State of California
AIR RESOURCES BOARD

Notice of Public Availability of Modified Text and Availability of Additional Documents

PUBLIC HEARING TO CONSIDER TECHNICAL STATUS AND PROPOSED REVISIONS TO ON-BOARD DIAGNOSTIC SYSTEM REQUIREMENTS FOR HEAVY-DUTY ENGINES, PASSENGER CARS, LIGHT-DUTY TRUCKS, MEDIUM-DUTY VEHICLES AND ENGINES

Public Hearing Date: August 23, 2012
Public Availability Date: January 4, 2013
Deadline for Public Comment: January 25, 2013

At its August 23, 2012 public hearing, the Air Resources Board (ARB or Board) approved for adoption amendments with modifications to the California Code of Regulations, title 13**,** sections 1968.2, 1968.5, 1971.1, and 1971.5. Upon becoming operative, the amendments would update the on-board diagnostic (OBD II) requirements for light-duty and medium-duty vehicles and engines and the heavy-duty on-board diagnostic (HD OBD) requirements for heavy-duty vehicles and engines, as well as the associated enforcement requirements.

At the hearing, the Board adopted Resolution 12-29 in which it approved for adoption amendments to sections 1968.2, 1968.5, 1971.1, and 1971.5**,** as modified by staff's suggested modifications presented to the Board at the August 23, 2012 hearing. The modifications were made in response to comments received since the Staff Report was published on July 5, 2012, as part of the 45-day notice. These modifications include changes to the required monitoring conditions for the diesel misfire monitor requirements in the HD OBD and OBD II regulations, clarifications to the readiness status and test results requirements in the HD OBD regulation, deletion of the service information requirements in the HD OBD regulation, and various changes to correct errors and improve clarity. The resolution and all other regulatory documents for this rulemaking are available online at the following ARB website:

http://www.arb.ca.gov/regact/2012/hdobd12/hdobd12.htm

In accordance with the Government Code, section 11346.8, the Board directed the Executive Officer to adopt the approved amendments after making them available to the public for comment for a period of at least fifteen days. The Board further provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make such modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if warranted.

Modifications to the proposed text are set forth in Attachment A to this notice, which contains relevant portions of sections 1971.1, 1968.2, 1971.5, and 1968.5 affected by the modifications being proposed with this notice. For sections 1971.1, 1971.5, and 1968.5, the amendments proposed with the 45-day notice are shown in single underline to indicate additions and ~~single strikeout~~ to indicate deletions from the existing regulatory text, while amendments proposed with this 15-day notice are shown in double underline to indicate additions and ~~double strikeout~~ to indicate deletions from the existing regulatory text. For section 1968.2, the amendments that were approved by the Board at the January 26-27, 2012 board hearing are shown in single underline to indicate additions and ~~single strikeout~~ to indicate deletions from the existing regulatory text. These amendments were formally approved by the Office of Administrative Law on August 7, 2012, and became operative on that date. The amendments proposed with the 45-day notice are shown in double underline to indicate additions and ~~double strikeout~~ to indicate deletions from the existing regulatory text, while new amendments proposed with this 15-day notice are shown in ***bold italic double underline*** to indicate additions and ~~***bold italic double strikeout***~~ to indicate deletions from the existing regulatory text.

Summary of Proposed Modifications

Modifications to HD OBD Regulation (section 1971.1)

1. Section 1971.1(c): As part of the 45-day notice, staff proposed a new definition of "alternate phase-in" that is similar to that currently provided in the OBD II regulation and would provide manufacturers with compliance flexibility in meeting some regulation requirements with prescribed phase-in schedules. As part of this 15-day notice, staff corrected a mistake in the example calculation in the last paragraph of the definition that referred to "2013"; the amendment has been corrected to indicate "2016".

   Additionally, as part of the 45-day notice, staff proposed modifications to the definition of "diagnostic or emission critical" electronic control unit to clarify which control units would fall under this definition and thus would be required to report a calibration identification number (CAL ID) and calibration verification number (CVN) combination. With the advent of more and more electronic controllers or 'smart' sensors that have integrated controllers on vehicles, the existing definition resulted in many modules with relatively minor roles in the OBD system having to support CAL ID and CVN. To better realign the requirements to the original intent of having this apply only to the controllers with the most critical OBD content, the proposal in the 45-day notice attempted to increase the amount of OBD content in a controller that would trigger the need for CAL ID and CVN. However, manufacturers have expressed concern that some elements of the proposed definition would increase the number of controllers subject to the requirement, including those that had relatively minor roles, and that some language in the definition was too broad to interpret consistently. After discussions with manufacturers, staff has revised the

definition to address both of these concerns. The latest revision does increase the amount of OBD content for most controllers before CAL ID and CVN would be required while still providing assurance that the controllers with the most critical OBD content will have CAL ID and CVN. The revision more directly targets inclusion of controllers that are at higher risk for being modified or tampered by including controllers that are reprogrammable and have material OBD content.

Finally, in the 45-day notice, staff proposed for the purposes of HD OBD compliance the addition of a definition of "emission standard" that differs from the definition of that term as set forth in Health and Safety Code section 39027. Health and Safety Code sections 39010 and 39601(b) authorizes the use of such revised definitions in ARB-adopted regulations for the purpose of conforming definitions to federal laws, rules and regulations. The definition proposed in the 45-day notice conforms to the federal definition of that term as interpreted by the U.S. Supreme Court in *Engine Manufacturers Association v. South Coast Air Quality Management District* (2004) 541 U.S. 246, 253, 124 S.Ct. 1756, 1762. The proposed definition makes it clear that OBD systems, in general, and OBD design-feature requirements of sections 1971.1 and 1968.2, specifically, are emission standards. Health and Safety Code section 39010 further provides that the definitions set forth in the Health and Safety Code govern the construction of Division 26 of the Health and Safety Code, including and until ARB revises those definitions in its regulations. The revised definition of emission standard would thus govern the construction of that term as used in the Division 26. To make this clear, staff is proposing that the definition be further modified to specifically reference that the definition not only applies to OBD compliance but also to the remedies provided in the Health and Safety Code for noncompliance

2. Section 1971.1(e)(1.4.2)(D): As part of the 45-day notice, staff proposed modifications to the freeze frame requirements for engines using the International Organization for Standardization (ISO) 15765-4 protocol to require storage of freeze frame conditions when storing pending fault codes under section 1971.1(d)(2.2.1)(D)(iii). In making this change, staff mistakenly did not align the proposed amendments with the freeze frame requirements under the diesel fuel system monitor section, which currently allows storage of freeze frame conditions in conjunction with storage of a confirmed fault code. Modifications are being proposed to address this error.

3. Section 1971.1(e)(2.3.3)(A): As part of the 45-day notice, staff proposed that manufacturers begin to phase-in monitors starting in the 2016 model year to detect a misfire fault when the percentage of misfire exceeds a certain level and to continuously monitor for diesel misfire under nearly all positive torque conditions up to 75 percent of the maximum engine speed and load. Further, the 45-day proposed modifications included a phase-in starting in the 2019 model year to expand the monitoring to all positive torque engine speed and load conditions up to 100 percent of the maximum rated engine speed and load. Manufacturers have commented that

it would be more consistent with terminology of the heavy-duty industry to limit monitoring to under 75 percent of the peak torque instead of 75 percent of the maximum load, and that it would also be beneficial during the initial phase-in starting in 2016 to limit monitoring to above a minimum torque condition because they anticipate robust detection of misfire at the lower torque ranges will be difficult. In response, staff is proposing to modify section 1971.1(e)(2.3.3)(A)(i) for the initial phase-in to require manufacturers to continuously monitor for diesel misfire under positive torque conditions between 20 and 75 percent of peak torque and up to 75 percent of the maximum engine speed. The proposed inclusion of the minimum torque enablement criterion would effectively cover a limited disablement area of very low torque and high engine speed conditions, which was initially proposed as part of the 45-day notice, making the initial proposal unnecessary. Staff is consequently proposing to delete the originally proposed disablement area from section 1971.1(e)(2.3.3)(A)(i). For the final phase-in to full-range misfire monitors beginning in 2019, staff mistakenly forgot to add the limited disablement area that is necessary to avoid false detections. Staff is now proposing to add this disablement allowance to section 1971.1(e)(2.3.3)(A)(ii).

4. Section 1971.1(e)(2.3.3)(C): In response to requests from industry wanting more specific language regarding diesel misfire monitor disablement, staff is proposing new language similar to the language currently in the gasoline misfire monitoring section, which allows manufacturers to disable diesel misfire monitoring or use an alternate malfunction criteria during certain conditions. The proposed language specifies that disablement may be approved under conditions such as rough road, fuel cut, and when intrusive diagnostics or infrequent regeneration events may significantly affect engine stability.

5. Section 1971.1(e)(2.4.2)(B)(i): As with proposed modification 2. above, as part of the 45-day notice, staff proposed modifications to the freeze frame requirements for engines using the ISO 15765-4 protocol to require storage of freeze frame conditions when storing pending fault codes under section 1971.1(d)(2.2.1)(D)(iii). In making this change, staff again mistakenly did not align these amendments with the freeze frame requirements under the diesel misfire monitor section. Modifications are now being proposed to address this.

6. Sections 1971.1(e)(5.2.3)(B), (e)(8.2.4)(A)(iii), (e)(8.2.4)(B), and (g)(3.2.2)(F)(ii): As part of the 45-day notice, staff proposed language allowing manufacturers to be exempt from specific monitoring requirements if certain conditions are met related to the “applicable full useful life standard.” Manufacturers have indicated that there is only one set of applicable standards for heavy-duty engines, and thus the term “full useful life” is not necessary and may cause confusion. Staff therefore is proposing to delete the phrase “full useful life” from these sections. Further, staff is proposing modifications to improve the clarity and address confusion about the criteria manufacturers have to meet to be exempt from monitoring. Specifically, the proposed modifications would make clearer that exemption is only allowed if (1) no

fault can cause emissions to increase by 15 percent or more of the applicable standard, and (2) no fault can cause emissions to exceed the applicable standard.

7. Section 1971.1(g)(5.7): As part of the 45-day notice, staff proposed language that would allow manufacturers to request Executive Officer approval to be exempt from monitoring a component if a failure only affects emissions or other diagnostics when the ambient temperature is below 20 degrees Fahrenheit. There has been some confusion about the language, and staff believes additional modifications are needed to ensure consistent interpretation and implementation by manufacturers. Specifically, staff is proposing to delete the requirement that manufacturers request Executive Officer approval and provide supporting data for such exemptions. Instead, manufacturers would be required to provide supporting data only when staff reasonably believes a manufacturer has inappropriately determined that a component falls under the exemption criteria. Staff additionally proposed that manufacturers provide more details about the supporting data; specifically the Executive Officer would be able to request emission data for any reasonable driving condition above 20 degrees Fahrenheit.

8. Section 1971.1(g)(5.8): As part of the 45-day notice, staff proposed a new definition of “alternate phase-in” and new prescribed phase-in schedules for requirements under the oxides of nitrogen (NOx) catalyst and NOx and particulate matter (PM) sensor monitoring requirements. However, as proposed, the alternate phase-in calculation methodology under the “alternate phase-in” definition was difficult to directly apply to the required phase-ins for the monitors listed above. The referenced phase-ins are more complicated than typical phase-ins because they include a partial phase-in requiring less than 100 percent of the vehicles to meet an interim, less stringent malfunction threshold in the first few years and then a second phase-in to meet the final malfunction threshold. Specifically, the first phase-in requires a minimum of 20 and 50 percent of diesel engines to comply with an interim threshold of +0.3 g/bhp-hr NOx in the 2014 and 2015 model years, respectively. The second phase-in requires 100 percent compliance to a final threshold of +0.2 g/bhp-hr NOx in the 2016 model year. To provide additional flexibility to manufacturers, the proposed regulatory language allows engines phased-in during the 2014 or 2015 model years to the interim threshold of +0.3 g/bhp-hr NOx to be carried over into the 2016 model year and not required to meet the final +0.2 g/bhp-hr NOx threshold until the 2017 model year, which further complicates the second phase-in. Given the additional complexities of these two overlapping phase-ins, additional clarifying language is being proposed so manufacturers will have clear direction as to how to apply the alternate phase-in calculations for these specific monitors. Specifically, staff is proposing language (newly proposed section 1971.1(g)(5.8.3)) that would allow manufacturers to use, with Executive Officer approval, a manufacturer-defined phase-in that would provide an equivalent compliance volume of engines meeting the requirement as the prescribed phase-in for these monitors. The manufacturer-defined phase-in would be approved provided the calculated compliance volume met or exceeded the required phase-in

compliance volume and the manufacturer met several criteria specifically identified in the proposed language regarding which engines to include and exclude from the calculation of the equivalent compliance volume.

For the first phase-in at the interim threshold of +0.3 g/bhp-hr NOx, the language clarifies that the compliance volume for the required phase-in is calculated with 20 and 50 percent in the 2014 and 2015 model years, respectively, and engines meeting this threshold no earlier than the 2013 model year would be counted towards meeting the requirements. Also consistent with the methodology of typical alternate phase-ins, all manufacturer-defined phase-ins would need to result in "full" compliance (i.e., 50 percent at +0.3 g/bhp-hr) no later than the 2017 model year, and for those manufacturer-defined phase-ins that result in less than 50 percent of the diesel engines complying in the 2016 model year, engines not meeting the +0.3 g/bhp-hr threshold in the 2015 and 2016 model years would need to be subtracted from the compliance volume calculation. Lastly, because engines meeting the final +0.2 g/bhp-hr threshold are meeting a more stringent threshold than engines meeting the interim +0.3 g/bhp-hr threshold, the language would clarify that engines meeting the +0.2 g/bhp-hr threshold during the 2013 through 2017 model years would also be deemed as complying with the +0.3 g/bhp-hr threshold and would not be counted against the manufacturer.

For the second phase-in at the final threshold of +0.2 g/bhp-hr NOx, the language clarifies that this is considered a second stand-alone phase-in for which the compliance volume is calculated with 100 percent in the 2016 model year for the required phase-in. As such, engines meeting the +0.2 g/bhp-hr threshold no earlier than the 2015 model year would be counted towards meeting the second phase-in and all engines would need to comply with the threshold by the 2018 model year. Further, for manufacturer-defined phase-ins that do result in some engines not complying in the 2017 model year, those engines not meeting the +0.2 g/bhp-hr threshold in the 2016 and 2017 model years would be subtracted from the compliance volume calculation. And lastly, to address the additional flexibility mentioned above in which engines previously certified in the 2014 or 2015 model years to the interim +0.3 g/bhp-hr threshold are allowed to be carried over into the 2016 model year and not certified to the final +0.2 g/bhp-hr threshold until the 2017 model year, the language clarifies that all 2016 model year engines using this carry-over provision would also be deemed as complying with the +0.2 g/bhp-hr final threshold and would not be counted against the manufacturer.

9. Section 1971.1(h)(4.1.1) and (h)(4.1.3)(B): As part of the 45-day notice, staff proposed changes to the readiness status requirements, including identifying specific monitored component/systems for which the readiness status shall always indicate "complete" and identifying the specific monitors that are required to be included in the readiness status for other monitored component/systems. Additionally, staff proposed that for the diesel misfire monitor, the readiness status would indicate "complete" if the idle-only misfire monitor (i.e., the monitor that meets

section 1971.1(e)(2.2.1)) has fully executed. Manufacturers, however, have indicated that they may not have a separate monitor for the idle-only monitoring requirement. Instead, they may use the continuous misfire monitor that runs during all required driving conditions, including idle. Monitored component/systems that only have continuous monitors are generally required to have their readiness status always indicate "complete" since the monitors should run all the time. Thus, staff is proposing to require manufacturers with a separate monitor designed to detect misfires identified in section 1971.1(e)(2.2.1) to set the diesel misfire readiness status to "complete" if this separate monitor has fully executed, while manufacturers without a separate monitor would be required to always set the diesel misfire readiness status to "complete" since they would only have the continuous misfire monitor.

10. Section 1971.1(h)(4.5.5): This section covers test results requirements, specifically requiring test results and limits to report values of zero after the OBD system fault memory is cleared. Manufacturers have indicated that the requirements are not aligned with the current specifications in Society of Automotive Engineers (SAE) J1939-73, which require test results and limits to report specific non-zero values that correspond to "test not complete" after the fault memory is cleared. Thus, for the 2010 through 2015 model years, staff is proposing that manufacturers be allowed to have the test results and limits report either values of zero as originally specified in the regulation or the specific non-zero values corresponding to "test not complete" in accordance with SAE J1939-73. Further, staff is proposing that 2016 and subsequent model year engines be required to align with SAE J1939-73 and only report the specific non-zero values for test results and limits corresponding to "test not complete."

11. Section 1971.1(h)(6): This section covers the service information requirements for HD OBD. At the time this section was first adopted in 2005, there were no separate service information requirements specific to heavy-duty engines. Since then, the Board has adopted a separate ARB regulation (California Code of Regulations, title 13**,** section 1969) that prescribes service information requirements for heavy-duty engines. Thus, staff is proposing to delete the service information requirements under section 1971.1(h)(6).

12. Section 1971.1(i)(3.1.2): The HD OBD regulation requires manufacturers to perform demonstration testing on monitors to ensure they are able to detect faults before the required emission thresholds are exceeded. As part of the 45-day notice, staff proposed changes to require manufacturers to detect diesel misfire when the percentage of misfire exceeds a certain percentage instead of when specific emission thresholds are exceeded. With this change, staff also proposed to exempt manufacturers from performing demonstration testing on the diesel misfire monitor. In making this latter change, staff, however, mistakenly overlooked proposed section 1971.1(e)(2.2.5), which would allow manufacturers to use an alternative malfunction criterion that would be calibrated to an emission level if emissions are below a

certain emission threshold. To correct this oversight, staff is proposing that manufacturers be required to perform demonstration testing on the diesel misfire monitor if it is calibrated using the alternative emission threshold of section 1971.1(e)(2.2.5).

13. Section 1971.1(k)(4): This section covers the carryover provisions for deficiencies that allow deficiencies to be carried over if manufacturers have met certain criteria. Manufacturers may carry over deficiencies in such cases for a maximum of two model years from the first year the deficiency was originally granted, unless hardware changes are needed, in which case the deficiency can be carried over for a maximum of three model years. Manufacturers have expressed concern that they have not been able to correct some deficiencies that were first granted in the 2010 or 2011 model years in time for the 2013 or 2014 model year and they will be prohibited from carrying those deficiencies over to those model years. To address this, staff recognizes that in many cases, manufacturers have been making a good faith effort to bring their systems into full compliance but that the workload of addressing all of the identified deficiencies on their first-ever OBD systems at the same time they are expanding implementation from one engine family in 2010 to all engine families in 2013 has been taxing. Thus, staff is proposing to allow manufacturers to request Executive Officer approval to carryover deficiencies first granted in the 2010 model year up through the 2013 model year if no hardware changes are needed and through the 2014 model year if hardware changes are needed. For deficiencies first granted in 2011, manufacturers would be allowed to carryover deficiencies through the 2014 model year.

<u>Modifications to OBD II Regulation (section 1968.2)</u>

14. Section 1968.2(c): See discussion of further modifications to the definition of "emission standard," at 1. above, which applies equally to the proposed modifications to the same term in the OBD II regulation.

15. Sections 1968.2(e)(15.4.3), (f)(1.2.2)(A)(ii), (f)(2.2.2)(A)(ii), (f)(4.2.1)(A)(ii), (f)(5.2.1)(A)(i)b., (f)(5.2.1)(B)(i)b., (f)(5.2.2)(A)(ii), (f)(6.2.1)(A)(ii), (f)(7.2.1)(A)(ii), (f)(8.2.1)(A)(ii), (f)(9.2.2)(A)(ii), (f)(12.2.2)(B)(i), (f)(13.2.1)(B), (f)(15.4.3), and (f)(17.1.3): As part of the 45-day notice, staff proposed a new definition for "emission standard" to clarify that the OBD regulations include emission standards, and proposed new definitions for "exhaust emission standards" and "tailpipe emission standards" to identify respective subcategories of the new definition of "emission standard" that had previously merely been identified in the regulation as emission standards. Staff, however, mistakenly failed to make specific all of the previous general references to emission standards to align those references with the new subcategory definitions. It is now proposing to specifically identify the appropriate subcategory references.

16. Sections 1968.2(f)(1.2.3)(B), (f)(9.2.4)(A), and (f)(15.2.2)(F)(ii): As part of the 45-day notice, staff proposed language allowing manufacturers to be exempt from specific monitoring requirements if certain conditions are met. Staff is proposing modifications to improve the clarity and address confusion about the criteria manufacturers have to meet to be exempt from monitoring. Specifically, the proposed modifications would make it clearer that exemption is allowed if (1) no fault can cause emissions to increase by 15 percent or more of the applicable full useful life standard, and (2) no fault can cause emissions to exceed the applicable full useful life standard.

17. Section 1968.2(f)(2.3): As part of the 45-day notice, staff proposed a change to the HD OBD regulation to only require the NOx converting catalyst reductant delivery performance monitor to run once per trip instead of continuously, since the original requirement was found to be inappropriate and too stringent. Staff mistakenly did not include this change in the OBD II regulation for medium-duty diesels; it is now proposing the same change to the OBD II regulation.

18. Section 1968.2(f)(3.3.3)(B): As part of the 45-day notice, staff proposed modifications requiring manufacturers to phase-in monitors starting in the 2016 model year for medium-duty diesel vehicles to detect a misfire fault when the percentage of misfire exceeds a certain level and to continuously monitor for diesel misfire under nearly all positive torque conditions up to 75 percent of the maximum engine speed and load. Further, the 45-day proposed modifications included a phase-in starting in the 2019 model year to expand the monitoring to all positive torque engine speed and load conditions (up to 100 percent of the maximum rated engine speed and load). Manufacturers have commented that it would be more consistent with terminology in the heavy-duty industry to limit monitoring to under 75 percent of the peak torque instead of 75 percent of the maximum load. Staff is thus proposing to modify section 1968.2(f)(3.3.3)(B)(i) for the initial phase-in starting in 2016 to require manufacturers to continuously monitor for diesel misfire under positive torque conditions up to 75 percent of the peak torque with engine speed below 75 percent of the maximum speed. Additionally, staff has found that the limited low torque and high engine speed disablement area allowed under section 1968.2(f)(3.3.3)(B)(i) would be necessary both during the 2016 phase-in and for the final phase-in starting in 2019 when the monitors are enabled under all positive torque engine speed and load conditions, and is proposing to add this disablement allowance to section 1968.2(f)(3.3.3)(B)(ii).

19. Section 1968.2(f)(3.3.3)(D): In response to requests from industry wanting more specific language regarding diesel misfire monitor disablement, staff is proposing new language similar to the language currently in the gasoline misfire monitoring section, which allows manufacturers to disable diesel misfire monitoring or use an alternate malfunction criteria during certain conditions. The proposed language specifies that disablement may be approved under conditions, such as rough road,

fuel cut, and when intrusive diagnostics or infrequent regeneration events may significantly affect engine stability.

20. Section 1968.2(f)(5.3.1)(A): As part of the 45-day notice, staff proposed to require manufacturers to track and report the in-use monitoring performance data of the diesel NOx sensor monitoring capability monitor on 2016 and subsequent model year "medium-duty vehicles certified to an engine dynamometer tailpipe emission standard." Staff mistakenly meant to require this on all medium-duty vehicles and is proposing to delete the phrase "certified to an engine dynamometer tailpipe emission standard" from this section.

21. Section 1968.2(f)(6.2.6): As part of the 45-day notice, staff proposed to allow manufacturers to be exempt from monitoring the diesel exhaust gas recirculation (EGR) catalyst if a fault of the catalyst could not cause a measurable emission impact on the criteria pollutants in the HD OBD regulation. Staff mistakenly did not include this change in the OBD II regulation; it is proposing to allow this same exemption criterion in the OBD II regulation.

22. Section 1968.2(f)(9.2.4)(B): As part of the 45-day notice, staff proposed to require manufacturers to monitor the catalyzed PM filter for proper feedgas generation starting with the 2016 model year in the HD OBD regulation. Staff mistakenly did not include this change in the OBD II regulation and is proposing to require 2016 and subsequent model year medium-duty vehicles to monitor the catalyzed PM filter for proper feedgas generation.

23. Section 1968.2(h)(4.3): The OBD II regulation requires manufacturers to perform demonstration testing on monitors to ensure they are able to detect faults before the required emission thresholds are exceeded. As part of the 45-day notice, staff proposed changes to require manufacturers to detect diesel misfire on medium-duty vehicles when the percentage of misfire exceeds a certain percentage instead of when specific emission thresholds are exceeded. With this change, staff also proposed changes to the demonstration testing requirements for diesel misfire monitoring which would specifically require testing only for those vehicles with misfire monitors calibrated to an emission malfunction threshold (i.e., those meeting section 1968.2(f)(3.2.2)(A)(i)). Staff, however, mistakenly overlooked proposed section 1968.2(f)(3.2.5), which would allow manufacturers to use an alternative malfunction criterion that would be calibrated to an emission level if emissions are below a certain emission threshold. To correct this oversight, staff is proposing that manufacturers be required to perform demonstration testing on the diesel misfire monitor if it is subject to section 1968.2(f)(3.2.2)(A)(i) or calibrated using the alternative emission threshold of section 1968.2(f)(3.2.5).

Modifications to HD OBD and OBD II Enforcement Regulations (sections 1971.5 and 1968.5)

24. Sections 1971.5(a)(3) and 1968.5(a)(3), definitions of "Nonconforming OBD System": The HD OBD and OBD II enforcement regulations respectively establish procedures to ensure that vehicles and engines certified for sale in California are equipped with OBD systems that properly function and meet the purposes and respective requirements of sections 1971.1 and 1968.2, and that OBD systems that fail to meet those requirements are nonconforming and subject to remedial action, including recall. In the 45-day notice, ARB staff proposed, for the purposes of OBD compliance, that a specific definition of "emission standard" (different from the definition set forth in Health and Safety Code section 39027) be added to the HD OBD and OBD II regulations. (See discussion in 1. above regarding rationale for amended definition of "emission standard" and Initial Statement of Reasons: Staff Report issued with 45-day notice, at pages 8 and 18.) ARB staff is now proposing that the definitions of "nonconforming OBD system" in the associated enforcement regulations be modified to reference this new emission standard definition. Specifically, that a nonconforming OBD system is an OBD system on a production engine/vehicle that has been determined not to meet the emission standards of sections 1971.1 and 1968.2. Additionally, for purposes of clarity, the reference in the definitions to tailpipe emission standards has been replaced with the term "exhaust emission standards," a term that is more generally used but has the same meaning.

Other Minor Modifications

25. In addition to the modifications described above, staff is proposing various nonsubstantive modifications to the regulatory text in sections 1971.1 and 1968.2 to improve clarity and to correct errors that have found by staff and industry.

Additional Document(s) Added to the Record

In the interest of completeness, staff has also added to the rulemaking record and invites comments on Attachment B, "Additional Supporting Documents and Information" and Attachment C, "S&P 500 Index: Annual Returns." These documents are also available at the following website:

http://www.arb.ca.gov/regact/2012/hdobd12/hdobd12.htm

Written comments will only be accepted on the modifications and document identified in this notice and may be submitted by postal mail or electronic mail submittal as follows:

Postal mail: Clerk of the Board, Air Resources Board
1001 I Street, Sacramento, California 95814
Electronic submittal: http://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 verbal 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.

In order to be considered by the Executive Officer, comments must be directed to ARB in one of the two forms described above and received by ARB by 5:00 p.m., on the deadline date for public comment listed at the beginning of this notice. Only comments relating to the above-described modifications to the text of the regulations shall be considered by the Executive Officer.

If you need this document in an alternate format or another language, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 no later than five (5) business days from the release date of this notice. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Si necesita este documento en un formato alterno u otro idioma, por favor llame a la oficina del Secretario del Consejo de Recursos Atmosféricos al (916) 322-5594 o envíe un fax al (916) 322-3928 no menos de cinco (5) días laborales a partir de la fecha del lanzamiento de este aviso. Para el Servicio Telefónico de California para Personas con Problemas Auditivos, ó de teléfonos TDD pueden marcar al 711.

Attachments

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 ARB's website at www.arb.ca.gov.