

State of California
AIR RESOURCES BOARD

Second Notice of Public Availability of Modified Text

PUBLIC HEARING TO CONSIDER PLUG-IN HYBRID ELECTRIC VEHICLE
TEST PROCEDURE AMENDMENTS AND AFTERMARKET PARTS
CERTIFICATION REQUIREMENTS ADOPTION

Public Hearing Date: January 23, 2009
Continuation Hearing Date: May 28, 2009
First Public Availability Dates: August 28, 2009 - September 14, 2009
Second Public Availability Release Date: November 2, 2009
Deadline for Second Public Comment Period: November 17, 2009

At its January 23, 2009, public hearing, the Air Resources Board (ARB or Board) approved the adoption of amendments to California Code of Regulations, title 13, sections 1961, 1962, 1962.1, 1976 and 1978, and to the incorporated "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", "California Exhaust Emission Standards and Test Procedures for 2005 through 2008 Model Zero-Emission Vehicles, and 2001 through 2008 Model Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes", "California Exhaust Emission Standards and Test Procedures for 2009 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes", "California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles", and "California Refueling Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles".

The approved amendments to the regulations and test procedures primarily adapt current exhaust and evaporative emission test procedures so that they more accurately reflect the exhaust and evaporative emissions generated from new configurations of plug-in hybrid electric vehicles.

At the hearing, the Board adopted Resolution 09-6, in which it approved the originally proposed amendments with several modifications. Some of the modifications had been suggested by staff in a document entitled "Staff's Proposed Regulatory Text Modifications" that was distributed at the hearing and that was Attachment G to the Resolution. The Resolution and Attachment G are available at ARB's website for this rulemaking: <http://www.arb.ca.gov/regact/2008/phev09/phev09.htm>. The Resolution directed the Executive Officer to incorporate the modifications into the proposed regulatory text, with such other conforming modifications and technical

Date of Release of the Initial Statement of Reasons:
Date of Initial Board Hearing:
Date of Release of Supplemental Staff Report:
Date of Second Board Hearing:
Date of First 15 day Notice Period:
Date of Second 15 day Notice Period:

December 5, 2008
January 22-23, 2009
May 12, 2009
May 28-29, 2009
August 28, 2009 - September 14, 2009
November 2, 2009 - November 17, 2009

amendments as may be appropriate, and to make the modified text available for a supplemental comment period of at least 15 days.

The Board also directed the Executive Officer and staff to return to the Board after consulting with affected conversion system manufacturers and others related to systems for conversions to off-vehicle charge capable hybrid electric vehicles (more commonly referred to as plug-in hybrid electric vehicles (PHEV)) in several months to continue the Board's consideration of the proposed adoption of section 2032, title 13, California Code of Regulations and its incorporated procedure – the "California Certification and Installation Procedures for Off-Vehicle Charge Capable Conversion Systems for 2000 and Subsequent Model Year Hybrid Electric Vehicles". This portion of the rulemaking establishes certification procedure requirements that provide PHEV manufacturers greater flexibility and create a phased approach to certification that encourages development of such conversion systems. The Board then continued the January 23, 2009 public hearing until May 28, 2009.

At its May 28, 2009 public hearing, staff presented a Supplemental Staff Report entitled "Proposed Rulemaking for Plug-in Hybrid Electric Vehicles, Modifications to the Proposed Aftermarket Parts Certification Requirements", and the Board adopted the proposed California Code of Regulations, title 13, section 2032 and the incorporated "California Certification and Installation Procedures for Off-Vehicle Charge Capable Conversion Systems for 2000 and Subsequent Model Year Hybrid Electric Vehicles."

The adopted aftermarket regulation and incorporated certification procedure primarily establish certification procedures that provide PHEV manufacturers greater flexibility and create a phased approach to certification that encourages development of such conversion systems.

The Board adopted Resolution 09-39, in which it approved the proposed regulation and incorporated certification procedure, with several modifications that were detailed in a document entitled "Proposed Regulation Order" that was distributed at the hearing and that was Attachment B to Resolution 09-39. The Resolution and Attachment B are available at ARB's website for this rulemaking: <http://www.arb.ca.gov/regact/2008/phev09/phev09.htm>. The Resolution directed the Executive Officer to incorporate the modifications into the proposed regulatory text, with such other conforming modifications and technical amendments as may be appropriate, and to make the modified text, the Supplemental Staff Report as set forth in Attachment C, and any additional supporting documents and information as may be appropriate, available for public comment for a period of 15 days.

Subsequent to the hearing, staff proposed modifications to the regulatory text

and the incorporated certification procedures. These post-hearing modifications were incorporated into the text of the proposed regulation and incorporated documents, and the text of all the modifications to the originally proposed regulation and incorporated documents was made available for a supplemental 15 day comment period by issuance of a “Notice of Public Availability of Modified Text.” This Notice was mailed on August 28, 2009 to all stakeholders, interested parties, and to other persons generally interested in ARB’s rulemaking concerning exhaust and evaporative emission test procedures applicable to PHEVs, and to procedures applicable to aftermarket certification of PHEV conversion systems.

The “Notice of Public Availability of Modified Text” listed the ARB website from which interested parties could obtain the complete text of the incorporated documents that would be affected by the modifications to the original proposal, with all of the modifications clearly indicated. These documents were also published on ARB’s webpage for this rulemaking:
<http://www.arb.ca.gov/regact/2008/phev09/phev09.htm> on August 28, 2009.

Staff has recently become aware that some of the proposed modifications as identified in the August 28, 2009 notice were inadvertent, and as proposed, would modify the ZEV regulation’s credit scheme in a manner that was never intended by staff. Staff is therefore proposing modifications at this time to rectify this oversight. In addition, staff is proposing some necessary changes to address the optional butane canister loading method when conducting only exhaust emission testing for HEVs and making some clarifying changes to the Evaporative and Refueling Test Procedures.

Attachment 1 to this notice contains the text of California Code of Regulations, title 13, section 1962.1 that shows the proposed second 15 day modifications to the originally proposed regulatory language relating to exhaust emissions.

Attachment 2 to this notice contains the text of the “California Exhaust Emission Standards and Test Procedures for 2009 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes” that shows the proposed second 15-day modifications to the originally proposed amendments relating to exhaust emissions test procedures.

Attachment 3 to this notice contains the text of “California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles” that shows the proposed second 15 day modifications to the originally proposed amendments relating to evaporative emissions test procedures.

Attachment 4 to this notice contains the text of “California Refueling Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles,” that shows the proposed second 15 day modifications to the originally proposed amendments relating to refueling emission standards and test procedures.

Attachment 5 to this notice contains the text of the incorporated “California Certification and Installation Procedures for Off-Vehicle Charge Capable Conversion Systems for 2000 and Subsequent Model Year Hybrid Electric Vehicles” that shows the proposed second 15 day modifications to the originally proposed certification procedures relating to aftermarket certification of PHEV conversion systems.

The rationale for the modifications to the regulation and incorporated standards and test procedures is set forth below.

I. Modifications to Regulatory Text of California Code of Regulations, Title 13, Section 1962.1 Being Made Available for Comment

Minor, Non-Substantive Changes

At the January 23, 2009, Board hearing, staff proposed modifications to section C.3.3 of the “California Exhaust Emission Standards and Test Procedures for 2009 and Subsequent Model Zero-Emission Vehicles, and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes,” to reflect the proposed changes to the testing procedure applicable to plug-in hybrid electric vehicles. At that time, staff also proposed changes to the associated ZEV regulation (title 13, California Code of Regulations section 1962.1(c)(3)(A)).

However, staff introduced an error by inadvertently modifying a subscript; this modification eliminated a variable that is necessary for the ZEV credit mechanism. Staff is therefore proposing to rectify this oversight by amending the subscript, and thereby restoring the eliminated variable to be consistent with its definition as intended and approved through the ZEV regulation that took effect on April 17, 2009. Specifically, staff proposes to correct the reference to the subscript for “equivalent all electric range” (EAER) in cases where the charge depleting actual range from the urban cycle (R_{cda}) is greater than 40 miles in the California Code of Regulations, title 13, Section 1962.1, subparagraph (c)(3)(A) to $EAER_{u40}$.

Staff also proposes to update the definitions section in subparagraph (i) to specify that the charge depleting actual range (R_{cda}) is based on the urban cycle,

and to correct the terminology in this section and in subsection (j). In the abbreviation section subparagraph (j) the term EAER₄₀ will be updated to align the subscript correctly for the variable EAER_{u40}.

II. Modifications to the Test Procedure as Renamed and Incorporated by Reference “California Exhaust Emission Standards and Test Procedures for 2009 and Subsequent Model Zero-Emission Vehicles, and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes,” Incorporated by Reference in California Code of Regulations Section 1962

Substantive Changes

Section B.2- Now includes the terminology for EAER_{u40}. This term is copied from the ZEV regulation. The term, R_{cdah}, is used in section F. 11 and in the definition section 1. For completeness this term is now included in the terminology list.

Section E- The title of the section has changed. To ensure that the effective dates of the amended test procedures will not disrupt certification or testing schedules, staff is proposing to delay the applicability of the amendments from the 2011 model year until the 2012 model year. Accordingly, sections that refer to “2011 and subsequent Model Years” will be changed to “2012 and subsequent Model Years.” Furthermore, the sections that state a manufacturer may elect to use these provisions to certify a 2009 or 2010 model year vehicle will be changed to 2009 through 2011 Model Year vehicles.

Section F- The title of the section has changed. To ensure that the effective dates of the amended test procedures will not disrupt certification or testing schedules, staff is proposing to delay the applicability of the amendments from the 2011 model year until the 2012 model year. Accordingly, sections that refer to “2011 and subsequent Model Years” will be changed to “2012 and subsequent Model Years.” Furthermore, the sections that state a manufacturer may elect to use these provisions to certify a 2009 or 2010 model year vehicle will be changed to 2009 through 2011 Model Year vehicles.

Section F.11.13- A new section was added to identify how to calculate EAER_{u40}. This calculation includes the correction for blended PHEV vehicles.

The following equation is being added in order to help further clarify the determination of EAER_{u40}, a variable which is ultimately used to determine Zero-emission VMT allowance when PHEV charge depleting range is equal to or exceeds 40 miles.

$$EAER_{u40} = \frac{ERF_u}{100} \times 40 \text{ miles}$$

Between 10 and 40 miles of charge depleting actual range from the urban cycle, this allowance is proportional to EAER and further modified by a utility factor. Beyond 40 miles, the zero emission VMT is still proportional to an EAER value, but one that is determined at a fixed or “capped” 40 mile range. For the vast majority of PHEVs in this range category, ERF_u will be 100% and the $EAER_{u40}$ value will be a constant 40 miles. For the rare case where a manufacturer might certify a blended PHEV with charge depletion range in excess of 40 miles, the allowance is based on $EAER_{u40}$, a 40 mile range value which is proportional to the ERF_u (electric range fraction). For example, a non-Blended 100% ERF_u PHEV would have an $EAER_{u40}$ of 40 miles, and a Zero-emission VMT allowance of 1.35, while a blended PHEV with 80% ERF_u will have an $EAER_{u40}$ of 32 miles and an allowance of only 1.08.

Section I- The title of the section has changed. This change modifies the effective model year of this section from “2009 and 2010” to “2009 through 2011.” Although this is a substantive change, manufacturers may opt to use the procedures in subsection E and F.

Minor, Non-Substantive Changes

Staff is proposing minor changes to section C.3.3 of the “California Exhaust Emission Standards and Test Procedures for 2009 and Subsequent Model Zero-Emission Vehicles, and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes” to align the terminology in the test procedure with the terminology in Title 13, Section 1962.1, subparagraph (c)(3)(A).

1. Table of Contents - (Corrections made)
2. Section B.1 - Clarification was made to the length of the soak period for Alternate Continuous Highway Test Schedule and the Alternate Continuous Urban test Schedule. Specifically, these soak periods between every two cycles have been reverted back to the originally proposed 10-20 minute interval as originally proposed because this is a sufficient time period of repeatedly perform this test sequence.
3. Section E.6.2.1 – A provision was added to allow more flexibility for measuring particulate emissions (Part 1065 of the CFR may be used as an optional particulate sampling method).

4. Sections E.8.1.2.1 through E.8.1.2.1.3 - These sections were modified to address the auxiliary power unit and the battery state of charge, and to be consistent with section F.7.1.2.1.
5. Section E.8.1.2.1 - Section was reorganized to clarify setting the battery state-of-charge (SOC) before preconditioning. The guidance on the setting the SOC prior the preconditioning were moved from E.8.1.2.1 (i) and (ii) to E.8.1.2.1. This section also clarifies that the auxiliary power unit will be manually activated at the beginning and operated throughout the US06 preconditioning cycle.
6. Section E.8.1.2.1.1 – Retain previously deleted paragraphs. Subparagraph (i) in CFR is needed to specify the preconditioning cycle performed when the vehicle has soaked less than 2 hours after the previous emission test. Subparagraph (ii) in CFR is needed to specify the preconditioning cycle performed when the vehicle has soaked more than 2 hours after the previous emission test. Preconditioning cannot be performed without these subparagraphs.
7. Section E.8.2.1 Clarification added to consistent with section F.7.2.1.
8. Section E.8.3.2.1 – Changed to be consistent with section E.8.1.2.1 for the same reasons.
9. Section E.8.3.2.1 – This sections was modified to include the CFR preconditioning steps.
10. Section E.8.4.1 Clarification added to consistent with section F.7.4.1.
11. Section F.3.2 - Correction of the section reference.
12. Section F.5 – The phrase “and determine the operation mode for US06 and SC03 emission tests” was deleted because it was not applicable to the section.
13. Sections 5.1.5 and 5.1.6 – the section numbering for these sections was modified to be consistent with the rest of Section 5.1.
14. Section F.5.1.7 – This section was added to clarify the charge sustaining requirement during vehicle preconditioning.
15. Section F.5.1.8 – This section was added to separate the second fuel drain and fill task.

16. Section F.5.1.9 –Canister preconditioning was moved from sections F.5.4.2 and F.5.4.3 to this new section to clarify vehicle preconditioning.
17. Section F.5.1.10 - Vehicle charging was moved from sections F.5.4.2 and F.5.4.3 to this new section to clarify vehicle preconditioning.
18. Section F.5.2.1 – A provision was added to allow more flexibility for measuring particulate emissions. This provision is already allowed by the US EPA.
19. Section F.5.2.1 - Language was modified to clarify the test sequence for urban testing. Initial preconditioning steps were moved to section 5.1.
20. Section F.5.2.1 – Duplicate text was removed. Further guidance was provided for vehicle charging.
21. Section F.5.4.2 – This section was removed, since cold soak and vehicle charging are addressed in sections F.5.1.9 and F.5.1.10.
22. Section F.5.4.3 was renumbered as F.5.4.2.
23. Section F.5.4.2 (i) – This section was added to provide guidance on vehicle preconditioning.
24. Section F.5.4.2 (ii) – A label was added to this section to provide clarity.
25. Section F.5.4.2 (ii) – Language was added to specify which test cycles require emission measurement.
26. Section F.5.4.2 (iii) – Language was added to clarify vehicle charging requirements after testing.
27. Section label F.5.4.4 change to F.5.4.3.
28. Section F.5.4.3 (i) – This section was modified to clarify vehicle preconditioning requirements before the urban charge sustaining emission test and to remove requirements that are already addressed in section F.5.1.
29. Section F.5.4.3 (iii) – This section was added to clarify vehicle charging requirements after testing.
30. Section F.5.5.1 – Language was added to the definition of "n" to make it consistent with section F.5.6.1.

31. Section F.6. – Modifications were made to make this section consistent with section F.5.
32. Section F.6 - Clarification was made to the optional requirement, which only applies to manufacturer testing.
33. Section F.6 – The Highway NOx provision previously contained in section F.9.5 was moved to this section for clarity.
34. Section F.6 – In the second paragraph, the plural “emissions” was corrected to “emission”, and the singular “HFEDS” was corrected to “HFEDSs”.
35. Section F.6 – The order of the first two paragraphs of this section were switched.
36. Section F.6.1 – This section was modified to clarify preconditioning requirements. Also, an “s” was deleted from the word “Emissions” in the term Urban Charge Sustaining Emission Test.
37. Section F.6.1 – A section was added to provide guidance on preconditioning before the highway charge sustaining emission test.
38. Section F.6.2.2.3 – Clarifying language was added to specify which HFEDSs require emission measurement. The reference for repeating the procedure if the SOC criterion failed was corrected.
39. Section F.6.2.2.8 – Reference was corrected from h(6) to (b)(9)(vi) and (b)(9)(vii) to be consistent with section E.7.2.7 (i).
40. Section F.6.3 – Reorganized for clarity.
41. Section F.6.3.2 (i) - This new section provides guidance for vehicle preconditioning.
42. Section F.6.3.2 (ii) – Clarification was added to specify which test cycles require emission measurement.
43. Section F.6.3.2 (iii) – The time limit to begin vehicle recharging was increased from with 1 hour to within 3 hour to provide more testing flexibility, and clarifying language was added to specify vehicle charging requirements after testing.

44. Section F.6.3.3 – Reorganized for clarity.
45. Section F.6.3 (i) – This new section provides guidance for vehicle preconditioning.
46. Section F.6.3.3 (ii) – Changes were made to be consistent with section F.6.2.2.3.
47. Section F.7 – Edited to be consistent with similar paragraphs in F.5 and F.6.
48. Section F.7.1.2.1.1 – CFR sections that were originally deleted have now been included because CFR §86.132-00 subparagraphs (i) and (ii) are necessary for US06 testing. Subparagraph (i) in CFR is needed to specify the preconditioning cycle performed when the vehicle has soaked less than 2 hours after the previous emission test. Subparagraph (ii) in CFR is needed to specify the preconditioning cycle performed when the vehicle has soaked more than 2 hours after the previous emission test. Preconditioning cannot be performed without these subparagraphs. Sections F.7.1.2.1.1 and F.7.1.2.1.2 were combined.
49. Section F.7.2.1 – This section was modified for clarity. The emission test cycle may not necessarily be the second US06 cycle.
50. Section F.7.2.6.1 – This section has been modified to allow other cycles to be used for preconditioning.
51. Section F.7.2.6.1 (i) – Unnecessary language was deleted. Recording requirements for vehicle charging are addressed in section F.3.
52. Section F.7.2.6.2 – This section was modified to clarify vehicle operation during the idle period between multiple test cycles and clarify the end of the test.
53. Section F.7.3.2.1.1 - Change to be consistent with Section E.8.1.2.1.1 for the same reasons. (Subparagraph (i) in CFR is needed to specify the preconditioning cycle performed when the vehicle has soaked less than 2 hours after the previous emission test. Subparagraph (ii) in CFR is needed to specify the preconditioning cycle performed when the vehicle has soaked more than 2 hours after the previous emission test. Preconditioning cannot be performed without these subparagraphs.)
54. Section F.7.4.1 – This section was modified to be consistent with F.7.2.1

55. Section F.8 – Clarifying language was added to provide reference for general guidance of 50°F and 20°F testing.
56. Section F.8.1 – Plural “emissions” was corrected to singular “emission”.
57. Section F.8.3 – This section was modified to be consistent with section F.8.2.
58. Section F.9.4 – This section was deleted, and the requirement was added in context to sections F.5.4.2 (iii), F.5.4.3 (iii), and F.6.3.2 (iii).
59. Section F.9.5 – This section was deleted, and the requirement was moved to section F.6.
60. Original Section F.9.6 – The original section F.9.6 was deleted. The provision is now addressed in section F.6.3.2(iii).
61. New Section F.9.6 – This provision was added to minimize unnecessary testing.
62. Section F.9.7 – This section was added to provide more flexibility regarding refueling during a long test sequence.
63. Section 11.7 – This section was rewritten to clarify both AC and DC energy consumption shall be calculated.
64. Section G. – The proposed test sequence was corrected and clarified.

III. Modifications to the Test Procedure as Incorporated by Reference as, “California Evaporative Emission Standards and Test Procedures For 2001 and Subsequent Model Motor Vehicles,” Incorporated by Reference in California Code of Regulations Section 1976

Substantive Changes

Some of the steps specified in sections III.D.1.7.1. through III.D.1.7.9., should not be excluded if a manufacturer elects to perform the optional canister butane load method allowed under section III.D.1.7.10. Specifically, the initial testing state of the canister must be established if the optional canister butane load method is elected. Thus, either a fuel tank drain and 95% fill step along with a vehicle drivedown step, or the optional canister bench purge step, must be done. Therefore, the steps specified in sections III.D.1.7.1., III.D.1.7.2., and III.D.1.7.3. should not be excluded. In addition, the fourth drain and fill step specified in section III.D.1.7.7. will also need to be done in order for the fuel tank to have the proper fuel level prior to the start of the exhaust emission test. Lastly, the preconditioning soak specified in section III.D.1.7.8. must be conducted because this is when the optional canister butane loading would be performed.

Accordingly, section III.D.1.7.10. is modified to indicate that only sections III.D.1.7.4., III.D.1.7.5., and III.D.1.7.6. are excluded when a manufacturer elects to use the optional canister butane load method. In addition, staff believes that when a manufacturer elects to perform the optional canister bench purge, the bench purge can be done either during the initial soak period, as currently specified in section III.D.1.7.3., or after the vehicle preconditioning step, specified in section III.D.1.6.1. This is reasonable because that is when the process for establishing the initial testing state of the canister is currently started. Accordingly, language is added to section III.D.1.7.3. to clarify that the optional canister bench purge can be performed either during the initial cold soak or after the vehicle preconditioning step.

Staff also wishes to clarify that the recently adopted requirement in section III.D.3.3.4. (that requires 2012 and subsequent model-year off-vehicle charge capable hybrid electric vehicles with non-integrated refueling canister-only systems to be preconditioned for the three-day diurnal test sequence using the fuel-tank-refill method specified in section III.D.3.3.6.), may not apply when conducting only an exhaust emission test sequence. This possibility exists because a manufacturer may instead elect to perform the canister preconditioning and butane loading method specified in sections III.D.1.9., III.D.1.10., and III.3.3.4. Accordingly, staff is adding language to section III.D.3.3.4 to clarify this point.

The engine starting and cranking provisions in section III.D.5.1.1. are not applicable to hybrid electric vehicles. Therefore, additional language is added to this section in order to specifically clarify the applicable vehicle types that are

subject to these requirements.

The existing requirement in section III.D.1.7.2. to drive fuel out of one tank first, when vehicles are equipped with dual fuel tanks, does not reflect current practice because such vehicles may not be designed with selectable, or isolatable, systems. Such vehicles should not be subject to the existing requirement. Accordingly, new language to clarify the applicability of the requirement is added to section III.D.1.7.2.

To ensure that the effective dates of the amended test procedures will not disrupt certification or testing schedules, staff is proposing to delay the applicability of the amendments from the 2011 model year until the 2012 model year. Accordingly, sections that refer to “2011 and subsequent Model Years” will be changed to “2012 and subsequent Model Years.” Furthermore, the sections that state a manufacturer may elect to use these provisions to certify a 2009 or 2010 model year vehicle will be changed to 2009 through 2011 Model Year vehicles.

Minor, Non-Substantive Change

There is a typographical error in section III.D.1.7.10. The correct citation should be “section III.D.1.7.1.,” and not “III.D.7.1.” However, this citation is deleted by the change to section III.D.1.7.10. that is described previously.

IV. Modifications to the Test Procedure as Incorporated by Reference as, “California Refueling Emission Standards and Test Procedures For 2001 and Subsequent Model Motor Vehicles,” Incorporated by Reference in California Code of Regulations Section 1978

Substantive Changes

The existing requirement in sections II.B.4.1.3. and II.B.4.4. to drive fuel out of one tank first, when vehicles are equipped with dual fuel tanks, does not reflect current practice because such vehicles may not be designed with selectable, or isolatable, systems. Such vehicles should not be subject to the existing requirement. Accordingly, new language to clarify the applicability of the requirement is added to sections II.B.4.1.3. and II.B.4.4.

In addition, to maintain consistency with the Evaporative Test Procedures, the optional canister bench purge step should also be allowed either during the initial soak period specified in 40 CFR §86.132-96(c)(1), as incorporated by reference, or after the vehicle preconditioning step, specified in section II.B.4.1. Therefore, language is added to section II.B.4.1.3.3. specifically to clarify when the optional canister bench purge can be performed.

To ensure that the effective dates of the amended test procedures will not disrupt certification or testing schedules, staff is proposing to delay the applicability of the amendments from the 2011 model year until the 2012 model year. Accordingly, sections that refer to “2011 and subsequent Model Years” will be changed to “2012 and subsequent Model Years.” Furthermore, the sections that state a manufacturer may elect to use these provisions to certify a 2009 or 2010 model year vehicle will be changed to 2009 through 2011 Model Year vehicles.

V. Modifications to the “California Certification and Installation Procedures for Off-Vehicle Charge Capable Conversion Systems for 2000 and Subsequent Year Hybrid Electric Vehicles,” Incorporated by Reference in California Code of Regulations Section 2032

Minor, Non-Substantive Change

Section 5(a) of the Certification and Installation Procedures has been clarified by explicitly specifying the dates that the “California Exhaust Emission Standards and Test Procedures for 2005 Through 2008 Model Zero-Emission Vehicles and 2001 Through 2010 Hybrid Electric Vehicles in the Passenger Car, Light-Duty Truck, and Medium-Duty Vehicle Classes,” the “California Exhaust Emission Standards and Test Procedures for 2009 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles in the Passenger Car, Light-Duty Truck, and Medium-Duty Vehicle Classes,” the “California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles,” and the “California Refueling Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles,” were last amended.

Modified Text Being Made Available

Staff has prepared regulatory text that includes the Board’s approved and directed modifications and other conforming modifications needed to clarify regulatory intent.

Attachments include regulatory modifications to title 13 in Attachment 1, modifications to exhaust test procedures in Attachment 2, modifications to evaporative test procedures in Attachment 3, and modifications to ORVR test procedures in Attachment 4, and certification procedures for conversion systems in Attachment 5. These documents as well as the regulatory documents for this rulemaking are available online at the following ARB website:

<http://www.arb.ca.gov/regact/2008/phev09/phev09.htm>

Comments and Subsequent Action

In accordance with section 11346.8 of the Government Code, the Board directed the Executive Officer to amend sections 1961, 1962, 1962.1, 1976, 1978, title 13, CCR, and the incorporated "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", "California Exhaust Emission Standards and Test Procedures for 2005 through 2008 Model Zero-Emission Vehicles, and 2001 through 2008 Model Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes", "California Exhaust Emission Standards and Test Procedures for 2009 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes", "California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles", and "California Refueling Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles", after making the modified text available to the public for comment for a period of at least 15 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.

In accordance with section 11346.8 of the Government Code, the Board also directed the Executive Officer to adopt new section 2032, title 13, CCR, and the incorporated "California Certification and Installation Procedures for Off-Vehicle Charge Capable Conversion Systems for 2000 and Subsequent Model Year Hybrid Electric Vehicles", after making the modified text available to the public for comment for a period of at least 15 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.

Written comments on the modifications approved by the Board may be submitted by postal mail or electronic mail 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 (Government Code section 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, this information may become available via Google, Yahoo, and any other search engines.

In order to be considered by the Executive Officer, comments must be directed to ARB in one of the three forms described above and received by the 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.

For individuals with sensory disabilities, this document and other related material can be made available in Braille, large print, audiocassette, or computer disk. For assistance, please contact the Clerk of the Board at (916) 322-5594 as soon as possible.

Attachments