

APPENDIX E

SUMMARY AND RATIONALE OF CERTIFICATION AND TEST PROCEDURES

CP-501

Summary of CP-501 Introductory Paragraph

Both “section” and “title” were made lowercase. The parenthetical reference to CCR was deleted. The statement “and the term ‘Executive Officer’ refers to the ARB Executive Officer or his or her authorized delegate” was added.

Rationale for CP-501 Introductory Paragraph

“Section” and “title” were made lowercase and the Executive Officer statement was added to provide consistency with other ARB procedures. The California Code of Regulations is being referred to as Cal. Code Regs. rather than CCR, so the CCR reference was deleted.

Section 1. General Information and Applicability

Summary of Section 1

“Air Resources Board” was added. “Portable fuel container systems or their components” replaced the reference to “portable fuel containers, spouts, or both portable fuel container and spouts.”

Rationale for Section 1

“Portable fuel container systems,” by definition, include components including the spout. Unless the section is referencing the separate sale of spouts, there is no reason to state the spout separately from the container, so the phrase “portable fuel container system or their components” will be used.

Summary of Section 1.1

Parentheses on the left side of the lettering were added. “These” was corrected by replacing with “this,” the reference to “Compliance Procedures” was deleted, and “Procedures” was made singular. The coordination of certification procedures with “California Department of Industrial Relations, Division of Occupational Safety and Health (DOSH)” was deleted.

Rationale for Section 1.1

The addition of the parentheses is to harmonize with the required section numbering and lettering for the regulation order. The document is a certification procedure, so the reference that claimed it was also a compliance procedure is unnecessary. Grammar

edits were made to correct plurality. The coordination with DOSH was deleted for consistency with other ARB documents and because section 1.2 Requirement to Comply with All Other Applicable Codes and Regulations explains that "...other applicable federal and state statutes and regulations such as fire codes, safety codes, and other safety regulations..." must be complied with, making the coordination with DOSH unnecessary.

Summary of Section 1.2

"Requirements of Article 6 of Cal. Code Regs., title 13, division 3, chapter 9" replaced "Performance, Certification, or Compliance Standards in this Section." Reference to "spill proof systems or spill proof spouts" was replaced with "portable fuel container systems."

Rationale for Section 1.2

The reference to the California Code of Regulations was made consistent with other ARB documents. The "spill-proof" phrase is misleading because testing is conducted to ensure that the system is "leak-proof," but spillage is not addressed in the certification of a "spill-proof system." References to "spill-proof systems or spill-proof spouts" will be changed to "Portable Fuel Container Systems."

Section 2. Certification Requirements

Summary of Section 2

The titles of TP-501 and TP-502 and other language were corrected by replacing "Spill-Proof Spouts and Spill-Proof Systems" with "Portable Fuel Container Systems." The phrase "and referred to as TP-501 and TP-502 hereafter" was added. Language was added requiring that the containers selected for certification shall exhibit worst-case emissions and be from different production molds. The same six portable fuel containers shall be tested for both TP-501 and TP-502, and the durability steps in TP-501 sections 5.5-5.7 shall be conducted prior to TP-502. "For the purposes of this requirement" and "accredited" were deleted. "Included" was replaced with "summarized."

Rationale for Section 2

The titles of TP-501 and TP-502 were changed, so the reference to them must be updated. The statement that allows for the referencing of "TP-501" and "TP-502" without the full title provides brevity. Selected containers shall exhibit worst-case emissions to ensure that other containers of the production family will also be compliant with the emissions standard and also to harmonize with other ARB test procedures. Selected containers shall also come from different production molds because, while

results are historically consistent for containers that come from the same mold, containers that come from different molds typically have higher variability in diurnal emissions. Certification containers from different molds would provide a more representative sample. Durability tests were added to TP-501, so the same containers tested in TP-501 must be used for diurnal testing in TP-502 to include the effect of the durability tests. The explanation of an independent test laboratory applies in all situations, not only “for the purposes of this requirement.” “Accredited” was deleted because ARB does not perform any accreditation of the independent laboratories. “Summarized” replaced “included” because the requirements are described in the following subheadings, but are summarized in the table.

Summary of Section 2.1 Openings

“System” was added to the end of “portable fuel container.” References to a “vent hole” were deleted. “With” and an oxford comma were added. “This procedure” replaced “these requirements.” A paragraph explaining secondary openings was added.

Rationale for Section 2.1 Openings

The “portable fuel container system” phrase will be used when referring to the system, to differentiate from when referring to the container alone. References to the “vent hole” were deleted to eliminate the emphasis on venting. The purpose of the secondary opening is to improve fuel flow and relieve pressure, but emphasis is being removed from venting to prevent any tampering that creates an open venting system. Punctuation edits were made. “This procedure” was used instead of “these requirements to provide consistency with the rest of the document. The secondary openings paragraph clarifies that the secondary opening must be normally closed.

Summary of Section 2.2 Color

Parentheses on the left side of the lettering were added. “System” was added to the end of “portable fuel container,” and “spill-proof” preceding spout was deleted.

Rationale for Section 2.2 Color

The addition of the parentheses is to harmonize with the required section numbering and lettering for the regulation order. The “portable fuel container system” phrase will be used when referring to the system, to differentiate from when referring to the container alone. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” Therefore, there is no need to classify a spout as “spill-proof.”

Summary of Section 2.3 Diurnal Emissions Standard

Section 2.3 (a) was deleted. “Systems” was added to the end of “portable fuel container” and “that” was added. “That are equipped with an intended spill-proof spout” was deleted and “of reactive organic gases” was added. “Air Resources Board Test Procedure” and “Test Procedure for Determining Diurnal Emissions from Portable Fuel Containers July 26, 2006, which is incorporated by reference herein” were deleted.

Rationale for Section 2.3 Diurnal Emissions Standard

Section 2.3 (a) was only applicable before July 1, 2007. The “portable fuel container system” phrase will be used when referring to the system, to differentiate from when referring to the container alone. It was specified that the emissions captured during diurnal testing are reactive organic gases, since there were no units previously listed. The procedure previously allowed for TP-502 to be referenced without the full title, so the title was deleted.

Summary of Section 2.4 Durability

“Systems” was added to the end of “portable fuel container,” replacing “spouts, or both portable fuel containers and spouts.” The titles of TP-501 and TP-502 were deleted.

Rationale for Section 2.4 Durability

“Portable fuel container systems,” by definition, include components including the spout. Unless the section is referencing the separate sale of spouts, there is no reason to state the spout separately from the container, so the phrase “portable fuel container system” will be used. The procedure previously allowed for TP-501 and TP-502 to be referenced without the full title, so the titles were deleted.

Summary of Section 2.5 Leakage

“Portable fuel container system” was used instead of “spill-proof system or spill-proof spout.” The titles of TP-501 and TP-502 were deleted.

Rationale for Section 2.5 Leakage

The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof systems or spill-proof spouts” will be changed to “portable fuel container systems.” The procedure previously allowed for TP-501 and TP-502 to be referenced without the full title, so the titles were deleted.

Summary of Section 2.6 Automatic Closure

“Portable fuel container system” replaced “spill-proof system or spill-proof spout.” “Spill-proof” preceding spout was deleted. The titles of TP-501 and TP-502 were deleted. Liquid “that may evaporate into the atmosphere” was moved to the beginning of the sentence.

Rationale for Section 2.6 Automatic Closure

The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof system or spill-proof spout” will be changed to “portable fuel container system.” The procedure previously allowed for TP-501 and TP-502 to be referenced without the full title, so the titles were deleted. The structure of the “liquid that may evaporate into the atmosphere” was rearranged to improve clarity.

Summary of Section 2.7 Warranty

Parentheses on the left side of the lettering were added. “Procedure” replaced “article” and “portable fuel container systems” replaced the reference to “spill proof systems or spill proof spouts.” “Requirements” replaced “certification and compliance standards” and “this procedure” was used instead of referencing the title of the certification procedure.

Parentheses on the left side of the lettering were added. “Portable fuel container system” replaced “spill-proof system or spill-proof spout.” “And” was added after 1). “THIS CONTAINER COMPLIES WITH CARB EMISSION REGULATIONS FOR PORTABLE FUEL CONTAINERS (13 CCR 2467 et seq.)” and language allowing for other information were added as the specific language required instead of requiring an unconditional statement. Section 3) was deleted.

Rationale for Section 2.7 Warranty

The addition of the parenthesis is to harmonize with the required section numbering and lettering for the regulation order. This document is a procedure, not an article, so it is referred to as a procedure. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof system or spill-proof spout” will be changed to “portable fuel container system.” Specific warranty language will be required to solve the issue of insufficient warranty statements. Section 3 was deleted as all certifications must be met.

Summary of Section 2.8 Operating and Maintenance Instructions

Parentheses on the left side of the lettering were added. “Portable fuel container system” replaced “spill-proof system or spill-proof spout.”

Rationale for Section 2.8 Operating and Maintenance Instructions

The addition of the parentheses is to harmonize with the required section numbering and lettering for the regulation order. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof system or spill-proof spout” will be changed to “portable fuel container system.”

Summary of Section 2.9 Materials Compatibility with Fuels

“Portable fuel container systems” replaced “spill-proof systems or spill-proof spouts” and “spouts” was added to the list of components. The current ASTM requirements, ASTM F852-08 and ASTM F976-08 updated the existing requirements and “is” was made plural to “are.” The section allowing for limited certification for specified fuel blends was deleted.

Rationale for Section 2.9 Materials Compatibility with Fuels

The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof system or spill-proof spout” will be changed to “portable fuel container system.” Since the reference to “spill-proof spout” was deleted, spout was added to the list of other components. Existing ASTM references are from 1999 and 2002, so they were updated to current editions. The section allowing for limited certification for specified fuel blends was deleted to encourage the use of specified fuel. Limited certification for specified fuel blends will still be considered if requested.

Summary of Section 2.10 Optional Consumer Acceptance Program

Section 2.10 was deleted.

Rationale for Section 2.10 Optional Consumer Acceptance Program

No PFC manufacturer has elected to use the optional Consumer Acceptance Program since its inception in 2007; therefore, it has not provided a benefit to manufacturers. It is unnecessary and will be deleted.

Section 3. Submitting an Application

Summary of Section 3

“Their” was used instead of “its.” Periods following each section were changed to semicolons.

Rationale for Section 3

“Their” applies to “applicant,” which is more appropriate than “its.” The lettered sections follow a colon, so semicolons were used to connect all requirements.

Summary of Section 3.1

(a) was used instead of 3.1. “Portable fuel container systems” replaced “spill-proof systems or spill-proof spouts.”

Rationale for Section 3.1

The lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof systems or spill-proof spouts” will be changed to “portable fuel container systems.”

Summary of Section 3.2

(b) was used instead of 3.2. “Portable fuel container system” replaced “spill-proof system or spill-proof spout.” “System” was added in front of component and was clarified by adding “i.e., container and spout.” The statement “If an application is submitted for a spill-proof system (i.e., container and spout), separate dimensioned drawings for the portable fuel container and for the spill-proof spout are required” was deleted. “Portable fuel container system” was used instead of “portable fuel container or more than one type of spill-proof spout.”

Rationale for Section 3.2

The lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof systems or spill-proof spouts” will be changed to “portable fuel container systems.” The requirement of the drawings of the components of the portable fuel container system was clarified. This change made the sentence requiring separate dimension drawings for the container and spout unnecessary, so it was deleted.

Summary of Section 3.3

(c) was used instead of 3.3. “Portable fuel container system” replaced “spill-proof system or spill-proof spout.”

Rationale for Section 3.3

The lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof system or spill-proof spout” will be changed to “portable fuel container system.”

Summary of Section 3.4

(d) was used instead of 3.4. The following statement was added: “All test results, including those from invalid tests or from any other tests, and whether or not they were conducted according to TP-501 and TP-502.” The titles of TP-501 and TP-502 were deleted. The following steps were added:

- (1) If any failure occurs, the applicant must complete the following actions before an Executive Order of Certification will be issued:
 - (A) Identify the source of the failure;
 - (B) Make changes, as necessary, to the manufacturing process to remedy the nonconformity;
 - (C) For containers with failures that cannot be repaired without the use of tools, sealant, etc., demonstrate that the portable fuel container system conforms to the evaporative emission standards by testing a new set of six portable fuel container systems in accordance with TP-501 and TP-502; and
 - (D) Submit a written report to the Executive Officer, after successful completion of testing on the portable fuel container system that contains a description of the source of the failure, the remedy, and test results for the portable fuel container system with the application for certification.

Rationale for Section 3.4

The lettering change was made to harmonize with the required section numbering and lettering for the regulation order. Instead of requiring “test data,” “all test results, including those from invalid tests or from any other tests, and whether or not they were

conducted according to TP-501 and TP-502” will be required to prevent withholding of results. The procedure previously allowed for TP-501 and TP-502 to be referenced without the full title, so the titles were deleted. The added steps provide a pathway to identify a problem, correct it, and either continue testing or retest a set of six new containers.

Summary of Section 3.5

Section 3.5 was deleted.

Rationale for Section 3.5

The requirement of the submittal of all test data in section 3.4 makes section 3.5, which requests other data that assists in the determination of certification, unnecessary.

Summary of Section 3.6

(e) was used instead of 3.6. “Actually,” and “ARB” were deleted and “the date code” was used instead of “date code wheels.” “Portable fuel container system” replaced “spill-proof system or spill-proof spout.”

Rationale for Section 3.6

The lettering change was made to harmonize with the required section numbering and lettering for the regulation order. “Actually” was deleted to make the sentence more direct. ARB preceding Executive Officer was deleted because the term “Executive Officer” was defined in the beginning of the document. Date code wheels are no longer being required. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof systems or spill-proof spouts” will be changed to “portable fuel container systems.”

Summary of Section 3.7

(f) was used instead of 3.7. “Portable fuel container system” replaced “spill-proof system or spill-proof spout.”

Rationale for Section 3.7

The lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof systems or spill-proof spouts” will be changed to “portable fuel container systems.”

Summary of Section 3.8

(g) was used instead of 3.8. “Portable fuel container system” replaced “spill-proof system or spill-proof spout.” ARB preceding Executive Officer was deleted.

Rationale for Section 3.8

The lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof systems or spill-proof spouts” will be changed to “portable fuel container systems.” ARB preceding Executive Officer was deleted because the term “Executive Officer” was defined in the beginning of the document.

Summary of Section 3.9

(h) was used instead of 3.9.

Rationale for Section 3.9

The lettering change was made to harmonize with the required section numbering and lettering for the regulation order.

Summary of Section 3.10

(i) was used instead of 3.10. “Portable fuel container system” replaced “spill-proof system or spill-proof spout.” An oxford comma was added.

Rationale for Section 3.10

The lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof systems or spill-proof spouts” will be changed to “portable fuel container systems.” Oxford commas are preferred by the *Air Resources Board Correspondence and Reference Guide*.

Summary of Section 3.11

Section 3.11 was deleted.

Rationale for Section 3.11

This section was removed as requested by the Portable Fuel Container Manufacturers Association (PFCMA). This requirement is unnecessary as portable fuel container

system manufacturers are liable for component performance, not component manufacturers.

Section 4. Application Review and Acceptance

Summary of Section 4.1

The 4.1 heading was deleted. “These procedures” was changed to “this procedure,” “will” was changed to “shall,” and “section 3” was added in reference to where the minimum requirements of the Certification Procedure are listed.

Rationale for Section 4.1

Subheadings for section 4 are unnecessary as the sections are related and do not provide separate information. The language references the information required by the singular procedure, so the reference was made singular. “Shall” was used for consistency with other ARB documents. “Section 3” was added to allow readers to know where to find the listed requirements.

Summary of Section 4.2

The 4.2 heading was deleted. “Portable fuel container system” replaced “spill-proof system or spill-proof spout.”

Rationale for Section 4.2

Subheadings for section 4 are unnecessary as the sections are related and do not provide separate information. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof system or spill-proof spout” will be changed to “portable fuel container system.”

Summary of Section 4.3

The 4.3 heading was deleted. “Cal. Code Regs.” was used instead of “CCR.” The time extension was elaborated by stating that it may be extended “upon mutual agreement between the Executive Officer and applicant, as deemed reasonable.”

Rationale for Section 4.3

Subheadings for section 4 are unnecessary as the sections are related and do not provide separate information. “Cal. Code Regs.” was used to provide consistency with other ARB documents. The time extension language was elaborated upon to provide clarity and to describe the process.

Summary of Section 4.4

The 4.4 heading was deleted. “Their” was clarified by stating “the applicant’s” and “representative” replaced “delegate.”

Rationale for Section 4.4

Subheadings for section 4 are unnecessary as the sections are related and do not provide separate information. “The applicant’s” was used to avoid ambiguity and “representative” was chosen as a more appropriate term.

Section 5. Engineering Evaluation

Summary of Section 5

“Portable fuel container system” replaced “spill-proof system or spill-proof spout.”

Rationale for Section 5

The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof system or spill-proof spout” will be changed to “portable fuel container system.”

Summary of Section 5.1

The 5.1 heading was deleted. “Portable fuel container system” replaced “spill-proof system or spill-proof spout.” “The” was added before “reason(s) for denial.” “An application for certification” was rearranged to be preceding “portable fuel container system,” instead of following it.

Rationale for Section 5.1

Subheadings for section 5 are unnecessary as the sections are related and do not provide separate information. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof system or spill-proof spout” will be changed to “portable fuel container system.” “The” was added and a sentence was rearranged to improve readability.

Summary of Section 5.2

Section 5.2 was deleted.

Rationale for Section 5.2

Section 5.2 is unnecessary because it repeats language from section 5 and it provides no new information. The first part of section 5 states that each application will be evaluated.

Summary of Section 5.3

The 5.3 heading was deleted. “Results” was deleted from “test results.” “Procedure” was made lowercase.

Rationale for Section 5.3

Subheadings for section 5 are unnecessary as the sections are related and do not provide separate information. “Results of” was already stated prior to test, so it is redundant and confusing to restate “results.” Capitalization changes were made for consistency with other ARB documents.

Section 6. Alternate Test and Inspection Procedures

Summary of Section 6

“Alternative test procedures” was used instead of “alternate test procedures.” “The” was added. “Reproducibility” was deleted from the requirements of a procedure. “For the purposes of this procedure” preceding the definition of a test procedure was deleted.

Rationale for Section 6

“Alternative” was used to provide consistency with other ARB procedures, as “alternative test procedure” is used rather than “alternate test procedure.” “The” was added for enhanced readability. “Reproducibility” was deleted from the requirements of a procedure because it is redundant since accuracy and precision are also stated. The definition of a test procedure is generally applicable, not just “for the purposes of this procedure.”

Summary of Section 6.1

The 6.1 heading was deleted.

Rationale for Section 6.1

Subheadings for section 6 are unnecessary as the sections are related and do not provide separate information.

Summary of Section 6.2

The 6.2 heading was deleted. “Indicating” was used instead of “and indicate that.”

Rationale for Section 6.2

Subheadings for section 6 are unnecessary as the sections are related and do not provide separate information. Grammatical changes were made for increased readability.

Summary of Section 6.3

The 6.3 heading was deleted. The spelling of “judgement” was changed and the reference to “40 C.F.R. Part 59 Subpart F was added.”

Rationale for Section 6.3

Subheadings for section 6 are unnecessary as the sections are related and do not provide separate information. The more common spelling of “judgment” was used and the reference to the federal test procedure was stated.

Summary of Section 6.4

The 6.4 heading was deleted. “As it existed July 26, 2006” was deleted. “Alternative test procedures” was used instead of “alternate test procedures.”

Rationale for Section 6.4

Subheadings for section 6 are unnecessary as the sections are related and do not provide separate information. The qualifying date was deleted to allow for future revisions to the reference. “Alternative” was used to provide consistency, as “alternative test procedure” is used rather than “alternate test procedure.”

Summary of Section 6.5

The 6.5 heading was deleted. “Alternative test procedures” was used instead of “alternate test procedures.” A comma was added.

Rationale for Section 6.5

Subheadings for section 6 are unnecessary as the sections are related and do not provide separate information. “Alternative” was used to provide consistency, as “alternative test procedure” is used rather than “alternate test procedure.” Punctuation changes were made to improve readability.

Section 7. Duration and Conditions of Certification

Summary of Section 7

Section 7 was added to establish the duration and conditions of certification executive orders.

Rationale for Section 7

Requiring renewal of PFC certification executive orders after four years will enable ARB to evaluate the performance of a PFC over the duration of its certification, and make determinations regarding renewal based on ARB and/or manufacturer supplied data. This process also provides ARB with a mechanism through which deficiencies can be corrected by withholding certification until information is provided demonstrating compliance with PFC performance standards.

Summary of Section 7.1

Section 7.1 limits executive order certification to four years.

Rationale for Section 7.1

Four year certification was proposed by staff after considering terms ranging from 30 months to 5 years, and is consist with ARB vapor recovery system certificaitions.

Summary of Section 7.2

This section allows for the revocation of an executive order.

Rationale for Section 7.2

If a PFC is determined to not be achieving the performance standards and specifications in CP-501, the executive order may be revoked.

Section 8 Certification Renewal

Summary of Section 8

The renewal process includes: a request for renewal, review of the renewal request, evaluation of deficiencies, letter of intent, and executive order renewal.

Rationale for Section 8

This section was added to notify applicants of the process required to renew certification.

Summary of Section 8.1

Section 8.1 lists the requirements that are included in a request for renewal.

Rationale for Section 8.1

In order to renew certification, an applicant must provide evidence that their product remains compliant with the certification procedure by including all required sections in the request for renewal.

Summary of Section 8.2

Section 8.2 explains that the Executive Officer shall review the request for renewal and will determine whether additional testing is required.

Rationale for Section 8.2

The Executive Officer has the authority to determine whether the information provided is sufficient to renew certification without additional testing. If the request for renewal is not sufficient, then certification testing shall be required for renewal.

Summary of Section 8.3

Section 8.3 allows the Executive Officer to solicit additional information regarding deficiencies and if any are noted, an evaluation of the deficiencies shall be conducted.

Rationale for Section 8.3

In order for an executive order to be renewed, the applicant must establish that deficiencies have been addressed.

Summary of Section 8.4

Section 8.4 describes the letter of intent, which is issued to either renew the executive order or to allow the executive order to expire.

Rationale for Section 8.4

The purpose of the letter of intent is to notify the manufacturer, prior to the notification date, whether or not the executive order will be renewed.

Summary of Section 8.5

Section 8.5 explains that executive orders are valid for four years and provides a timeline estimate for the renewal process.

Rationale for Section 8.5

This section notifies applicants of the expected timeline associated with executive order renewal.

Summary of Section 8.6

Section 8.6 explains the conditions for the denial of executive order renewal.

Rationale for Section 8.6

Executive order renewals will be denied if the performance standards and/or specifications enumerated in CP-501 are not met.

Section 9. References

Summary of Section 9

A reference section was added.

Rationale for Section 9

The Certification Procedure includes documents that are incorporated by reference, so those references were added to the reference section.

TP-501

Summary of TP-501 Introductory Paragraph

“Section” and “title” were made lowercase, “Article 6, Chapter 9” was deleted, “CCR” was deleted, and “applies” was changed to “apply.”

Rationale for TP-501 Introductory Paragraph

“Section” and “title” were made lowercase to provide consistency with other ARB procedures. Article 6, Chapter 9 was deleted to provide consistency with the references in other ARB documents. The California Code of Regulations is being referred to as Cal. Code Regs. rather than CCR, so the CCR reference was deleted.

Section 1. Applicability

Summary of Section 1

“Portable fuel container(PFC) systems” replaced “spill-proof systems or spill-proof spouts” and “portable fuel container systems or their components” replaced “portable fuel containers, spouts or both portable fuel containers and spouts.” “As required by

ARB Certification Procedure “CP-501, *Certification Procedure for Portable Fuel Container Systems*” and an Oxford comma were added.

Rationale for Section 1

The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof system or spill-proof spout” will be changed to “portable fuel container system.” “Portable fuel container systems,” by definition, include components including the spout. Unless the section is referencing the separate sale of spouts, there is no reason to state the spout separately from the container, so the phrase “portable fuel container system or their components” will be used. Reference to the Certification Procedure was added for consistency with TP-502. Oxford commas are preferred by the *Air Resources Board Correspondence and Reference Guide*.

Summary of Section 1.1 Requirement to Comply with All Other Applicable Codes and Regulations

Section 1.1 was added.

Rationale for Section 1.1 Requirement to Comply with All Other Applicable Codes and Regulations

This section was added for consistency with ARB Test Procedure TP-502.

Summary of Section 1.2 Safety

Section 1.2 discussing safety precautions involved with hazardous materials was added.

Rationale for Section 1.2 Safety

This section was added because gasoline will now be used in the procedure.

Section 2. Principle and Summary of Test Procedure

Summary of Section 2

The spelling of “principle” was changed in the title. Reference to a “spill-proof spout when installed” on a portable fuel container system was deleted. “Portable fuel container system” was stated instead of “spill-proof system” and “spill-proof” preceding spout was deleted. Instead of stating “the spill-proof spout is allowed to close,” “the automatic closure is actuated” is used. “This feature” replaced “the automatic closure

feature.” Language and a comma were added for increased readability. The S.I. unit of pressure (kPa) was used in addition to psig, which was put in parentheses.

Rationale for Section 2

The correct spelling of “principle” was used. Previous language specified that the spout was leak free, but the entire system must be leak free, so the reference to the spout was deleted. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof system or spill-proof spout” will be changed to “portable fuel container system.”

Section 3. Biases and Interferences

Summary of Section 3

Section 3 was deleted.

Rationale for Section 3

Section 3 currently states “This section is reserved for future specifications,” and has no other content. There is still no content, and therefore, the section serves no purpose and will be deleted.

Section 4. Sensitivity, Range, and Precision

Summary of Section 4

Section 4 was deleted.

Rationale for Section 4

Section 4 currently states “This section is reserved for future specifications,” and has no other content. There is still no content, and therefore, the section serves no purpose and will be deleted.

Section 5. Equipment

Summary of Section 5

The section number format was changed from 5.1 to 3 (a). Reference to the test fixture was changed from Figure 2 to Figure 1. Pressure units were presented in kPa and the pressure gauge adapter and container pressurization assembly was changed from Figure 3 to Figure 2. Sections (d) and (e) were added.

Rationale for Section 5

The section number change was made because sections 3 and 4 were deleted. The test fixture figure was the first figure referenced, so it was changed to Figure 1. The SI units were added for consistency with U.S. EPA and the pressure gauge adapter and container pressurization assembly was the second figure referenced and was changed to Figure 2. Section (d) added an ultraviolet light source as optional equipment for the added UV exposure test. Section (e) added certification fuel required for the slosh test.

Section 6. Calibration Procedure

Summary of Section 6

Section 6 was changed to section 4. “This section is reserved for future specifications” was deleted. The calibration of the pressure gauge was added.

Rationale for Section 6

The section number change was made because sections 3 and 4 were deleted. The pressure gauge used to measure the pressure in the containers shall be calibrated according to the manufacturer’s recommended procedure and schedule. The new language replaced the “reserved for future specifications statement.”

Section 7. Test Procedure

Summary of Section 7.1

Section 7.1 was changed to section 5.1. Language was added, instructing the portable fuel container to be filled to its capacity with water and the spout to be attached. This statement replaced the section instructing what to do if spill-proof spouts are not part of a spill-proof system. The assembly was changed from being called a “spill-proof system” to a “portable fuel container system.”

Rationale for Section 7.1

The section number change was made because sections 3 and 4 were deleted. Portable fuel container systems include the spout, and must be certified with its associated spout. Special cases can be approved by the Executive Officer. The existing language for spouts that are not part of a system is therefore unnecessary and will be deleted. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof system or spill-proof spout” will be changed to “portable fuel container system.”

Summary of Section 7.2

Section 7.2 was changed to section 5.2. The title of the section was changed to “Initial Leak Check.” “Spill-proof system” was changed to “portable fuel container system.” The portable fuel container was instructed to be inverted “with the spout pointing down in a vertical axial position.” Any leaks during this leak check were clarified as a failure. The field data sheet was changed to Figure 3.

Rationale for Section 7.2

The section number change was made because sections 3 and 4 were deleted. “Initial Leak Check” is a more representative title, as passing the section without leaks does not guarantee that the system is verified as “leak free.” The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” References to “spill-proof system or spill-proof spout” will be changed to “portable fuel container system.” Confusion as to whether the spout or container was inverted was removed by clarifying that the “spout [is] pointing down in a vertical axial position.” A statement clarifying that any leaks constitute a failure notifies testers that the container has failed. The field data sheet was the third figure referenced and was changed to Figure 3.

Summary of Section 7.3

Section 7.3 was changed to section 5.3. The title of the section was changed to “Automatic Closure Test.” The test fixture pre-fill volume equation was changed from “0.25 multiplied by (5.0 gallons–minus the container’s rated capacity)” to “Volume of Test Fixture – (0.25 × Capacity of PFC)” for PFC less than or equal to 5 gallons and “0” for PFC greater than 5 gallons. “Remove the spout from the test fixture and allow the spout to close” replaced “engage the automatic closure fixture.” The sentences “the spout must return to the closed position without the operator pushing or pulling the spout closed” and “if at any point the spout fails to return to the closed position, the container fails the test” were added. A comma was added.

Rationale for Section 7.3

The section number change was made because sections 3 and 4 were deleted. “Automatic Closure Test” is more consistent with the titles of the other section in section 5. The existing test fixture pre-fill volume equation does not work as intended for containers less than two gallons or greater than 5 gallons. The procedure requires the test fixture to be filled three times without refilling the fuel container, which is not possible for containers less than two gallons. Containers greater than five gallons result in a negative prefill volume. The new proposed equations solve both of these issues. The “engag[ing] of the automatic closure feature” was clarified by explaining what the

operator should do to engage this feature. A statement clarifying that the spout must return to the closed position without user interaction and that failure to do so constitutes a failure notifies testers that the container has failed. The comma improved sentence readability.

Summary of Section 7.4

Section 7.4 was changed to section 5.4. The title was changed to “Pressurized Leak Test.” The section instructing the removal of the spout for modifications was replaced with language instructing the application of pressure through the spout. Language was inserted that allows for alternative pressurization methods upon approval from the Executive Officer. Any leaks were clarified as a failure.

Rationale for Section 7.4

The numbering change was made because sections 3 and 4 were deleted. The title change is more consistent with the other titles in section 5. New requirements are to use the same six containers tested for durability in TP-501 in TP-502. Therefore, modifications to the containers to install pressure fittings should not be made, since it would impact diurnal emissions results. Instead, the procedure instructs the pressurization through the spout. If the spout is not intended to be used to apply pressure, alternatives will be allowed as long as approved by the Executive Officer. Any leaks during this test result in a failure, which was clarified.

Summary of Section 7.5

Section 5.5 was added.

Rationale for Section 7.5

The pressure cycling test is required for certification with U.S. EPA and will be added to ARB’s certification requirements for harmonization.

Summary of Section 7.6

Section 5.6 was added.

Rationale for Section 7.6

The UV exposure test is required for certification with U.S. EPA and will be added to ARB’s certification requirements for harmonization.

Summary of Section 7.7

Section 5.7 was added.

Rationale for Section 7.7

The slosh test is required for certification with U.S. EPA and will be added to ARB's certification requirements for harmonization.

Section 8. Quality Assurance / Quality Control (QA/QC)

Summary of Section 8

Section 8 was deleted.

Rationale for Section 8

Section 8 currently states "This section is reserved for future specifications," and has no other content. There is still no content, and therefore, the section serves no purpose and will be deleted.

Section 9. Recording Data

Summary of Section 9

Section 9 was changed to section 6. The title was changed to "Recording and Reporting Data." Reference to the data sheet figure was changed to Figure 3. Statements requiring the submittal of any supporting documentation and requiring the maintenance of records for at least five years were added.

Rationale for Section 9

The section number change was made because sections 3, 4, and 8 were deleted. Reporting requirements were added, so it was added to the title. The field data sheet was changed to Figure 3, since it was the third figure referenced. Data forms, field notes, and other supporting documentation will be maintained for at least five years and made available to ARB to establish a record and increase reporting requirements to improve compliance.

Section 10. Calculating Results

Summary of Section 10

Section 10 was deleted.

Rationale for Section 10

Section 10 currently states "This section is reserved for future specifications," and has no other content. There is still no content, and therefore, the section serves no purpose and will be deleted.

Section 11. Alternative Test Procedures

Summary of Section 11

Section 11 was changed to section 7. Reference to section 6 of CP-501 was added. “Herein” replaced “above.” Statements stating that approval is granted on a case by case basis and that documentation shall be made available upon request were deleted.

Rationale for Section 11

The section number was changed because sections 3, 4, 8, and 10 were deleted. Reference to section 6 of CP-501 was added to allow readers to see alternative test procedure language. The statement stating that approval is granted on a case by case basis is stated in section 6 of CP-501 and the requirement of documentation being made available was added to section 6 of TP-501.

Section 12. References

Summary of Section 12

Section 12 was changed to section 8. References to “Title 40, Code of Federal Regulations Part 59, Subpart F,” “Title 40, Code of Federal Regulations Part 1065,” “CP-501, Certification Procedure 501 for Portable Fuel Container Systems,” and Part II, section A.100.3.1.2 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” were added.

Rationale for Section 12

The section number was changed because sections 3, 4, 8, and 10 were deleted. The listed references were used in the amendment of the procedure.

Section 13. Figures

Summary of Section 13

Section 13 was changed to section 9. Figure 1 was changed to the Test Fixture, Figure 2 was changed to the Elevated Pressure Test Setup, and Figure 3 was changed to the Field Data Sheet. Figure 2 was edited to show a set up for applying pressure through the spout. Figure 3 was edited to add tables for the Pressure Cycling Test, UV Exposure Test, and Slosh Test. The titles of Initial Leak Test and Automatic Closure Test were updated.

Rationale for Section 13

The section number was changed because sections 3, 4, 8, and 10 were deleted. The figure numbers changed to be in the order they were referenced in the procedure.

TP-502

Summary of TP-502 Introductory Paragraph

“Section” and “title” were made lowercase, “Article 6, Chapter 9” was deleted, “CCR” was deleted, and “applies” was changed to “apply.”

Rationale for TP-502 Introductory Paragraph

“Section” and “title” were made lowercase to provide consistency with other ARB procedures. Article 6, Chapter 9 was deleted to provide consistency with the references in other ARB documents. The California Code of Regulations is being referred to as Cal. Code Regs. rather than CCR, so the CCR reference was deleted.

Section 1. Applicability

Summary of Section 1

“Portable fuel containers” was changed in one case to “portable fuel container systems” and in another case to “portable fuel container systems and their components.” “Defined in” was changed to “required by.” “Subject to the maximum allowable diurnal emission standard for portable fuel containers that are” was deleted, “that” and “the” were deleted, and an Oxford comma was added.

Rationale for Section 1

The “portable fuel container system” phrase will be used when referring to the system, to differentiate from when referring to the container alone. “Components” are listed separately when discussing the sale of portable fuel containers or their components, since, even though they must be certified as a package, they can be sold separately. The test procedure is required by Certification Procedure 501, so “required by” is a more accurate statement than “defined in.” The existing language states that the procedure is applicable to portable fuel containers that are “subject to the maximum allowable diurnal emission standard,” but it is applicable to all portable fuel containers. “The” preceding ARB is unnecessary as it is an acronym and “that” was deleted for sentence consistency. Oxford commas are preferred by the *Air Resources Board Correspondence and Reference Guide*.

Summary of Section 1.1 Requirement to Comply with All Other Applicable Codes and Regulations

“Portable fuel container system” was used instead of “portable fuel container” and “container.” “Or” was deleted and an Oxford comma was added.

Rationale for Section 1.1 Requirement to Comply with All Other Applicable Codes and Regulations

The “portable fuel container system” phrase will be used when referring to the system, to differentiate from when referring to the container alone. The entire system is required to comply with this section. “Or” was deleted to improve sentence readability and Oxford commas are preferred by the *Air Resources Board Correspondence and Reference Guide*.

Summary of Section 1.2 Safety

“Operations” was deleted from “flammable materials and operations.”

Rationale for Section 1.2 Safety

There are no flammable operations in this test procedure.

Section 2. Principle and Summary of Test Procedure

Summary of Section 2

“Spill-proof” preceding spout was deleted. Instead of stating “demonstrate permeation rate equilibrium,” “maximize permeation rate” was stated. “Minimum” was added before “three-day diurnal test.” “Test” was added to “certification test fuel” and the reference to the fuel specification in “Section 5.7” was changed to “section 5 (g).”

The definition of equilibrium was deleted. “Preconditioning is accomplished by ...” was stated instead of “During preconditioning, equilibrium can be demonstrated by ...” The sentence explaining the elevated temperature soak using a 95% correlation coefficient was deleted. The preconditioning soak was clarified to be at ambient conditions, and alternative soaks would be allowed at 28 ± 5 °C (82.4 ± 9 °F) for 140 days or at 43 ± 5 °C (109.4 ± 9 °F) for 70 days. “After preconditioning” was used instead of “once equilibrium is demonstrated,” “a minimum of three 24-hour diurnal cycles,” and “Moisture” was replaced with “the effects, if any, of humidity.” An Oxford comma was added, “reference container” replaced “trip blank,” and “corrected mass” replaced “weight.”

Rationale for Section 2

The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” Therefore, there is no need to classify a spout as “spill-proof.” The purpose of preconditioning is to maximize permeation; therefore, it is more accurate to claim that the preconditioning “maximizes permeation rate.” Rather than restricting the number of diurnal tests performed to three, “minimum” was added, to allow for a larger sample size if desired. “Test” was added to “certification test fuel” to specify that the fuel will be used for the diurnal test. Section 5.7 is being changed to section 5 (g), so the reference to the section is being changed to reflect it.

“Maximizing permeation” is being used instead of “demonstrating equilibrium,” so there is no reason to define equilibrium or explain how it is demonstrated. The elevated temperature soak using a correlation coefficient is being removed, so the language explaining it is also being deleted. Instead, the preconditioning soak was clarified to be at ambient conditions, and alternative soaks would be allowed at 28 ± 5 °C (82.4 ± 9 °F) for 140 days or at 43 ± 5 °C (109.4 ± 9 °F) for 70 days. Since “equilibrium demonstration” is no longer being used, “preconditioning” will replace references to “equilibrium.” “Minimum” was added to allow for a sample size larger than three. “Moisture” was clarified with a more specific statement of “the effects, if any, of humidity.” Oxford commas are preferred by the *Air Resources Board Correspondence and Reference Guide*, “trip blank” is being redefined as “reference container” so all references will be changed as well, and “corrected mass” is more appropriate than “weight” when referring to the corrected mass loss due to diurnal emissions.

Section 3. Biases and Interferences

Summary of Section 3.1

Section 3.1 deleted.

Rationale for Section 3.1

Section 3.1 explained that fuels containing ethanol may bias results. Oxygenated fuel is now required for certification testing, so this is no longer a bias or interference.

Summary of Section 3.2

Section 3.2 was changed to section 3 (a). “Moisture” was changed to “humidity” and “trip blank” was changed to “reference container.” “Buoyancy effects and varying” was added before “atmospheric conditions.”

Rationale for Section 3.2

The section lettering change was made because section 3.1 was deleted and to harmonize with the required section numbering and lettering for the regulation order. The recording of the relative humidity is required, so “humidity” was used instead of “moisture” to harmonize the terms. “Trip blank” is being redefined as “reference container” so all references to “trip blank” will be changed to “reference container.” The reference container will be filled with inert material, so it will also correct for buoyancy effects and “varying” was added to explain that correction must be made when atmospheric conditions change.

Summary of Section 3.3

Section 3.3 was changed to section 3 (b). “Reference container” was used instead of “trip blank” and “mass” was used instead of “weight.” A requirement to store the reference container separately from the fuel-filled containers was added. Language was changed to “Purge the temperature enclosure used for preconditioning at regular intervals.”

Rationale for Section 3.3

The section lettering change was made because section 3.1 was deleted and to harmonize with the required section numbering and lettering for the regulation order. “Trip blank” is being redefined as “reference container” so all references to “trip blank” will be changed to “reference container.” The reactive organic gas (ROG) emissions are measured as mass rather than weight. The reference container must be stored away from any fuel or fuel vapors to ensure that it remains unbiased in the source of its mass loss during diurnal testing. The temperature enclosure was specified as the one “used for preconditioning,” as it is the one that applies to this section. “Intervals” replaced “frequencies” to improve sentence readability.

Summary of Section 3.4

Section 3.4 was changed to section 3 (c). “Spill-proof” preceding spout was deleted.

Rationale for Section 3.4

The section lettering change was made because section 3.1 was deleted and to harmonize with the required section numbering and lettering for the regulation order. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” Therefore, there is no need to classify a spout as “spill-proof.”

Summary of Section 3.5

Section 3.5 was deleted.

Rationale for Section 3.5

Section 3.5 covered the calibration of the balance. Section 6 is the Calibration Procedure, so the content from section 3.5 was moved to section 6.

Summary of Section 3.6

Section 3.6 was changed to section 3 (d). Details about the effects of static charges were replaced with methods of eliminating static electricity.

Rationale for Section 3.6

The section lettering change was made because sections 3.1 and 3.5 were deleted and to harmonize with the required section numbering and lettering for the regulation order. Examples of methods to eliminate static electricity provide greater detail than the existing description.

Section 4. Sensitivity, Range, and Precision

Summary of Section 4

The maximum mass was changed from 26,000 to 17,500 grams. "Weight" was changed to "mass." The upper limit requirements of the balance were changed from "not less than 2,000 grams greater than the weight of the largest filled container" to "120% of the mass of the filled container for which it is being used." The 0.1 gram minimum readability and 0.2 gram reproducibility requirements were deleted from this section. The following requirements were added:

For mass measurements more than 6,200 grams, the minimum sensitivity of the balance must be 0.1 grams. For mass measurement less than or equal to 6,200 grams, the minimum sensitivity of the balance must be 0.01 grams.

Rationale for Section 4

The highest expected mass of a fuel-filled portable fuel container is less than 26,000 grams, so the upper limit was reduced to ten times the lower limit, or 17,500 grams. The reactive organic gas (ROG) emissions are measured as mass rather than weight. Since masses theoretically vary from 1,750 to 17,500 grams, 120% of the mass of the container was used instead of 2,000 grams more than the mass of the container, since 2,000 grams is a much higher percentage of the 1,750 gram container's mass than of the 17,500 gram container's mass. The minimum readability was separated into

different capacity balances in the next sentence and the reproducibility of the balances is covered in section 9 (g). The different sensitivity balances add accuracy and consistency with other ARB procedures.

Section 5. Equipment

Summary of Section 5.1

Section 5.1 was changed to section 5 (a). The balance requirement was made plural by requiring “one or more top loading balances that meet the requirements...”

Rationale for Section 5.1

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. Depending on the masses of the containers, different balances may be used, so the equipment required must meet that requirement.

Summary of Section 5.2

Section 5.2 was changed to section 5 (b). “Traceable” was added following “NIST.” “Section 3.5” was changed to “section 6 (b).”

Rationale for Section 5.2

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. “Traceable” was added to “NIST” to establish a record of documentation and to maintain accuracy. Section 3.5 is being changed to section 6 (b), so the reference to the section is being changed to reflect it.

Summary of Section 5.3

Section 5.3 was changed to section 5 (c). The temperatures were also presented in degrees Celsius and “+/-” was replaced with “with a tolerance of.”

Rationale for Section 5.3

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. Degrees Celsius are being used for consistency with U.S. EPA. “+/-” was replaced with “with a tolerance of” to be more specific.

Summary of Section 5.4

Section 5.4 was changed to section 5 (d). “Sensitivity of” was changed to “accurately to within” and the temperatures were also presented in degrees Celsius.

Rationale for Section 5.4

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. “Accurately to within” was used instead of “sensitivity of” as the preferred word choice. Degrees Celsius are being used for consistency with U.S. EPA.

Summary of Section 5.5

Section 5.5 was changed to section 5 (e). The “+/-” symbol was changed to “±” and pressure units were also presented in pascals.

Rationale for Section 5.5

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. “±” was used instead of “+/-” because it is a more concise notation. Pascal was used to provide the SI unit of pressure.

Summary of Section 5.6

Section 5.6 was changed to section 5 (f). The “+/-” symbol was changed to “±.”

Rationale for Section 5.6

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. “±” was used instead of “+/-” because it is a more concise notation.

Summary of Section 5.7

Section 5.7 was changed to section 5 (g). Reference to the 2001 model year fuel reference was changed to “part II, section A.100.3.1.2 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”.” Fuel specified in 40 C.F.R. Part 1065.710 was also added and “is” was made plural to “are.”

Rationale for Section 5.7

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The certification fuel used for diurnal testing is being updated to contain 10 percent ethanol, which the updated reference specifies. U.S. EPA certification fuel is also being accepted for diurnal testing, so the

reference to the fuel was added as well. Since multiple fuels are being accepted, “is” was changed to “are.”

Section 6. Calibration Procedure

Summary of Section 6.1

Section 6.1 was changed to section 6 (a).

Rationale for Section 6.1

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order.

Summary of Section 6.2

Section 6.2 was changed to section 6 (b). The balance was required to be calibrated by an independent agency, annually. “The accuracy of the balance” was specified to be checked, using “NIST-traceable mass standards.” “Approximately” was added before the percentages of the “container’s expected test weight.” A statement concerning repeatability was added. A statement was added, requiring NIST-traceable mass standards to be calibrated annually.

Rationale for Section 6.2

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The calibration will be checked annually rather than every six months to harmonize with other ARB test procedures. The “accuracy” of the balance was specified to be checked, rather than the balance itself. “Traceable” was added to “NIST” to establish a record of documentation and to maintain accuracy. The masses used to calibrate the balance are to be checked at “approximately 80%, 100% and 120% of the expected mass of the containers tested” since the exact amount cannot be determined prior to measuring the mass of the containers. In order to maintain accuracy of the balance, re-calibration shall be conducted or a different balance shall be used if readability drifts more than ± 0.1 gram for a balance with 0.1 gram sensitivity or more than ± 0.02 grams for a balance with 0.01 gram sensitivity between initial and final measurements. The mass standards are being proposed to be calibrated annually, to maintain balance accuracy.

Section 7. Durability Demonstration

Summary of Section 7

“At” was deleted before “conclusion.” “Section” was made lowercase. The durability demonstration time period was changed from two weeks to ten days. “Test” was replaced with “durability demonstration” and an Oxford comma was added.

Rationale for Section 7

Word choice edits were made to improve sentence readability. The durability demonstration time period was changed from two weeks to ten days to provide consistency with U.S. EPA. “Durability demonstration” was used to be more specific than stating “test.” Oxford commas are preferred by the *Air Resources Board Correspondence and Reference Guide*.

Summary of Section 7.1

Section 7.1 was changed to section 7 (a). The parentheses around the “s” in “container(s)” were deleted.

Rationale for Section 7.1

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. Each container must be identified, so “containers” is plural and not conditionally plural.

Summary of Section 7.2

Section 7.2 was changed to section 7 (b). “The” was changed to “each” and the +/- 1% allowance was deleted. “Spill-proof” preceding spout was deleted. “Spout” was made plural and the installation of the spouts was specified to be “per the manufacturer’s instructions. The temperature at which the spouts are installed will be recorded.

Rationale for Section 7.2

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. Each container is filled with fuel, so “the” was changed to “each.” Since containers will be filled to nominal capacity, there is no longer a need for the +/- 1% allowance. The “spill-proof” phrase is misleading because testing is conducted to ensure that the system is “leak-proof,” but spillage is not addressed in the certification of a “spill-proof system.” Therefore, there is no need to classify a spout as “spill-proof.” The spout shall be installed per the manufacturer’s instructions, to insure that it is correctly installed. The temperature is recorded to keep

a record of the temperatures experienced by the fuel containers for possible use in future troubleshooting or corrective action.

Summary of Section 7.3

Section 7.3 was changed to section 7 (c). The statement instructing the spout to be installed was deleted. "Portable fuel container systems" replaced spout. The temperature increase was also presented in degrees Celsius. "Containers" was made plural and "any" replaced "the."

A section was added instructing what to do if a container does not expand after being exposed to elevated temperature.

"After removing a portable fuel container system from the elevated temperature environment" was added before "submerge[ing] it in a water bath..." "Fourth" was corrected to "forth" and "denotes" was changed to "denote."

An Oxford comma was added.

Rationale for Section 7.3

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The spouts were installed in section (b), so it was deleted from section (c). Degrees Celsius are being used for consistency with U.S. EPA. The section applies to all test containers, so the language was made plural.

Existing language explained that if a container did not expand, there may be a leak, but did not instruct what to do if there was a leak. The new language provides a pathway to allow the containers to return to the starting temperature, remove and reinstall the spout, and then repeat the elevated temperature period.

A transition was added to account for the new language. "Forth" was corrected. "Denote" applies to bubbles, so it was changed from "denotes."

Oxford commas are preferred by the *Air Resources Board Correspondence and Reference Guide*.

Summary of Section 7 (d)

Section 7 (d) was added to instruct the user to actuate the spout to relieve pressure prior to performing inversions and actuations.

Rationale for Section 7 (d)

This section was added to avoid potential leaks due to actuations following the inversion of pressurized containers. It also provides a safety measure of taking care to point the spout away from the user.

Summary of Section 7 (e)

Section 7 (e) was added, which instructs the user to fill each container to nominal capacity.

Rationale for Section 7 (e)

Containers will precondition at nominal capacity rather than 50 percent capacity to maximize the wetted surface area in each container during preconditioning and to harmonize with U.S. EPA.

Summary of Section 7.4

Section 7.4 was changed to section 7 (f). "Container" was expanded to "portable fuel container system" and it was specified to be kept inverted for the five second time period. "Container" was also changed to "system," the reporting of a leak was clarified as a failure, and the flat surface was clarified as "horizontal."

Rationale for Section 7.4

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The entire system must be inverted and checked for leaks, so "container" was expanded to "portable fuel container system" in one instance and "system" in another. The system must stay inverted for the five second period, so it was clarified to "keep it inverted." Any leaks during this process results in a failure of the test, so it was clarified that the leak is reported as a failure. "Horizontal" was added to ensure that the flat surface was not inverted.

Summary of Section 7.5

Section 7.5 was changed to section 7 (g). "With the portable fuel container system in the upright position" was added to the beginning of the section. Language was added to allow differently configured containers to be actuated without dispensing fuel. "e.g." was used instead of "i.e." and "etc." was deleted. The apostrophe from "actuation's" was deleted. A pressure relief valve actuation step was added. The statement "if at any point the spout or valve fails to return to the closed position, the container fails the test" was added.

Rationale for Section 7.5

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The previous section specified that the system is inverted, so a statement was added to this section that the fuel container system shall be upright. Alternative portable fuel container designs may not be able to be actuated without dispensing fuel while upright, so they will be allowed to be rotated so that the spout does not dispense fuel. The text in the parentheses provides examples, not further explanation, so “e.g.” was used rather than “i.e.” Since the text in the example was presented as examples, “etc.” is unnecessary. “Actuations” is not possessive, so the apostrophe was deleted. The purpose of this step is to demonstrate durability for the container, so any valve on the container shall demonstrate durability as well. Any failure during this process is a failure of the test, so a clarifying statement was added.

Summary of Section 7.6

Section 7.6 was changed to section 7 (h). “The” was added preceding “steps” and “paragraphs (f) and (g) of this section” replaced “7.4 and 7.5.”

Rationale for Section 7.6

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. Sections 7.4 and 7.5 were changed to 7 (f) and 7 (g), so the reference to the sections was changed as well.

Summary of Section 7.7

Section 7.7 was changed to section 7 (i). The apostrophe from “actuation’s” was deleted. Language was added to remove and replace the refueling cap if the spout is non-removable.

Rationale for Section 7.7

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. “Actuations” is not possessive, so the apostrophe was deleted. The purpose of this step is to simulate filling the container, so if the spout is non-removable, removing and replacing the refueling cap would simulate filling the container.

Summary of Section 7.8

Section 7.8 was changed to section 7 (j). “Repeating” was changed to “repeat the.” Steps “7.4 through 7.7” was replaced with “paragraphs (f), (g), (h), and (i) of this section no more than once per day.” The process is required to be repeated nine more times

instead of four more times, along with two hundred actuations instead of one hundred and ten spout replacements instead of five. The apostrophe from “actuation’s” was deleted and the time period was changed from seven to ten days.

Rationale for Section 7.8

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. “Repeating” was changed to “repeat” to provide consistency with the language from other sections. Sections 7.4 through 7.7 were changed to 7 (f) through 7 (i), so the reference to the sections was changed as well. The statement requiring actuations to be completed “no more than once per day” clarifies that the purpose of the step is to demonstrate durability over time (minimum ten days), and that actuations shall be equally distributed over that minimum ten day period. Existing language in the following sections required the repetition of this step, but there is no difference in the procedure. Instead of stating the steps separately, section 7 (j) requires all 200 actuations. “Actuations” is not possessive, so the apostrophe was deleted. The time period was changed for consistency with U.S. EPA.

Summary of Section 7.9

Section 7.9 was deleted.

Rationale for Section 7.9

Content from section 7.9 was included in section 7 (j), so it was deleted.

Summary of Section 7.10

Section 7.10 was deleted and was replaced with section 7 (k). This section requires the repetition of steps (f), (g), (h), (i), and (j) of this section during the last ten days of the preconditioning period.

Rationale for Section 7.10

Section 7.10 previously stated when the actuation process was repeated at the end of the preconditioning period, which is included in the new language in section 7 (k). The new language simplifies that the steps in 7 (f) through 7 (j) are repeated at least ten days before the conclusion of the preconditioning period.

Summary of Section 7.11

Section 7.11 was changed to section 7 (l). “Cycles” was replaced with “spout actuations and replacements completed.”

Rationale for Section 7.11

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. “Cycles” was specified as “spout actuations and replacements” to be more descriptive as to what “cycles” refers to.

Section 8. Preconditioning

Summary of Section 8

The title of Section 8 was changed to “Preconditioning Fuel Soak.” Section 8 was deleted and was replaced with new language in sections 8 (a), (b), and (c).

Section 8 (a) includes requirements for the preconditioning fuel soak. A preconditioning soak for 140 days at minimum 23°C or for 70 days at 43 ± 5 °C soak will be allowed. The durability steps from section 7 will count as part of the preconditioning fuel soak as long as the container remains fuel-filled to the specified capacity and the temperature stays within the specified range.

Section 8 (b) covers steps following the fuel soak. At the conclusion of the preconditioning fuel soak, the fuel is discarded and the container is immediately refueled to 50 percent capacity. The volume of fuel is to be recorded.

Section 8 (c) instructs testers to install the spout and to leave off all manual closures such as caps.

Rationale for Section 8

“Fuel Soak” was added to the title to explain what the preconditioning process consists of. Existing language provided instructions for the ambient condition soak and elevated temperature soak using a correlation coefficient. The elevated temperature soak using a correlation coefficient does not have a lower or upper limit temperature or timeframe and may not sufficiently demonstrate preconditioning. The U.S. EPA elevated temperature soak of 43 ± 5 °C soak for 70 days will replace the correlation coefficient elevated temperature soak. Existing language was deleted and replaced with the following sections.

Section (a) will continue the previously allowed ambient soak for 140 days and will also adopt U.S. EPA preconditioning soaks at 28 ± 5 °C for 140 days or 43 ± 5 °C for 70 days as alternative soak periods. Since the containers will contain fuel during the preconditioning steps in section 7, the time required to perform those steps will count as part of the preconditioning soak, as long as the container remains fuel-filled to the specified capacity and the temperature stays within the specified range.

Section (b) instructs for the fuel to be discarded and replaced to 50 percent capacity, since containers now precondition at nominal capacity and are tested for diurnal emissions at 50 percent capacity. The volume of fuel is recorded on the data sheet to provide evidence that it is filled to 50 percent capacity.

Section (c) is required to replace the spouts after refilling the containers with fuel. Other manual closures are to be left off to simulate the worst-case storage condition of the portable fuel container systems in use.

Section 9. Diurnal Test with Trip Blank Correction

Summary of Section 9

“Performed after preconditioning” replaced “used.” Emissions were described as “evaporative (permeation and vented).” “Container” was replaced with “portable fuel container system.” Portable fuel container systems were previously subjected to “a minimum of three (3) consecutive diurnal cycles” and will be simplified to “a minimum of three diurnal cycles.” The “specified in Table 9.1” phrase was moved to describe the temperature profile. “The California” was used instead of “California’s” and “after permeation equilibrium has been reached” was deleted.

Rationale for Section 9

“Performed after preconditioning” was used to be more specific than stating “used.” Emissions were described as “evaporative (permeation and vented)” to explain the source of emissions. “Portable fuel container system” was used because the entire system is subjected to the diurnal cycles. Diurnal cycles are not necessary to be conducted consecutively, so “consecutive” was deleted. Table 9.1 describes the temperature profile, not the diurnal cycle itself, so it was moved to describe the temperature profile. Word choice edits were made and permeation equilibrium is not guaranteed to be reached, so the “equilibrium” statement was deleted.

Summary of Section 9.1

Section 9.1 was changed to section 9 (a). “Repeat” was added to the beginning of the section, replacing “shall be repeated,” which followed the description of where the leak check was described in section 7. The leak check will be conducted on “each of the six portable fuel container systems (test containers).” “Section” was made lowercase. A statement was added, describing that the leak check is not necessary for the reference container. “Container” was made plural, “same CERT” and “as used for durability and equilibrium testing” were deleted, and “added in paragraph (b) of section 8” was added.

Rationale for Section 9.1

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. Sentence structure was rearranged to “improve sentence readability. Capitalization changes of “section” were made for consistency with other ARB documents. The leak check was specified to be repeated on all six test containers, since it is a requirement for all test containers. “CERT containers” is being replaced with “test containers” to be more direct as to what the containers are. The leak check is not necessary for the reference container, since it contains inert material and does not build pressure or a vacuum. Paragraph (b) of section 8 was referenced instead of “durability and equilibrium testing” to directly reference the relevant section.

Summary of Section 9.2

Section 9.2 was deleted and was replaced with section 9 (b).

Section 9 (b) describes the preparation of the reference container.

Section 9 (b) (1) instructs testers to obtain a seventh container of the same model as the six other test containers that has not been previously contained fuel.

Section 9 (b) (2) explains that the reference container is filled with sand, glass beads, or other inert material so that the mass of the reference container is approximately equal to the fuel-filled containers.

Section 9 (b) (3) ensures that the sand, glass beads, or inert material is dry.

Section 9 (b) (4) requires the sealing of the reference container with the spout.

Rationale for Section 9.2

Existing language for section 9.2 described the leak check for the reference container, which no longer necessary and will be deleted.

The addition of section (b) is required to prepare the reference container with inert material for diurnal testing. This section establishes that “reference container” will replace the term “trip blank” to harmonize with U.S. EPA.

Section 9 (b) (1) requires a seventh container, which must be the same model as the other six test containers to ensure that it has the same properties and reacts the same way to the diurnal temperature profile. The container must have not previously contained fuel or any other contents that might affect the stability of its mass so that it does not influence the mass loss due to the diurnal test.

Section 9 (b) (2) instructs to fill the reference container with sand, glass beads, or other inert material so that the mass of the reference container is approximately the same as the fuel-filled test containers. This will correct for any buoyancy effects caused by comparing the masses of different density samples. The material must be inert so that it will not interact with the surroundings and introduce bias to the mass measurements.

Section 9 (b) (3) requires the inert material to be dry so that potential evaporation will not affect mass measurements.

Following these steps, section 9 (b) (4) instructs for the spout to be installed to be the same as the test containers.

Summary of Section 9.3

Section 9.3 was changed to section 9 (c). “Trip blank” was changed to “reference container” and “CERT fuel containers” was changed to “test containers.” Language was added to allow the tester to skip this step.

Rationale for Section 9.3

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. “Reference container” will replace the term “trip blank” to harmonize with U.S. EPA. “CERT containers” is being replaced with “test containers” to be more direct as to what the containers are. Section 9.3 instructs for the containers to “remove excess hydrocarbon buildup that may have resulted from preconditioning” by acclimating at “105°F +/- 2°F for a minimum of 24-hours.” This step will be allowed, but not required, since U.S. EPA does not have this requirement.

Summary of Section 9.4

Section 9.4 was deleted.

Rationale for Section 9.4

Section 9.4 explained the cleaning of containers after the previous elevated temperature acclimation. Since the elevated temperature acclimation is being deleted, there is no need to clean the containers.

Summary of Section 9.5

Section 9.5 was changed to section 9 (d). “Trip blank” was changed to “reference container” and “CERT fuel containers” was changed to “test containers.” The acclimation temperature was presented in degrees Celsius. The maximum time period of 36 hours was removed. The phrase “eliminate potential temperature bias that may occur from Section 9.3” was replaced with “stabilize the fuel temperature. Vent the

containers at the conclusion of the stabilization period to relieve any positive or negative pressure that may have developed during stabilization.”

Rationale for Section 9.5

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. “Reference container” will replace the term “trip blank” to harmonize with U.S. EPA. “CERT containers” is being replaced with “test containers” to be more direct as to what the containers are. Degrees Celsius are being used for consistency with U.S. EPA. The test containers must acclimate for a minimum of six hours, but there is no reason for an upper bound timeframe, so the maximum of 36 hours was removed. Section 9.3 is being deleted, so this process stabilizes fuel temperature, rather than “eliminate[s] potential temperature bias that may occur from Section 9.3.” Containers are vented to ensure that they start the diurnal test at atmospheric pressure.

Summary of Section 9.6

Section 9.6 was changed to section 9 (e). The “accuracy of the” balance was specified to be checked and “traceable” was added to “NIST.” “Accuracy” replaced “balance” and “approximately” was added before the percentages. An apostrophe was added to “containers” and “Section 3.5” was changed to “section 6 (b).”

Rationale for Section 9.6

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The “accuracy” of the balance was specified to be checked, rather than the balance itself. “Traceable” was added to “NIST” to establish a record of documentation and to maintain accuracy. The masses used to calibrate the balance are to be checked at “approximately 80%, 100% and 120% of the expected mass of the containers tested” since the exact amount cannot be determined prior to measuring the mass of the containers. “Container’s” is possessive, so an apostrophe was added. The reference was changed to the calibration procedure in section 6 (b).

Summary of Section 9.7

Section 9.7 was changed to section 9 (f). “Mass” replaced “weight.” “Section 9.5” was changed to “section 9 (d)” and the temperatures were presented in degrees Celsius.

Rationale for Section 9.7

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The reactive organic gas (ROG)

emissions are measured as mass rather than weight. Section 9.5 changed to section 9 (d), so the reference to that section changed as well. Degrees Celsius are being used for consistency with U.S. EPA.

Summary of Section 9.8

Section 9.8 was deleted.

Rationale for Section 9.8

Section 9.8 referenced section 3.5, the contents of which were moved to section 6 (b), which specify that the accuracy of the balance shall be checked using NIST-traceable mass standards prior to and following mass measurements. Therefore section 9.8 is redundant and unnecessary.

Summary of Section 9.9

Section 9.9 was changed to section 9 (g).

Rationale for Section 9.9

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order.

Summary of Section 9.10

Section 9.10 was changed to section 9 (h). “Mass” replaced “weight.” An Oxford comma was added. The statement “Repeat until two consecutive weighings are within 0.1 grams for a balance with 0.1 gram sensitivity or within 0.05 grams for a balance with 0.01 gram sensitivity” was added. “Repeat Section 9.8 and Section 9.9” was deleted.

Rationale for Section 9.10

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. The reactive organic gas (ROG) emissions are measured as mass rather than weight. The repeatability statement was added to demonstrate that repeatability is achieved. The diurnal cycles are repeated in the next section, so there is no need to repeat them in this section.

Summary of Section 9.11

Section 9.11 was changed to section 9 (i). “The steps in paragraph (g) and (h) of this section” was stated instead of “Section 9.10.” “A minimum of three” was added, “consecutive” was deleted, and “is” was replaced with “have been.”

Rationale for Section 9.11

The section lettering change was made to harmonize with the required section numbering and lettering for the regulation order. Existing language required the repetition of the weighings in section 9.10, and was changed to repeat the diurnal cycle and weighings in 9 (g) and (h). “A minimum of three” was added to allow for a larger sample size of diurnal cycles. Cycles are not required to be consecutive, so “consecutive” was deleted. “Have been” replaced “is” to provide sentence agreement.

Summary of Section 9.12

Section 9.12 was deleted.

Rationale for Section 9.12

The leak check in section 9.12 is not required because it is unlikely a leak will occur after the previous leak checks. Additionally, if a leak does occur, the results of the diurnal test will reflect the increased emissions from the leak.

Summary of Section 9.13

Section 9.13 was deleted.

Rationale for Section 9.13

Section 9.13 was deleted because its content regarding calculating mass measurements is included in section 10.

Section 10. Calculating Results

Summary of Section 10

“Emission” was added to “diurnal emission rate.” “Individual mass loss” was used rather than “daily weight loss.” “The three diurnal cycles” was replaced with “all diurnal cycles.” The “elevated temperature correlation coefficient (if used)” was deleted. The calculation was specified to be in units of “grams per gallon per day” and “listed” was deleted.

The calculation title was changed to “Calculating the Diurnal Emission Rate.” The equation was changed to:

$$\text{Emission Rate} = \frac{M_{\text{initial}} - M_{\text{final}}}{(\text{nominal capacity}) \times (\text{one day})}$$

Where:

M_{initial} = Initial Test Container Mass – Initial Reference Container Mass (grams)

M_{final} = Final Test Container Mass – Final Reference Container Mass (grams)

The Diurnal Rate Calculation and Elevated Temperature Data Point Correlation were deleted.

Rationale for Section 10

“Emission” was added to “diurnal emission rate” to explain what is being measured. The reactive organic gas (ROG) emissions are measured as mass rather than weight and cycles are not required to be daily, so “individual mass loss” was used instead of “daily weight loss.” “All diurnal cycles” replaced “the three diurnal cycles” to specify that if more than three diurnal cycles were performed, all must be reported. The elevated temperature soak with a correlation coefficient was removed, so the calculation was also removed. The units of the calculation were presented to provide additional information. Edits were made to improve sentence readability.

The title change reflects that the emission rate is being calculated.

The new proposed equation is the equation used for U.S. EPA, and is equivalent to the existing ARB equation, but has fewer steps and is simpler. The diurnal rate was calculated directly and there is no need to calculate the elevated temperature data point correlation, so those equations were removed.

Section 11. Recording Data

Summary of Section 11

The title was changed to “Recording and Reporting Data.” Statements requiring the submittal of any supporting documentation and requiring the maintenance of records for at least five years were added.

Rationale for Section 11

Reporting requirements were added, so it was added to the title. Data forms, field notes, and other supporting documentation will be maintained for at least five years and made available to ARB to establish a record and increase reporting requirements to improve compliance.

Section 12. Quality Assurance / Quality Control

Summary of Section 12

An Oxford comma and other comma were added.

Rationale for Section 12

Oxford commas are preferred by the *Air Resources Board Correspondence and Reference Guide* and the other comma improves sentence structure.

Section 13. Alternative Test Procedures

Summary of Section 13

“Herein” replaced “above.” Reference to section 6 of CP-501 was added. Statements stating that approval is granted on a case by case basis and that documentation shall be made available upon request were deleted.

Rationale for Section 13

“Herein” is the more appropriate term for the included test procedure. Reference to section 6 of CP-501 was added to allow readers to see alternative test procedure language. The statement stating that approval is granted on a case by case basis is stated in section 6 of CP-501 and the requirement of documentation being made available was added to section 6 of TP-501.

Section 14. References

Summary of Section 14

Reference to the 2001 model year fuel was changed to “part II, section A.100.3.1.2 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’.” “Title 40, Code of Federal Regulations Part 59, Subpart F,” “Title 40, Code of Federal Regulations Part 1065,” and “CP-501, Certification Procedure 501 for Portable Fuel Container Systems” were added.

Rationale for Section 14

The reference to certification fuel was updated to the document describing the specifications of the current certification fuel, including the 10 percent ethanol requirement. The other listed references were used in the amendment of the procedure.