

State of California  
AIR RESOURCES BOARD

**Supplement to the Final Statement of Reasons for Rulemaking**

AMENDMENTS TO THE NEW PASSENGER MOTOR VEHICLE GREENHOUSE GAS EMISSION STANDARDS FOR MODEL YEARS 2017-2025 TO PERMIT COMPLIANCE BASED ON FEDERAL GREENHOUSE GAS EMISSIONS STANDARDS AND ADDITIONAL MINOR REVISIONS TO THE LEV III AND ZEV REGULATIONS

Public Hearing Date: November 15, 2012  
Agenda Item: 12-8-3  
Addendum Prepared: December 31, 2012

**I. Background**

On December 6, 2012, the Air Resources Board (ARB or Board) submitted the Final Statement of Reasons (FSOR) for the “Proposed Amendments to the New Passenger Motor Vehicle Greenhouse Gas Emission Standards for Model Years 2017-2025 to Permit Compliance Based on Federal Greenhouse Gas Emissions Standards and Additional Minor Revisions to the LEV III and ZEV Regulations” to the Office of Administrative Law (OAL) for its review and approval. During its review, OAL expressed concerns regarding the sufficiency of ARB’s description of the necessity for certain regulatory changes. ARB notes that no commenter or stakeholder appeared to have any similar concerns. Without conceding additional description is necessary, ARB wishes to address OAL’s concerns as follows.

ARB is submitting this supplement to the Final Statement of Reasons (FSOR) to OAL on December 31, 2012, for inclusion in OAL Regulatory Action File Number 2012-1206-01S.

**II. Clarification of and Modifications to Appendix J “List of Proposed Changes to Title 13, CCR and Incorporated Test Procedures” of the Initial Statement of Reasons**

**Amendments to Title 13, CCR, Section 1961.2**

Subsection (a)(2)

Subsection (a)(2)(D)1.: The current version of the regulation provides two compliance phase-in schedules to meet LEV III particulate matter standards. The primary phase-in schedule requires a certain percentage of vehicles to meet the applicable particulate matter standard each year, with 100% of vehicles

meeting the standard in the final year of the phase-in period. The second phase-in schedule provides an alternative phase-in schedule that is designed to provide equivalent particulate matter reductions during the phase-in period, while providing compliance flexibility to the manufacturer. In order to provide equivalent particulate matter reductions during the phase-in, it is essential to add language clarifying that a manufacturer that chooses to certify its vehicles using the alternative phase-in schedule must meet the applicable particulate matter standard with 100% of its vehicles in the 2021 model year. This is because without this provision, a manufacturer may continue to certify some portion of its vehicles to the higher LEV II PM standard indefinitely and would not achieve equivalent PM emissions reductions.

Subsection (a)(2)(D)2.: The current version of the regulation provides two compliance phase-in schedules to meet LEV III particulate matter standards. The primary phase-in schedule requires a certain percentage of vehicles to meet the applicable particulate matter standard each year, with 100% of vehicles meeting the standard in the final year of the phase-in period. The second phase-in schedule provides an alternative phase-in schedule is designed to provide equivalent particulate matter reductions during the phase-in period, while providing compliance flexibility to the manufacturer. In order to assure that the alternative phase-in schedule provides equivalent particulate matter reductions during the phase-in period it is essential to add language clarifying that a manufacturer that chooses to certify its vehicles using the alternative phase-in schedule must meet the applicable particulate matter standard with 100% of its vehicles in the 2028 model year. This is because without this provision, a manufacturer may continue to certify some portion of its vehicles to the higher LEV II PM standard indefinitely and would not achieve equivalent PM emission reductions.

Subsection (a)(2)(D)3.: The current version of the regulation provides two compliance phase-in schedules to meet LEV III particulate matter standards. The primary phase-in schedule requires a certain percentage of vehicles to meet the applicable particulate matter standard each year, with 100% of vehicles meeting the standard in the final year of the phase-in period. The second phase-in schedule provides an alternative phase-in schedule that is designed to provide equivalent particulate matter reductions during the phase-in period, while providing compliance flexibility to the manufacturer. In order to provide equivalent particulate matter reductions during the phase-in it is essential to add language clarifying that a manufacturer that chooses to certify its vehicles using the alternative phase-in schedule must meet the applicable particulate matter standard with 100% of its vehicles in the 2021 model year. This is because without this provision, a manufacturer may continue to certify some portion of its vehicles to the higher LEV II PM standard indefinitely and would not achieve equivalent PM emission reductions.

Subsection (a)(7)

Subsection (a)(7)(a):

Footnote 2: The proposal would clarify that for federally-certified test groups certifying in California in accordance with Section H subparagraph 1.4 of the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” the full-useful life emission value used to comply with federal SFTP requirements may be used in the sales-weighted fleet-average without applying an additional deterioration factor. This clarification is necessary because the current regulatory language does not adequately explain how to include such test groups in a fleet’s LEV III SFTP fleet average. Because SFTP emission values used to certify to federal standards are already full-useful life values, it is not necessary to apply an additional deterioration factor to such test groups in order to include them in the LEV III SFTP fleet average, which is also a full-useful life value.

Footnote 5: A reference in this footnote to footnote 7 would be corrected to refer to footnote 2 as intended. The reference was intended to direct to footnote 2, which sets forth how to calculate NMOG+NO<sub>x</sub> composite emission values for carry-over LEV II and federally-certified test groups. The current reference directs to footnote 2, which applies to the CO composite emission value.

**Amendments to Title 13, CCR, Section 1962.**

Subsection (c): It is necessary to add text to this subsection in order to provide manufacturers the option to comply with the 2017 through 2025 National greenhouse gas program as compliance with California’s greenhouse gas program for those model years.

Subsection (c)(1): This subsection is added to assure that manufacturers notify the Executive Officer prior to the start of the model year that they are choosing to opt in to the National greenhouse gas program instead of California’s greenhouse gas program. ARB needs such notification to ensure that it can monitor which compliance path manufacturers choose to meet California GHG requirements.

Subsection (c)(2): This subsection is added to assure that manufacturers choosing to comply with the National greenhouse gas program provide the Air Resources Board with the same data they provide to the USEPA demonstrating compliance with the National greenhouse gas program. Provision of these data is necessary so that California can monitor vehicle greenhouse emissions of new vehicles in California.

Subsection (c)(3): This subsection is needed to assure California receives the necessary data to determine the greenhouse gas emissions from new vehicles in California and those states that adopt California greenhouse gas requirements. Provision of these data is necessary since California will be providing to each of the States that choose to adopt the California greenhouse gas program the greenhouse gas emissions data from new vehicles so that they can monitor vehicle greenhouse gas emissions within their respective State.

### **Amendments to Title 13, CCR, Section 1962.1**

#### Section (c)

Subsection (c)(3): The revision date and revision number for Society of Automotive Engineers (SAE) J2841 has been updated. This change is needed to incorporate by reference the correct version and date of this document which defines how the utility factor is derived. The utility factor is used in determining the zero-emission vehicle mile traveled (VMT) allowance, or credit, provided to vehicles that qualify as a partial zero-emission vehicle. Additionally, the amended date of the test procedure incorporated in this subsection, the “California Exhaust Emission Standards and Test Procedures for 2009 through 2017 Model Zero-Emission Vehicles, and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-duty Vehicle Classes” has been updated.

### **Appendix B – “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles”**

#### **Part 1. Subpart E** California Exhaust Emission Standards

##### Section 1

##### Subsection 1.1.2

##### Subsection 1.1.2.1

##### Subsection 1.1.2.1.4

Subsection 1.1.2.4.1: See explanation to Amendments to Title 13, CCR, Section 1961.2, Subsection (a)(2) above.

Subsection 1.1.2.1.4.2: See explanation to Amendments to Title 13, CCR, Section 1961.2, Subsection (a)(2) above.

Subsection 1.1.2.1.4.3: See explanation to Amendments to Title 13, CCR, Section 1961.2, Subsection (a)(2) above

## Subsection 1.2

### Subsection 1.2.2

#### Subsection 1.2.2.1

Subsection 1.2.2.1.2 Table Footnote 2: Footnote 2 requires LEV II vehicles to apply a deterioration factor to their converted NMOG+NO<sub>x</sub> SFTP emissions at full-useful life. This proposal would clarify that for federally-certified test groups certifying in California in accordance with subparagraph 1.4, the full-useful life emission value used to comply with federal full-useful life SFTP requirements may be used in the sales-weighted fleet-average without applying an additional deterioration factor. This change is needed because these vehicles already include a deterioration factor in their full-useful life emission data; failure to correct this subsection to reflect current practice would require the manufacturer to overstate the emissions of its vehicles during the certification process

## Subsection 2.5

### Subsection 2.5.1

Subsection 2.5.1.3.4: See explanation to Amendments to Title 13, CCR, Section 1962. above.

## **III. Modifications to Enclosure B “Summary of 15-Day Changes to the Proposed Regulation Order and Incorporated Test Procedures”**

### **Modifications to §1961. Exhaust Emission Standards and Test procedures – 2004 through 2019 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.**

#### Subsection (a)

Subsection (a)(1): This change is needed to clarify that 2015-2016 model year LEV II SULEVs that receive a partial zero-emission vehicle (ZEV) allowance and all other 2015-2016 model year SULEV vehicles may use “carry-over” of

emission data to certify to combined NMOG+NOx standards instead of separate NMOG and NOx standards. It also clarifies that all LEV II vehicles allowed to certify to combined NMOG+NOx standards must meet the combined standards at 150,000 miles, consistent with the durability requirements for LEV III vehicles certifying to combined NMOG+NOx standards. This change also clarifies that 2015-2016 model year LEV II SULEV vehicles not using “carry over” emission data may not certify to combined NMOG+NOX standards. These clarifications are needed to assure consistency in vehicle treatment during the phase-in of the LEV III program, while providing compliance flexibility to the manufacturers when certifying to LEV III’s most challenging emission standard.

**Modifications to §1961.2. Exhaust Emission Standards and Test Procedures – 2004 through 2019 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.**

Subsection (a)

Subsection (a)(1): See explanation for §1961. Subsection (a)(1) above.

Subsection (b)

Subsection (b)(1)

Subsection (b)(1)(A): This change is needed to clarify that determination of a manufacturer’s compliance with the 2018 and subsequent model year partial ZEV anti-backsliding requirement is based on a running three year average of the manufacturer’s PZEV production starting in model year 2020, rather than matching their average percentage of PZEVs produced and delivered for sale in California for model years 2015-2017 every model year beginning in 2018 as required in the current regulation. This change provides manufacturer’s with additional compliance flexibility while meeting the original intent of the requirement, which was to assure the continued production of these very clean vehicles when the PZEV vehicle category migrates from the ZEV program to the LEV program in 2018.

**Modifications to §1962.2. Zero-Emission Vehicle Standards for 2018 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.**

Subsection (c)

Subsection (c)(3)

Subsection (c)(3)(A): This clarification is needed to indicate that all electric range (AER) is the correct metric for credit attributed to electric range of transitional zero emission vehicles. The test cycle

range, AER, is measured in miles driven electrically before the engine turns on for the first time.

**Summary of 15-Day Changes to “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles”**

**Part 1. Subpart E**

Subsection 1

Subsection 1.1

Subsection 1.1.1: See explanation for §1961. Subsection (a)(1) above.

Subsection 2

Subsection 2.1

Subsection 2.1.1: See explanation for §1961.2. subsection (b)(1)(A) above.

**III. Minor Additional Non-Substantive Changes**

OAL identified several additional, minor non-substantive changes in its review that ARB agrees add clarity and consistency to the regulations.

**IV. Compliance with title 1, §20, California Code of Regulations and Government Code Section 11346.5(b)**

Title 13, CCR sections 1900, 1956.8, 1960.1, 1961, 1961.2, 1961.3, 1962.1, 1962.2 and 1976 identify the incorporated ARB documents by title and date. The ARB documents are readily available from the ARB upon request, and were made available in the context of this rulemaking in the manner specified in Government Code Section 11346.5(b).

Existing administrative practice of ARB has been to have technical recommended practices, such as the above, incorporated by reference rather than printed in the California Code of Regulations. These procedures are highly complex technical documents. Because ARB has never printed these types of documents in the California Code of Regulations, the affected public is accustomed to the incorporation format utilized in the title 13 sections impacted by these regulations. Moreover, printing portions of the documents in the California Code of Regulations when the bulk of the procedures are incorporated by reference would be unnecessarily confusing to the affected public. Additionally, the documents from SAE are copyrighted and are available only for purchase on the organization’s website. The full documents are instead

available for public inspection from the Air Resources Board's Legal Office at 1001 I Street, 23rd floor, Sacramento, California 95814.

## **V. Peer Review**

Health and Safety Code Section 57004 sets forth requirements for peer review of identified portions of rulemakings proposed by entities within the California Environmental Protection Agency, including ARB. Specifically, the scientific basis or scientific portion of a proposed rule may be subject to this peer review process. Here, ARB determined that the rulemaking at issue – which applies engineering judgments and standard economic principles that do not present new scientific issues – does not contain a “scientific basis” or “scientific portion” subject to peer review, and thus no peer review as set forth in Section 57004 was or needed to be performed. No comment was received to the contrary.