

Title 13. California Air Resources Board

Notice of Public Hearing to Consider Proposed Revisions to the On-Board Diagnostic System Requirements and Associated Enforcement Provisions for Passenger Cars, Light-Duty Trucks, Medium-Duty Vehicles and Engines, and Heavy-Duty Engines

The California Air Resources Board (CARB or Board) will conduct a public hearing at the date and time noted below to consider approving for adoption the proposed amendments to California's On-Board Diagnostic System Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines (OBD II) and Heavy-Duty Engine On-Board Diagnostic System Requirements (HD OBD).

Date: July 22, 2021

Time: 9:00 A.M.

Please see the public agenda which will be posted ten days before the July 22, 2021, Board Meeting for any appropriate direction regarding a possible remote-only Board Meeting. If the meeting is to be held in person, it will be held at the California Air Resources Board, Byron Sher Auditorium, 1001 I Street, Sacramento, California 95814.

This item will be considered at a meeting of the Board, which will commence at 9:00 a.m., July 22, 2021, and may continue at 8:30 a.m., on July 23, 2021. Please consult the agenda for the hearing, which will be available at least ten days before July 22, 2021, to determine the day on which this item will be considered.

Written Comment Period and Submittal of Comments

In accordance with the Administrative Procedure Act, interested members of the public may present comments orally or in writing during the hearing and may provide comments by postal mail or by electronic submittal before the hearing. The public comment period for this regulatory action will begin on June 4, 2021. Written comments not submitted during the hearing must be submitted on or after June 4, 2021, and received **no later than July 19, 2021**. Comments submitted outside that comment period are considered untimely. CARB may, but is not required to, respond to untimely comments, including those raising significant environmental issues. CARB requests that when possible, written and email statements be filed at least ten days before the hearing to give CARB staff and Board members additional time to consider each comment. The Board also encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for

modification of the proposed regulatory action. Comments submitted in advance of the hearing must be addressed to one of the following:

Postal mail: Clerks' Office, California Air Resources Board
1001 I Street, Sacramento, California 95814

[Electronic submittal](https://www.arb.ca.gov/lispub/comm/bclist.php): <https://www.arb.ca.gov/lispub/comm/bclist.php>

Please note that under the California Public Records Act (Gov. Code, § 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

Additionally, the Board requests but does not require that persons who submit written comments to the Board reference the title of the proposal in their comments to facilitate review.

Authority and Reference

This regulatory action is proposed under the authority granted in California Health and Safety Code, sections 38501, 38505, 38510, 39010, 39600, 39601, 39602.5, 43000.5, 43013, 43018, 43100, 43101, 43104, 43105, 43105.5, 43106, 43154, 43211, and 43212; and *Engine Manufacturers Association v. California Air Resources Board* (2014) 231 Cal.App.4th 1022. This action is proposed to implement, interpret, and make specific sections 38501, 38505, 38510, 39002, 39003, 39010, 39018, 39021.5, 39024, 39024.5, 39027, 39027.3, 39028, 39029, 39031, 39032, 39032.5, 39033, 39035, 39037.05, 39037.5, 39038, 39039, 39040, 39042, 39042.5, 39046, 39047, 39053, 39054, 39058, 39059, 39060, 39515, 39600, 39601, 39602.5, 43000, 43000.5, 43004, 43006, 43013, 43016, 43018, 43100, 43101, 43102, 43104, 43105, 43105.5, 43106, 43150, 43151, 43152, 43153, 43154, 43155, 43156, 43204, 43211 and 43212 of the Health and Safety Code.

Informative Digest of Proposed Action and Policy Statement Overview (Gov. Code, § 11346.5, subd. (a)(3))

Sections Affected: Proposed amendments to California Code of Regulations, title 13, sections 1968.2, 1968.5, 1971.1, and 1971.5.

Documents Incorporated by Reference (Cal. Code Regs., tit. 1, § 20, subd. (c)(3)):

The following documents would be incorporated in the regulation by reference as specified by section:

- SAE International (SAE) J1979-DA, "Digital Annex of E/E Diagnostic Test Modes," April 2021, sections 1968.2(g)(1.4.1) and 1971.1(h)(1.4.1)

- SAE J1979-2 – “E/E Diagnostic Test Modes: OBD on UDS,” April 2021, sections 1968.2(g)(1.4.2) and 1971.1(h)(1.4.2)
- Data Record Reporting Procedures for Over-the-Air Reprogrammed Vehicles and Engines Using SAE J1979-2, June 1, 2021; sections 1968.2(g)(8.1.1) and 1971.1(h)(6.1.1)

Background and Effect of the Proposed Regulatory Action:

On-Board Diagnostic (OBD) systems serve an important role in helping to ensure that on-road vehicles and engines maintain low emissions throughout their full lives. OBD systems monitor virtually all emission controls on engines and vehicles, including catalysts, particulate matter (PM) filters, exhaust gas recirculation systems, oxygen sensors, evaporative systems, fuel systems, electronic powertrain components, and other components and systems that can affect emissions when malfunctioning. The systems also provide specific diagnostic information in a standardized format through a serial data link on-board each vehicle. The use and operation of OBD systems also ensure reductions of in-use motor vehicle and motor vehicle engine emissions through the incentive they create for manufacturers to improve emission system durability and performance.

The Board originally adopted comprehensive OBD regulations in 1990, requiring all 1996 and newer model year passenger cars, light-duty trucks, and medium-duty vehicles and engines to have OBD II systems. The Board subsequently updated the OBD requirements in 2002 with the adoption of California Code of Regulations, title 13, sections 1968.2 and 1968.5, which established OBD II requirements (Cal. Code Regs., title 13, § 1968.2) and enforcement requirements (Cal. Code Regs., title 13, § 1968.5) for 2004 and subsequent model year vehicles. The Board has modified the OBD II regulation in several updates since initial adoption to address manufacturers’ implementation concerns and, where needed, to strengthen specific monitoring requirements. In 2005, CARB adopted California Code of Regulations, title 13, section 1971.1, which established comprehensive OBD requirements for 2010 and subsequent model year heavy-duty engines and vehicles (i.e., vehicles with a gross vehicle weight rating greater than 14,000 pounds), referred to as HD OBD. The Board subsequently updated the HD OBD regulation in 2009 and adopted HD OBD-specific enforcement requirements (Cal. Code Regs., title 13, § 1971.5). The Board last adopted updates to the OBD II and HD OBD regulations in 2018.

Since then, CARB staff has identified a number of new proposed amendments to the OBD II and HD OBD regulations that it believes are warranted. The majority of the proposed amendments are related to the new proposed requirement for manufacturers to implement Unified Diagnostic Services (UDS) features on vehicles and engines using the International Organization for Standardization (ISO) 15765-4 communication protocol. The use of UDS for OBD communications would significantly increase the number of available fault codes for manufacturers to use, provide more information related to emissions-related malfunctions that are detected by OBD

systems, improve the usefulness of the generic scan tool to repair vehicles, and provide needed information on in-use monitoring performance. UDS implementation would be required for all 2027 and subsequent model year light- and medium-duty vehicles and engines, as well as heavy-duty vehicles and engines that use the ISO 15765-4 protocol. Notwithstanding, manufacturers would be permitted to implement UDS as early as the 2023 model year. The proposed amendments related to the use of UDS include:

- Increasing the amount of information required to be provided by each supported fault code
- Increasing the number of freeze frames, readiness status, and in-use monitor performance ratio (IUMPR) data required to be supported
- Adding new data parameters that are required to be tracked and reported for the purposes of evaluating in-use monitoring activity
- Adding necessary SAE International document references to complement these new UDS requirements

Staff has also identified other proposed amendments to the OBD II regulation that it believes are warranted and necessary. The proposed amendments would address manufacturers' implementation concerns, enhance some existing requirements, and provide clarification on other requirements. The proposed amendments to the OBD II regulation include:

- Revising the monitoring requirements for cold start emission reduction strategies (CSERS) to include more details on which features of the emission control system need to be monitored and under which conditions, and requiring new data to be tracked and reported related to CSERS activity
- Adding new monitoring requirements to detect engine stalls on gasoline vehicles/engines to ensure the idle speed system monitor covers stall malfunctions on virtually all engine starts
- Requiring more stringent emission malfunction thresholds for the PM filter monitor in conjunction with relaxing the IUMPR requirements
- Revising the non-methane hydrocarbon (NMHC) catalyst and catalyzed PM filter monitoring requirements for feedgas generation performance to provide clarify and to make compliance easier to achieve
- Updating the supporting data requirements for the diesel oxides of nitrogen (NOx) sensor diagnostic to better ensure the robustness of monitoring strategies that rely on sensor readings
- Specifying the data manufacturers are required to submit to support the diesel catalyst/adsorber laboratory aging protocols and catalyst/adsorber monitor malfunction criteria and the associated acceptance criteria
- Requiring the ability of vehicles to seal the evaporative system when commanded by a generic scan tool to aid service technicians in finding and fixing detected evaporative system leaks

- Revising the durability demonstration testing requirements to allow for alternate methods to conduct retesting
- Revising the production vehicle evaluation testing requirements to decrease the number of tests required for verification of monitoring requirements and to collect more data from in-use vehicles

Staff is also proposing similar amendments to the HD OBD regulation, section 1971.1, where necessary to harmonize the requirements with regard to the UDS-related amendments, the CSERS monitor and tracking data amendments, the engine stall monitor amendments, the NO_x sensor monitoring amendments, and the diesel catalyst/adsorber monitor malfunction criteria amendments. Lastly, staff is proposing amendments to correct regulatory language regarding diesel misfire monitoring.

A number of minor amendments are also proposed as part of this rulemaking. Staff is proposing amendments to the OBD II enforcement regulation (section 1968.5) to align with the proposed changes to the OBD II regulation, specifically to account for the proposed amendments related to the UDS features and to add nonconformance criteria for the proposed IUMPRs applicable to the PM filter monitor. Staff is also proposing amendments to the HD OBD enforcement regulation (section 1971.5) to align with the proposed amendments related to the UDS features in the HD OBD regulation. Lastly, additional amendments are being proposed to correct section reference errors, typographical errors, and other minor errors in the regulations.

CARB may also consider other changes to the sections affected, as listed on page two of this notice, during the course of this rulemaking process.

Objectives and Benefits of the Proposed Regulatory Action:

The proposed amendments to the OBD II and HD OBD regulations will provide manufacturers with greater compliance flexibility, and will strengthen and clarify the requirements they are expected to meet in designing and developing robust OBD systems. These amendments will further ensure that OBD systems will be effective in detecting emission-related malfunctions during in-use driving and providing more timely identification and repair of malfunctions, therefore minimizing excess in-use emissions. Manufacturers will also be further encouraged to design and build more durable engines and emission-related components, all of which will help ensure that forecasted emission reduction benefits from adopted light-, medium-, and heavy-duty vehicle and engine emission control programs are achieved in-use. Ultimately, the proposed action will further the goal of CARB, which is to promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants, and provide safe, clean air to Californians. No quantifiable benefit to worker safety is expected.

CARB carried out an extensive public process. CARB began the OBD regulatory update process at the end of 2016, when CARB staff had meetings with industry to discuss UDS-related amendments to the OBD regulation. CARB staff then began

meetings with SAE committee members in 2017 to help develop the specifications related to the proposed UDS-related requirements in the SAE standards. CARB held a public workshop in El Monte on February 27, 2020, to discuss the proposal and to seek comments. Interested stakeholders participated in the workshop in person or via webinar. The workshop notice and workshop presentation were posted on the OBD Program website prior to the workshop. CARB staff also presented and sought comments regarding elements of the upcoming proposed amendments to the OBD regulations during SAE OBD symposiums held in September 2019 (Garden Grove, California), September 2020 (virtual symposium) and March 2021 (virtual symposium). These symposiums were attended by vehicle and engine manufacturers, scan tool manufacturers, and individuals involved in various other aspects of the automotive industry. CARB also presented and sought comments about the proposal during a Truck and Engine Manufacturers Association (EMA) compliance workshop in April 2020. Additionally, CARB staff held numerous teleconferences with the Alliance for Automotive Innovation and EMA, which represents the vast majority of stakeholders affected by the proposed rulemaking, as well as numerous meetings and correspondences (comprising of teleconferences, in-person meetings, and e-mail correspondences) with individual manufacturers. The proposal was developed in close collaboration with these stakeholders. As a result of the comments received throughout the regulatory process, staff made significant changes to the proposed amendments to the OBD II and HD OBD regulations, which are reflected in the final proposal.

Comparable Federal Regulations:

In February 1993, the United States Environmental Protection Agency (U.S. EPA) promulgated OBD requirements for federally certified light-duty vehicles and trucks. (40 Code of Federal Regulations (CFR) Part 86, §§ 86.094-2, 86.094-17, 86.094-18(a), 86.094-21(h), 86.094-25(d), 86.094-30(f), 86.094-35(l), 86.095-30(f), 86.095-35(l); see 58 Fed.Reg. 9468-9488 (February 19, 1993).) These requirements were later amended to require OBD systems on medium-duty vehicles by the 2008 model year. The final rule with the latest modifications of the requirements was published on February 24, 2009. A central part of the federal regulation is that, for federal certification of vehicles, U.S. EPA will deem California-certified OBD II systems to comply with the federal regulations.

In Health and Safety Code sections 43013, 43018, and 43101, the Legislature directed CARB to adopt emission standards for new motor vehicles that are necessary and technologically feasible and to endeavor to achieve the maximum emission reduction possible from vehicular and other mobile sources to accomplish the attainment of the State standards at the earliest practicable date. CARB initially adopted the OBD II regulations to meet those legislative directives. The OBD II regulation was first adopted in 1990. On October 11, 1996, the U.S. EPA granted California's request for

a waiver regarding the OBD II regulation, as last amended in December 1994,¹ recognizing that the OBD II regulation is at least as stringent in protecting public health and welfare as the federal regulation, and that unique circumstances exist in California necessitating the need for the State's own motor vehicle regulations program.

In 2014, the U.S. EPA adopted Tier 3 regulations that include provisions (40 CFR 86.1806-17) that generally align federal OBD requirements for 2017 and subsequent model year light duty vehicles, light-duty trucks, medium-duty passenger vehicles, and complete heavy-duty vehicles between 8,501 and 14,000 pounds gross vehicle weight rating with CARB's California OBD II regulation, as last amended in 2013. The federal requirements differ from the corresponding California OBD requirements in several aspects. For example, the malfunction thresholds for the emission threshold monitors may differ based on the emission standard the vehicle is certified to, especially in cases involving vehicles certified to Tier 3 standards that have no corresponding Low Emission Vehicle standard. Additionally, the federal OBD requirements do not incorporate the anti-tampering provisions of the OBD II regulation (that prevent unauthorized modifications of the computer-coded engine operating parameters of the on-board computer). Further, while the federal regulation does not incorporate the specific deficiency provisions of the California OBD II regulation, it contains its own deficiency provisions that contain differences from the deficiency provisions in the OBD II regulation. Specifically, the federal requirements do not assign fines for deficiencies while California's OBD II regulation would require manufacturers to pay fines if their OBD system is certified with three or more deficiencies. Additionally, the California OBD II regulation allows for deficiencies that are applied after certification of the OBD system (i.e., retroactive deficiencies), while the federal OBD regulation does not contain such provisions. Further, the federal requirements specifically do not allow deficiencies for complete lack of major monitors. Further, considering California updated the OBD II regulation with more stringent requirements after 2013, including the requirement for the vehicle to track and report certain data parameters to characterize the vehicle's NOx control performance as well as the greenhouse gas emissions in the real world, California's OBD II regulation establishes more comprehensive and stringent requirements than the federal regulation.

CARB initially adopted the HD OBD regulation in 2005. A waiver for the regulation was granted by U.S. EPA in 2008.² CARB amended the regulation in 2010, and was granted another waiver action by U.S. EPA in 2012.³ On November 7, 2016, the U.S.

¹ *California State Motor Vehicle Pollution Control Standards; Waiver of Federal Preemption; Decision*, 61 Fed. Reg. 53371 (October 11, 1996).

² *California State Motor Vehicle Pollution Control Standards; Notice of Waiver of Clean Air Act Preemption; California's 2010 Model Year Heavy-Duty Vehicle and Engine On-Board Diagnostic Standards*, 73 Fed. Reg. 52042 (September 8, 2008).

³ *California State Motor Vehicle Pollution Control Standards; Notice of Waiver of Clean Air Act Preemption; California's 2010 Model Year Heavy-Duty Vehicle and Engine On-Board Diagnostic Standards*, 77 Fed. Reg. 73459 (December 10, 2012).

EPA formally granted California's request for a waiver regarding the HD OBD regulation, as last amended on June 26, 2013,⁴ recognizing that the HD OBD regulation is at least as stringent in protecting public health and welfare as the federal regulation, and that unique circumstances exist in California necessitating the need for the State's own motor vehicle regulations program. The U.S. EPA has also adopted OBD requirements for vehicles and engines above 14,000 pounds, which is the weight range for California's "heavy-duty" class. The federal regulation (40 CFR 86.010-18) was published on February 24, 2009, and subsequently amended on September 15, 2011, and June 17, 2013.

The federal regulation is consistent with CARB's California regulation in the most important aspects. However, the California HD OBD regulation in general still establishes more comprehensive and stringent requirements than the federal OBD regulation. For example, the HD OBD regulation generally requires California OBD systems on diesel engines to detect malfunctions before emissions exceed more stringent thresholds than those required by the federal HD OBD regulation. Further, the federal regulation does not require the OBD system to detect diesel oxidation catalyst malfunctions before a specific emission threshold is exceeded like the California OBD regulations—it is only required to detect a failure if the catalyst completely lacks NMHC conversion capability. As another example, under the federal HD OBD regulation, the malfunction thresholds for the emission threshold monitors are not required to be adjusted to account for emissions due to infrequent regeneration events.

The proposed 2021 amendments would continue California's efforts to require more comprehensive and robust monitoring of emission related systems and components than required by federal OBD regulations. Historically, virtually every light- and medium-duty vehicle sold in the U.S. is designed and certified to California's OBD II requirements in lieu of the federal OBD requirements, and virtually all heavy-duty engine manufacturers have also certified to California's HD OBD regulation, since U.S. EPA's regulation directly allows acceptance of systems that have been certified to California's regulations. While this process is expected to continue, this may not be the case for some future heavy-duty engines that will be certified to the lower emission standards recently proposed as part of CARB's Heavy-Duty Omnibus rulemaking update⁵. This rulemaking, which will result in California regulations having

⁴ *California State Motor Vehicle Pollution Control Standards; Malfunction and Diagnostic System Requirements for 2010 and Subsequent Model Year Heavy-Duty Engines; Notice of Decision*, 81 Fed. Reg. 78149 (November 7, 2016).

⁵ Staff Report: Initial Statement of Reasons for Rulemaking: Proposed Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments: Proposed Amendments to the Exhaust Emissions Standards and Test Procedures for 2024 and Subsequent Model Year Heavy-Duty Engines and Vehicles, Heavy-Duty On-Board Diagnostic System Requirements, Heavy-Duty In-Use Testing Program, Emissions Warranty Period and Useful Life Requirements, Emissions Warranty Information and Reporting Requirements, and Corrective Action Procedures, In-Use Emissions Data Reporting Requirements, and Phase 2 Heavy-Duty

different emission standards than the federal regulation, may result in heavy-duty engine manufacturers producing federal-only engines that do not meet California's regulations. Therefore, it is expected that heavy-duty engine manufacturers will need to design different OBD systems, one meeting the California OBD regulation and the other meeting the federal OBD regulation, for a portion of their future product lines. However, if U.S. EPA adopts emission standards in the future that align with CARB's lower emission standards, it is expected that heavy-duty manufacturers will continue to design one OBD system to meet both the California and federal OBD requirements.

An Evaluation of Inconsistency or Incompatibility with Existing State Regulations (Gov. Code, § 11346.5, subd. (a)(3)(D)):

During the process of developing the proposed regulatory action, CARB conducted a search of any similar regulations on this topic and concluded these regulations are neither inconsistent nor incompatible with existing state regulations.

Disclosure Regarding the Proposed Regulation

Fiscal Impact/Local Mandate Determination Regarding the Proposed Action (Gov. Code, § 11346.5, subds. (a)(5)&(6)):

The determinations of the Board's Executive Officer concerning the costs or savings incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulatory action are presented below.

Under Government Code sections 11346.5, subdivision (a)(5) and 11346.5, subdivision (a)(6), the Executive Officer has determined that the proposed regulatory action would create costs or savings to any State agency, would not create costs or savings in federal funding to the State, would create costs or mandate to any local agency or school district, whether or not reimbursable by the State under Government Code, title 2, division 4, part 7 (commencing with section 17500), or other nondiscretionary cost or savings to State or local agencies.

Cost to any Local Agency or School District Requiring Reimbursement under section 17500 et seq.:

The proposed amendments are estimated to have a cumulative \$491,655 in cost and \$528,885 in revenue over the regulatory lifetime through 2034 for local agencies and school districts. The cost accounts for the incremental costs associated with the new vehicles purchased by local agencies during the regulatory lifetime, while the revenue accounts for the share of State sales tax revenue the local government will receive for all affected new vehicles sold in

Greenhouse Gas Regulations, and Powertrain Test Procedures, June 23, 2020. (<https://ww3.arb.ca.gov/regact/2020/hdomnibuslownox/isor.pdf>)

California during the regulatory lifetime. More details about the costs can be found in Chapter VIII.E. of the Staff Report: Initial Statement of Reasons (ISOR).

Any cost to local government is not reimbursable by the State, pursuant to Government Code, title 2, division 4, part 7 (commencing with section 17500) because the additional costs associated with the proposed amendments apply generally to all entities that purchase affected engines and vehicles, private fleets and owners as well as State and local agencies. The proposed amendments do not mandate a new program or higher level of service on any local government.

Cost or Savings for State Agencies:

The proposed amendments are estimated to have a cumulative \$180,062 in cost and \$458,135 in revenue over the regulatory lifetime through 2034 for State agencies. The cost accounts for the incremental costs associated with the new vehicles purchased by State agencies during the regulatory lifetime and the estimated costs incurred by the Bureau of Automotive Repair for software and database updates needed to accommodate the proposed UDS features in the Smog Check program. The revenue results from the share the State government will receive from the State sales tax revenue associated with the incremental costs for all affected new vehicles sold in California during the regulatory lifetime. More details about the costs can be found in Chapter VIII.E. of the ISOR.

The proposed amendments may require a small amount of additional time for CARB staff to review new OBD II and HD OBD requirements in manufacturer applications. However, clarifications in the proposed amendments would streamline other parts of the review process for CARB staff, since it will be easier to determine compliance with the requirements. Any additional staff time required as part of the proposed amendments are anticipated to be offset by a reduction in staff time from the proposed clarifications.

Other Non-Discretionary Costs or Savings on Local Agencies:

No other non-discretionary costs or savings to local agencies are expected.

Cost or Savings in Federal Funding to the State:

No costs or savings in federal funding is anticipated.

Housing Costs (Gov. Code, § 11346.5, subd. (a)(12)):

The Executive Officer has also made the initial determination that the proposed regulatory action will not have a significant effect on housing costs.

Significant Statewide Adverse Economic Impact Directly Affecting Business, Including Ability to Compete (Gov. Code, §§ 11346.3, subd. (a), 11346.5, subd. (a)(7), 11346.5, subd. (a)(8)):

The Executive Officer has made an initial determination that the proposed regulatory action would not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons. Support for this determination is set forth in the Initial Statement of Reasons (ISOR).

Results of The Economic Impact Analysis/Assessment (Gov. Code, § 11346.5, subd. (a)(10)):

Non-Major Regulation: Statement of the Results of the Economic Impact Assessment (EIA):

(A) The creation or elimination of jobs within the State of California.

The proposed amendments are not expected to cause a noticeable change in California employment because California accounts for only a small share of motor vehicle, heavy-duty engine, and parts manufacturing employment, and the minimal additional work done by engine and vehicle manufacturers can be done with existing staff; for example, some engineering jobs may be reassigned to design and calibrate OBD II and HD OBD systems.

(B) The creation of new business or the elimination of existing businesses within the State of California.

The proposed amendments are not expected to affect business creation or elimination within California.

(C) The expansion of businesses currently doing business within the State of California.

The proposed amendments are not expected to affect the expansion of existing business currently within the State of California.

(D) The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.

The proposed amendments are not expected to result in direct emission benefits, but rather increase the certainty that emission benefits projected for the light-, medium-, and heavy-duty vehicle programs are realized in practice. Although not quantified, the proposed amendments are expected to result in cleaner vehicles than those currently produced and improve the reliability of emissions controls and the efficiency of repair. As a result, Californians will

benefit from more durable vehicles and more efficient diagnosis and repair of malfunctioning vehicles. No quantifiable benefit to worker safety is expected.

Effect on Jobs/Businesses:

The Executive Officer has determined that the proposed regulatory action would not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the Economic Impact Analysis in the ISOR.

Benefits of the Proposed Regulation:

The objective of the proposed regulatory action is to strengthen the OBD II and HD OBD requirements, provide manufacturers to greater compliance flexibility, and clarify the performance requirements manufacturers are expected to meet in designing and developing robust OBD II and HD OBD systems. These amendments will further ensure that OBD systems will be effective in detecting emission-related malfunctions during in-use driving and providing more timely identification and repair of malfunctions, therefore minimizing excess in-use emissions. This will encourage manufacturers to design and build more durable engines and emission-related components, all of which will help ensure that forecasted emission reduction benefits from adopted light-, medium-, and heavy-duty vehicle and engine emission control programs are achieved in-use.

A summary of these benefits is provided; please refer to "Objectives and Benefits", under the Informative Digest of Proposed Action and Policy Statement Overview Pursuant to Government Code section 11346.5, subdivision (a)(3) discussion on page five.

Business Report (Gov. Code, §§ 11346.5, subd. (a)(11); 11346.3, subd. (d)):

In accordance with Government Code sections 11346.5, subdivisions (a)(11) and 11346.3, subdivision (d), the Executive Officer finds the reporting requirements of the proposed regulatory action which apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

Cost Impacts on Representative Private Persons or Businesses (Gov. Code, § 11346.5, subd. (a)(9)):

In developing this regulatory proposal, CARB staff evaluated the potential economic impacts on representative private persons or businesses. Based on the cost analysis, staff estimated that a representative private person or business would incur an impact of \$0.67 to \$7.37 per light-duty and medium-duty vehicle and \$14.34 to \$25.87 per heavy-duty vehicle to comply with the proposed amendments. The cost impacts

depend on the number of new vehicles the private person or business purchases during the lifetime of the regulatory proposal.

Effect on Small Business (Cal. Code Regs., tit. 1, § 4, subds. (a) and (b)):

The Executive Officer has also determined under California Code of Regulations, title 1, section 4, that the proposed regulatory action would affect small businesses. There is no light-duty, medium-duty, or heavy-duty vehicle/engine manufacturer that is a “small business” in California. However, any vehicle owner in California that purchases a new vehicle will be impacted by a price increase of \$0.67 to \$7.37 per light-duty and medium-duty vehicle and \$14.34 to \$25.87 per heavy-duty vehicle. For example, a small heavy-duty vehicle fleet could incur costs ranging from \$0 to \$51.74 for a fleet purchasing 0 to 2 heavy-duty diesel vehicles. Vehicle/engine repair shops in California will be impacted by an incremental cost of \$8 per shop owner associated with upgrading scan tools for diagnostics and repairs of vehicles.

Consideration of Alternatives (Gov. Code, § 11346.5, subd. (a)(13)):

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the Board, or that has otherwise been identified and brought to the attention of the Board, would be more effective in carrying out the purpose for which the action is proposed, would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

State Implementation Plan Revision

If adopted by CARB, CARB plans to submit the proposed regulatory action to the U.S. EPA for approval as a revision to the California State Implementation Plan (SIP) required by the federal Clean Air Act (CAA). The adopted regulatory action would be submitted as a SIP revision because it amends regulations intended to reduce emissions of air pollutants in order to attain and maintain the National Ambient Air Quality Standards promulgated by U.S. EPA pursuant to the CAA.

Environmental Analysis

CARB, as the lead agency for the proposed amendments, has concluded that this action is exempt from the California Environmental Quality Act (CEQA), as described in CEQA Guidelines §15061, because the action is both an Action Taken by Regulatory Agencies for Protection of the Environment (as described in CEQA Guidelines §15308 for “class 8” exemptions); and it is also exempt as described in CEQA Guidelines §15306 (“class 6” exemption for the purposes of data collection) because it can be seen with certainty that there is no possibility that the proposed action may result in a significant adverse impact on the environment. A brief explanation of the basis for reaching this conclusion is included in Chapter VI of the ISOR.

Special Accommodation Request

Consistent with California Government Code section 7296.2, special accommodation or language needs may be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language; and
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerks' Office at cotb@arb.ca.gov or (916) 322-5594 as soon as possible, but no later than ten business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades lingüísticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia;
- Documentos disponibles en un formato alternativo u otro idioma; y
- Una acomodación razonable relacionados con una incapacidad.

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al cotb@arb.ca.gov o (916) 322-5594 lo más pronto posible, pero no menos de 10 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

Agency Contact Persons

Inquiries concerning the substance of the proposed regulatory action may be directed to the agency representative Jason Wong, Manager, On-Board Diagnostics Program Development Section, at (626) 575-6838 or Jason.Wong@arb.ca.gov, or (designated back-up contact) Adriane Chiu, Air Resources Engineer, On-Board Diagnostics Program Development Section, at (626) 350-6453 or Adriane.Chiu@arb.ca.gov. If you are unable to reach the preceding designated contacts, please contact Chris Hopkins, Regulations Coordinator, at Chris.Hopkins@arb.ca.gov or (916) 445-9564.

Availability of Documents

CARB staff has prepared a Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, which includes a summary of the economic and environmental impacts of the proposal. The report is entitled: Public Hearing to Consider Proposed Revisions to the On-Board Diagnostic System Requirements and

Associated Enforcement Provisions for Passenger Cars, Light-Duty Trucks, Medium-Duty Vehicles and Engines, and Heavy-Duty Engines.

Copies of the ISOR and the full text of the proposed regulatory language, in underline and strikeout format to allow for comparison with the existing regulations, may be accessed on CARB's website listed below, on June 1, 2021. Please contact Chris Hopkins, Regulations Coordinator, at Chris.Hopkins@arb.ca.gov or (916) 445-9564 if you need physical copies of the documents. Because of current travel, facility, and staffing restrictions, the California Air Resources Board's offices have limited public access. Pursuant to Government Code section 11346.5, subdivision (b), upon request to the aforementioned Regulations Coordinator, physical copies would be obtained from the Public Information Office, California Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814.

Further, the agency representative to whom nonsubstantive inquiries concerning the proposed administrative action may be directed is Chris Hopkins, Regulations Coordinator, (916) 445-9564. The Board staff has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

Hearing Procedures

The public hearing will be conducted in accordance with the California Administrative Procedure Act, Government Code, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340).

Following the public hearing, the Board may take action to approve for adoption the regulatory language as originally proposed, or with non-substantial or grammatical modifications. The Board may also approve for adoption the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice and that the regulatory language as modified could result from the proposed regulatory action. If this occurs, the full regulatory text, with the modifications clearly indicated, will be made available to the public, for written comment, at least 15-days before final adoption.

The public may request a copy of the modified regulatory text from CARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814.

Final Statement of Reasons Availability

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on CARB's website listed below.

Internet Access

This notice, the ISOR and all subsequent regulatory documents, including the FSOR, when completed, are available on CARB's website for this rulemaking at <https://ww2.arb.ca.gov/rulemaking/2021/obd2021>

California Air Resources Board



Richard W. Corey
Executive Officer

Date: May 18, 2021

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see [CARB's website](http://www.ARB.ca.gov) (www.ARB.ca.gov).