendix A to the Initial Statement of Reasons, released August 4, 2015.

Attachment B: Proposed Amendments to the Regulation for Enforcement of Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines, California Code of Regulations, Title 13, section 1968.5, as set forth in Appendix B to the Initial Statement of Reasons, released August 4, 2015.

Attachment C: Proposed Amendments to the Regulation for Definitions, California Code of Regulations, Title 13, section 1900, as set forth in Appendix C to the Initial Statement of Reasons, released August 4, 2015.

Attachment D: Staff's Suggested Modifications to the Original Proposal. (Distributed at the September 25, 2015 ARB hearing)

ATTACHMENT D to RESOLUTION 15-44

Staff's Suggested Modifications to the OBD II (Distributed at the September 24-25, 2015 Board Hearing)

Shown below are the staff's suggested modifications to the originally proposed amendments to the regulatory text set forth in Appendix A to the Staff Report: Initial Statement of Reasons, which was released August 4, 2015. Modified regulatory language will be developed by staff as described below, and the modified language will be made available to the public for a fifteen-day comment period prior to final adoption.

Sections 1968.2(e)(9) and (f)(10) – Gasoline Positive Crankcase Ventilation (PCV) and Diesel Crankcase Ventilation (CV) System Monitoring Requirements

Staff is considering amendments that will exempt manufacturers from detecting disconnections of the fresh air lines on naturally aspirated vehicles. This is due to manufacturers' concerns regarding the ability of monitors to robustly detect such disconnections.

Section 1968.2(f)(1.2.3)(B) – Non-Methane Hydrocarbon (NMHC) Converting Catalyst Feedgas Generation Monitoring Requirements

Staff is considering amendments for the cleaner Low Emission Vehicle III (LEV III) applications that will relax the criteria used to exempt manufacturers from detecting malfunctions when the NMHC catalyst is unable to generate the feedgas needed for proper selective catalytic reduction system operation. These amendments will account for the lower, combined non-methane organic gas plus oxides of nitrogen tailpipe standards applicable to such LEV III vehicles.

Section 1968.2(g)(6) – Vehicle Performance Tracking Requirements

Staff will propose amendments that will clarify data acquisition and storage requirements for vehicle performance data, and give additional lead time for implementation of these parameters.