

State of California
California Environmental Protection Agency
AIR RESOURCES BOARD

**Addendum to the Final Statement of Reasons for Rulemaking, Including Summary of
Comments and Agency Response, for Stationary Source Test Methods Regulations**

Public Hearing Dates: August 27, 1998
Agenda Item Number: 98-9-3

I. INTRODUCTION

In response to the August 16, 1999 Notice of Disapproval of Regulatory Action, this addendum, and the other documents in the resubmittal filing, supplement the Air Resources Board (the "Board" or "ARB") file for the rulemaking denominated as OAL File No. 99-0702-06. To address the Office of Administrative Law (OAL) comments in the Decision Re Disapproval of Rulemaking Action (Disapproval Decision), August 17, 1999, the ARB clarifies where the ARB's methods conform to the corresponding federal methods and where the ARB's methods differ from the corresponding federal methods. A demonstration of the necessity for the differences between the ARB's methods and the federal methods is provided. Additionally, the ARB clarifies the relationship between the new and the existing provisions in Method 1 for Executive Officer approval. Lastly, the addendum provides a revised summary of the comments received for this rulemaking action and provides responses to the revised summary.

II. SUPPLEMENTAL STATEMENT OF REASONS

Method 1

Section 1.2

Section 1.2, as amended, contains three paragraphs. The first paragraph has not been changed. The second paragraph is amended to name the Executive Officer as the approval authority for variants. Under the United States Environmental Protection Agency (the "EPA") Method 1, the authority for approval of variants is vested in the control agency's authorized representative. In ARB's Method 1, the change from the "Control Agency's authorized representative" to the "Executive Officer" makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB's method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words "Control Agency's authorized representative" appear.

Note that the word "variant" in the second paragraph is used by EPA and ARB to refer to a variant facility or installation. Variant facilities or installations are facilities or installations that are not constructed to allow selection of sampling points conforming to the requirements of Method

1. The approval of variants has commonly been contingent on addition of permanent or temporary modifications to a facility that make possible the selection of testing locations consistent with Method 1 requirements (in other words, stack extensions or other modifications). These “variants” are unrelated to “any modification of the method beyond those expressly permitted,” addressed in the third paragraph.

The third paragraph adds a definition for Executive Officer and adds a general directive for modifications of the method. The addition defines Executive Officer as the Executive Officer of the Air Resources Board. The added general directive provides that modifications to Method 1 that are not expressly provided for in Method 1 are major modifications subject to approval of the Executive Officer. A specific example of the application of this general directive is found in section 2.3.1 of Method 1. Section 2.3.1 expressly provides for a modification to the requirement to use the values in Table 1-2, but directs Executive Officer approval for other modifications.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: “‘Permit’ means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act.” [Government Code section 15375(a). Emphasis added.] The Board’s adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 1, because districts are not required to use Method 1, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 2.1

Changes were made to make wording and intent consistent with EPA Method 1.

Section 2.2.1

Changes were made to make wording and intent consistent with EPA Method 1.

Section 2.2.2

Changes were made to make wording and intent consistent with EPA Method 1.

Section 2.3.1

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Parenthetical mention was added of documents described in EPA Method 1 Section 2.3.1 and

containing example equations, principally to increase consistency with EPA Method 1. While the same documents were previously described in the bibliography of ARB Method 1 that description has been deleted since the documents are mainly of scholarly interest, difficult to obtain, and not essential to proper performance of the test procedures. Note that the criteria for locating traverse points in round stacks are illustrated in Figure 1-3 in both ARB Method 1 and EPA Method 1.

Section 2.3.1.2

Changes were made to make wording and intent consistent with EPA Method 1.

Section 2.3.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Other changes were made to make wording and intent consistent with EPA Method 1.

Section 2.4

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Other changes were made to make wording and intent consistent with EPA Method 1.

Section 2.5 and Subsections Thereof

These sections were added to make wording and intent consistent with EPA Method 1. Reference to ARB has been inserted where reference to EPA occurs in EPA Method 1 since ARB is the promulgator of ARB Method 1.

Section 3

A reference to EPA Method 1 was added based on the intended close relationship between ARB Method 1 and EPA Method 1. The methods are substantially equivalent but EPA Method 1 is revised frequently and may contain provisions or errors not found in ARB Method 1.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 2

Section 1.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board. The change from the “Control Agency’s

authorized representative” to the “Executive Officer” makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB’s method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words “Control Agency’s authorized representative” appear.

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB executive officer and defining “Executive Officer as meaning the Executive officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: “‘Permit’ means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act.” [Government Code section 15375(a). Emphasis added.] The Board’s adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 2, because districts are not required to use Method 2, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Section 2.1

Changes were made to make wording and intent consistent with EPA Method 2.

Section 2.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Other changes were made to make wording and intent consistent with EPA Method 2.

Section 2.3

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Other changes were made to make wording and intent consistent with EPA Method 2.

Section 2.4

Changes were made to make wording and intent consistent with EPA Method 2.

Section 2.5

Changes were made to make wording and intent consistent with EPA Method 2.

Section 2.6

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Section 2.7

Reference to a document previously described in the bibliography of ARB Method 2 has been deleted as unnecessary.

Other changes were made to make wording and intent consistent with EPA Method 2. Note that the function of the National Bureau of Standards has been assumed by the National Institute of Standards and Technology and EPA Method 2 has not been updated to indicate this.

Section 2.8

Reference to a document previously described in the bibliography of ARB Method 2 has been deleted as unnecessary.

Other changes were made to make wording and intent consistent with EPA Method 2.

Section 3 Including Subsections Thereof

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

“Reference Method 4” has been changed to “Method 4” to improve clarity by avoiding the implication that EPA Method 4 is being referred to. Although ARB Method 4 is substantially equivalent to EPA Method 4, differentiation between the two methods is improved with this clarifying change.

Other changes were made to make wording and intent consistent with EPA Method 2.

Section 4.1.1

Reference to a document previously described in the bibliography of ARB Method 2 was deleted as unnecessary.

Other changes were made to make wording and intent consistent with EPA Method 2.

Section 4.1.2.1

Changes were made to make wording and intent consistent with EPA Method 2.

Section 4.1.2.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Other changes were made to make wording and intent consistent with EPA Method 2.

Section 4.1.2.3

Reference to documents previously described in the bibliography of ARB Method 2 was deleted as unnecessary.

Section 4.1.3.4

Changes were made to make wording and intent consistent with EPA Method 2.

Section 4.1.3.5

Changes were made to make wording and intent consistent with EPA Method 2.

Section 4.1.3.7

Changes were made to make wording and intent consistent with EPA Method 2.

Section 4.1.4.1

Changes were made to make wording and intent consistent with EPA Method 2.

Section 4.1.4.4

Changes were made to make wording and intent consistent with EPA Method 2.

Sections 4.1.5.1.3 and 4.1.5.2

Reference to a document previously described in the bibliography of ARB Method 2 was deleted as unnecessary.

Other changes were made to make wording and intent consistent with EPA Method 2.

Section 4.1.5.3

Changes were made to make wording and intent consistent with EPA Method 2.

Section 4.1.6.1.1

Changes were made to make wording and intent consistent with EPA Method 2.

4.1.6.1.2

Reference to a document previously described in the bibliography of ARB Method 2 was deleted as unnecessary.

Other changes were made to make wording and intent consistent with EPA Method 2.

Section 4.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Section 4.3

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Other changes were made to make wording and intent consistent with EPA Method 2. Note that NIST has assumed the function of the former NBS.

Section 5.1

Changes were made to make wording and intent consistent with EPA Method 2.

Section 5.2

Changes were made to make wording and intent consistent with EPA Method 2.

Section 5.3

Changes were made to make wording and intent consistent with EPA Method 2.

Section 6

A reference to EPA Method 2 was added based on the intended close relationship between ARB Method 2 and EPA Method 2. The methods are substantially equivalent but EPA Method 2 is revised frequently and may contain provisions or errors not found in ARB Method 2.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 2A

Section 1.2

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB executive officer and defining “Executive Officer as meaning the Executive officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as

defined in the statute: “‘Permit’ means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act.” [Government Code section 15375(a). Emphasis added.] The Board’s adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 2A, because districts are not required to use Method 2A, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board. The change from the “Control Agency’s authorized representative” to the “Executive Officer” makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB’s method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words “Control Agency’s authorized representative” appear.

Section 2.1

Changes were made to make wording and intent consistent with EPA Method 2A.

Sections 3.2

Separate numbering of subsections was introduced for consistency with EPA Method 2A.

Sections 3.3.1

Changes were made to make wording and intent consistent with EPA Method 2A.

Sections 4.1

Separate numbering of subsections was introduced for consistency with EPA Method 2A.

Section 4.1.6

Changes were made to make wording and intent consistent with EPA Method 2A.

Section 4.1.8

Changes were made to make wording and intent consistent with EPA Method 2A.

Section 4.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 2.

Section 6

A reference to EPA Method 2A was added based on the intended close relationship between ARB Method 2A and EPA Method 2A. The methods are substantially equivalent but EPA Method 2A is revised frequently and may contain provisions or errors not found in ARB Method 2A.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 3

Section 1.1

Changes were made to make wording and intent consistent with EPA Method 3. Note that ARB Method 3 Section 1.1 corresponds to EPA Method 3 section 1.2 with the exception that wording related to calculation of excess air is omitted from EPA Method 3, which does not include provisions for determination of excess air. The provision for determination of excess air in ARB Method 3 is retained based on historical precedent and ARB's view that a determination of excess air is useful. The departure from EPA Method 3 is intentional, but it does not reduce the validity or correctness of ARB Method 3's or its consistency with EPA Method 3 in other respects.

Section 1.2.1

Changes were made to make wording and intent consistent with EPA Method 3. Note that this section corresponds to EPA Method 3 Section 1.1.1 except for wording related to excess air.

Section 1.2.2

The approval authority was changed from the "Control Agency's authorized representative" to the "Executive Officer" of the Air Resources Board. The change from the "Control Agency's authorized representative" to the "Executive Officer" makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB's method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words "Control Agency's authorized representative" appear.

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB's Executive Officer and defining "Executive Officer" as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as

defined in the statute: “‘Permit’ means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act.” [Government Code section 15375(a). Emphasis added.] The Board’s adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 3, because districts are not required to use Method 3, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 1.2.3

Changes were made to make wording and intent consistent with EPA Method 3.

Section 2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Section 2.1.1 (“Probe”)

Changes were made to make wording and intent consistent with EPA Method 3.

Section 2.1.2 (“Pump”)

This section was inadvertently misnumbered 2.1.1 (duplicating the identification of the preceding section) in preparation of the revised method submitted for Board approval and subsequently to OAL. Both EPA Method 3 and the preexisting ARB Method 3 number the section correctly and the proper numbering has been restored.

Section 2.2 and Subsections Thereof

Changes were made to make wording and intent consistent with EPA Method 3.

Section 3.1.1

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Section 3.1.2

Changes were made to make wording and intent consistent with EPA Method 3 section 3.2.

Section 3.1.3

Changes were made to make wording and intent consistent with EPA Method 3 section 3.3.

Section 3.2.2

Changes were made to make wording and intent consistent with EPA Method 3 section 4.2.

Section 3.3.1

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Section 4

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Section 4.1.1

The approval authority was changed from the “administrator” (language used in EPA Method 3 to refer to the administrator of the U.S. EPA) to the “Executive Officer” of the Air Resources Board as in Section 1.2.2. Use of “administrator” in the preexisting version of ARB Method 3 is an inadvertent error which apparently occurred in originally adapting the EPA method to ARB’s needs.

Section 4.1.3

Changes were made to make wording and intent consistent with EPA Method 3 section 3.3.

Section 4.1.5

A reference to a document previously listed in the bibliography of ARB Method 3 has been replaced by an equivalent reference to Section 4.4 which discusses comparison of fuel factors calculated from gas concentrations to values expected in combustion of common fossil fuels.

Section 4.2.2

Changes were made to make wording and intent consistent with EPA Method 3 section 4.2. Note that, since section 4.2.2 of ARB Method 3 relates to determination of excess air which would be rendered incorrect by leakage in the bag or train, and based on precedent in the preexisting version of ARB Method 3, leak checks are specified as mandatory, not optional, in this section. EPA Method 3 specifies leak checks as optional but is not intended for determination of excess air.

Section 4.2.3

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Other changes were made to make wording and intent consistent with EPA Method 3 section 4.3.

Section 4.2.7

A reference to a document previously listed in the bibliography of ARB Method 3 has been replaced by an equivalent reference. Note that Section 4.4 discusses carbon balance calculations.

Section 4.3.1

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Section 4.4.1.2

This section has been modified to correctly refer to Section 3 of EPA Method 19. There is no ARB Method 19.

Section 5 and Subsections Thereof

Changes were made (including renumbering of subsections) to make wording and intent consistent with EPA Method 3 section 6.

Section 6.1

Changes were made to make wording and intent consistent with EPA Method 3 section 7.1.

Section 6.2

Nomenclature in equations was made consistent with revisions to Section 6.1.

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Section 6.3

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Section 7

A reference to EPA Method 3 was added based on the intended close relationship between ARB Method 3 and EPA Method 3. The methods are substantially equivalent but EPA Method 3 is revised frequently and may contain provisions or errors not found in ARB Method 3.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 4

Section 1.2

This section was divided into numbered subsections following the example of EPA Method 4. Note that this change and other formatting and wording changes, where made to increase consistency with EPA Method 4, are based on a version of EPA Method 4 downloaded from EPA’s site on the Internet and may diverge slightly from other versions and revisions of EPA Method 4. All changes to ARB Method 4 have been reviewed by ARB staff and judged correct

from a technical viewpoint. Although exact wording and format may or may not differ from any particular formally adopted version of EPA Method 4, the downloaded document was represented by EPA on their web site as a promulgated version of the test method.

Section 1.2.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board. The change from the “Control Agency’s authorized representative” to the “Executive Officer” makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB’s method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words “Control Agency’s authorized representative” appear.

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB’s Executive Officer and defining “Executive Officer” as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: “‘Permit’ means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act.” [Government Code section 15375(a). Emphasis added.] The Board’s adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 4, because districts are not required to use Method 4, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 1.2.3

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Section 2.1.1

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Other changes were made to make wording and intent consistent with EPA Method 4.

Section 2.1.2

Changes were made to make wording and intent consistent with EPA Method 4. Where EPA

Method 4 refers to “Method 5” ARB Method 4 refers to “ARB Method 5” explicitly to clearly indicate that ARB Method 5 is pertinent rather than EPA Method 5. In a departure from the text of EPA Method 4, wording recommending use of a silica gel trap to protect the pump has been retained as a useful caution to readers although it also appears in the section of ARB Method 5 referred to by newly inserted language.

Section 2.1.4

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Other changes were made to make wording and intent consistent with EPA Method 4. Where EPA Method 4 refers to “Method 5” ARB Method 4 refers to “ARB Method 5” explicitly to clearly indicate that ARB Method 5 is pertinent rather than EPA Method 5.

Section 2.1.5

Changes were made to make wording and intent consistent with EPA Method 4. Where EPA Method 4 refers to “Method 5” ARB Method 4 refers to “ARB Method 5” explicitly to clearly indicate that ARB Method 5 is pertinent rather than EPA Method 5.

Section 2.1.6

Changes were made to make wording and intent consistent with EPA Method 4.

Section 2.2

Changes were made to make wording and intent consistent with EPA Method 4. Where EPA Method 4 refers to “Method 5” ARB Method 4 refers to “ARB Method 5” explicitly to clearly indicate that ARB Method 5 is pertinent rather than EPA Method 5.

Section 2.2.1

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Section 2.2.3

Changes were made to make wording and intent consistent with EPA Method 4.

Section 2.2.4

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.2.

Section 2.2.6

Changes were made to make wording and intent consistent with EPA Method 4.

Section 2.2.7

This section was added to make wording and intent consistent with EPA Method 4. A non-substantive correction to the wording in final regulation order was made. The word “control” was added to the phrase “quality check” so the phrase in the final regulation order reads: “A quality control check . . .” Where EPA Method 4 refers to “Method 5” ARB Method 4 refers to “ARB Method 5” explicitly to clearly indicate that ARB Method 5 is pertinent rather than EPA Method 5.

Section 2.3.1

Changes were made to make wording and intent consistent with EPA Method 4.

Section 2.3.2

Changes were made to make wording and intent consistent with EPA Method 4.

Section 3.1

Changes were made to make wording and intent consistent with EPA Method 4.

Section 3.2.1

Changes were made to make wording and intent consistent with EPA Method 4.

Section 3.2.2

Changes were made to make wording and intent consistent with EPA Method 4.

Section 3.3.1

Changes were made to make wording and intent consistent with EPA Method 4.

Section 3.3.3

Changes were made to make wording and intent consistent with EPA Method 4.

Section 4.1

Changes were made to make wording and intent consistent with EPA Method 4. Where EPA Method 4 refers to “Method 5” ARB Method 4 refers to “ARB Method 5” explicitly to clearly indicate that ARB Method 5 is pertinent rather than EPA Method 5. Where EPA Method 4 refers to “Method 6” ARB Method 4 refers to “ARB Method 6” explicitly to clearly indicate that ARB Method 6 is pertinent rather than EPA Method 6.

Section 5

A reference to EPA Method 4 was added based on the intended close relationship between ARB Method 4 and EPA Method 4. The methods are substantially equivalent but EPA Method 4 is revised frequently and may contain provisions or errors not found in ARB Method 4.

References to ARB Methods 5 and 6 were added because these test methods are referred to in the other sections and need to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 5A

Section 1.1

Changes were made to make wording and intent consistent with EPA Method 5A. Note that these changes and other formatting and wording changes, where made to increase consistency with EPA Method 5A, are based on a version of EPA Method 5A downloaded from EPA's site on the Internet and may diverge slightly from other versions and revisions of EPA Method 5A. All changes to ARB Method 5A have been reviewed by ARB staff and judged correct from a technical viewpoint. Although exact wording and format may or may not differ from any particular formally adopted version of EPA Method 5A, the downloaded document was represented by EPA on their web site as a promulgated version of the test method.

Section 1.2

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB's Executive Officer and defining "Executive Officer" as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: "'Permit' means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act." [Government Code section 15375(a). Emphasis added.] The Board's adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 5A, because districts are not required to use Method 5A, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Other changes were made to make wording and intent consistent with EPA Method 5A.

Section 2.1

A reference to "Method 5" was changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method. Both test methods

contain identical wording in the indicated sections but ARB has no control over revisions to EPA Method 5 which might make reference to EPA Method 5 inappropriate.

Other changes were made to make wording and intent consistent with EPA Method 5A.

Section 2.1.1

A reference to "Method 5" was changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in Section 2.1.

Section 2.1.2

A reference to "Method 5" was changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in Section 2.1.

Other changes were made to make wording and intent consistent with EPA Method 5A.

Section 2.1.4

Changes were made to make wording and intent consistent with EPA Method 5A.

Section 2.2.1

A reference to "Method 5" was changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in Section 2.1.

Section 2.2.2

Punctuation changes were made to make wording and intent consistent with EPA Method 5A.

Section 2.2.4

The approval authority was changed from the "Control Agency's authorized representative" to the "Executive Officer" of the Air Resources Board. The change from the "Control Agency's authorized representative" to the "Executive Officer" makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB's method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words "Control Agency's authorized representative" appear.

Section 2.3.1

A reference to "Method 5" was changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in Section 2.1.

Section 3.1.1

A reference to "Method 5" was changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in Section 2.1.

Section 3.3.2

A reference to "Method 5" was changed to refer to "ARB Method 5" to make an explicit

distinction between the ARB test method and the similar EPA test method as in Section 2.1.

Section 4.1 and Subsections Thereof

References to "Method 5" were changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in Section 2.1.

Other changes were made to make wording and intent consistent with EPA Method 5A.

Section 4.2 and Subsections Thereof

References to "Method 5" were changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in Section 2.1.

Other changes were made to make wording and intent consistent with EPA Method 5A.

Section 4.3

Reference to figure 5A-1 was replaced with reference to "an appropriate data sheet" since neither EPA Method 5A or ARB Method 5A contains such a figure. The data to be recorded are clearly described in other sections.

Section 4.3.2

Numbering of subsections was added for consistency with EPA Method 5A.

Section 4.3.2.1

The approval authority was changed from the "Control Agency's authorized representative" to the "Executive Officer" of the Air Resources Board as in Section 2.2.4.

Section 4.3.2.3

Changes were made to make wording and intent consistent with EPA Method 5A.

Section 4.4

This section was added to make wording and intent consistent with EPA Method 5A.

Section 5

Changes were made to make wording and intent consistent with EPA Method 5A.

A reference to "Method 5" found in EPA Method 5A wording was changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in Section 2.1.

Section 6.1

A reference to "Method 5" was changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in Section 2.1.

Other changes were made to make wording and intent consistent with EPA Method 5A.

Section 6.2

A reference to "Method 5" was changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in Section 2.1.

Section 6.3

A reference to "Method 5" was changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in Section 2.1.

Section 6.4

Changes were made to make wording and intent consistent with EPA Method 5A.

Section 6.5

Reference to "Method 5" and "Method 4" found in EPA Method 5A wording was changed to refer to "ARB Method 5" and "ARB Method 4" to make an explicit distinction between the ARB test methods and similar EPA test methods as in Section 2.1.

Other changes were made to make wording and intent consistent with EPA Method 5A.

Section 6.6

Changes were made to make wording and intent consistent with EPA Method 5A.

Section 6.7

Changes were made to make wording and intent consistent with EPA Method 5A.

Section 6.9

Changes were made to make wording and intent consistent with EPA Method 5A.

Section 6.10

A reference to "Method 5" was changed to refer to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in Section 2.1.1.

Other changes were made to make wording and intent consistent with EPA Method 5A.

Section 7

A reference to EPA Method 5A was added based on the intended close relationship between ARB Method 5A and EPA Method 5A. The methods are substantially equivalent but EPA Method 5A is revised frequently and may contain provisions or errors not found in ARB Method 5A.

References to ARB Methods 4 and 5 were added because these test methods are referred to in the other sections and need to be identified clearly in this section.

Reference to the Bibliography of Method 5 was deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. The bibliography of ARB Method 5 was simplified in the last revision of that test method. Many documents previously cited in ARB Method 5's bibliography are old and extremely difficult to obtain, and all are principally of scholarly interest. The change does not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliographies of the comparable EPA test methods.

Method 5E

Section 1.2

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB's Executive Officer and defining "Executive Officer" as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: "Permit' means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act." [Government Code section 15375(a). Emphasis added.] The Board's adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 5E, because districts are not required to use Method 5E, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 2.1 and Subsections Thereof

The words "Reference Method 5" were changed (in several places) to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method. Both test methods contain identical wording in the indicated sections but ARB has no control over revisions to EPA Method 5 which might make reference to EPA Method 5 inappropriate.

Section 2.2

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 2.3

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 2.3.1

Changes were made to make wording and intent consistent with EPA Method 5E.

Section 2.3.3

Changes were made to make wording and intent consistent with EPA Method 5E.

Section 3.1

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 3.2

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 3.3

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 3.3.1

Changes were made to make wording and intent consistent with EPA Method 5E.

Section 3.3.3

Changes were made to make wording and intent consistent with EPA Method 5E.

Section 3.3.4

Changes were made to make wording and intent consistent with EPA Method 5E.

Section 4.1

A note which previously appeared in Section 4.2 of ARB Method 5E has been moved to this section. Although the note wording appears as part of section 4.2 in at least one version of EPA Method 5E it has been placed in Section 4.1 of ARB Method 5E because this is more appropriate in view of the normal sequence of procedural steps.

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 4.1.2

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 4.2

The text of the note that now appears in Section 4.1 has been deleted from Section 4.2.

Subsections of Section 4.2 were numbered separately for consistency with EPA Method 5E.

Other changes were made to make wording and intent consistent with EPA Method 5E.

Section 4.2.1

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 4.2.2

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 4.2.3

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 4.2.4

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 4.2.5

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Other changes were made to make wording and intent consistent with EPA Method 5E.

Section 4.3

Subsections of Section 4.3 were numbered separately for consistency with EPA Method 5E.

Section 4.3.1

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 4.3.2

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 4.3.3

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit

distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 4.3.4

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 4.3.5.1

Changes were made to make wording and intent consistent with EPA Method 5E.

Section 5

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 6

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Section 6.1

Changes were made to make wording and intent consistent with EPA Method 5E.

Section 6.2

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Other changes were made to make wording and intent consistent with EPA Method 5E.

Section 6.3

The words "Reference Method 5" were changed to "ARB Method 5" to make an explicit distinction between the ARB test method and the similar EPA test method as in section 2.1.

Other changes were made to make wording and intent consistent with EPA Method 5E.

Section 7

A reference to EPA Method 5E was added based on the intended close relationship between ARB Method 5E and EPA Method 5E. The methods are substantially equivalent but EPA Method 5E is revised frequently and may contain provisions or errors not found in ARB Method 5E.

A reference to ARB Method 5 was added because that test method is referred to in the other sections of ARB Method 5 and needs to be identified clearly in this section.

Reference to the Bibliography of Method 5 was deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. The bibliography of ARB

Method 5 was simplified in the last revision of that test method. Many documents previously cited in ARB Method 5's bibliography are old and extremely difficult to obtain, and all are principally of scholarly interest. The change does not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliographies of the comparable EPA test methods.

Method 6

Section 1.1

Changes were made to make wording and intent consistent with EPA Method 6.

Section 1.2

The approval authority was changed from the "Control Agency's authorized representative" to the "Executive Officer" of the Air Resources Board. The change from the "Control Agency's authorized representative" to the "Executive Officer" makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB's method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words "Control Agency's authorized representative" appear. A similar change of wording from "Administrator" to "Executive Officer" has also been made wherever "Administrator" appears since use of "Administrator" referring to the U.S. Administrator, is an inadvertent error made in the past when adapting EPA's test method to ARB's requirements.

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB executive officer and defining "Executive Officer as meaning the Executive officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: "'Permit' means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act." [Government Code section 15375(a). Emphasis added.] The Board's adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 6, because districts are not required to use Method 6, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Other changes were made to make wording and intent consistent with EPA Method 6.

Section 2.1

Changes were made to make wording and intent consistent with EPA Method 6.

Section 2.1.1

The approval authority was changed from the “Administrator” to the “Executive Officer” of the Air Resources Board as mentioned in discussion of Section 1.2.

Section 2.1.2

The approval authority was changed from the “Administrator” to the “Executive Officer” of the Air Resources Board as mentioned in discussion of Section 1.2.

Other changes were made to make wording and intent consistent with EPA Method 6.

Section 2.1.6

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Section 3.1.2

Changes were made to make wording and intent consistent with EPA Method 6. The ARB’s method is amended to specify “water” rather than “de-ionized distilled water” because “water” is defined in Section 3.1.1. With explicit specifications for required purity in section 3.1.1, “water” is a more restrictive specification than “de-ionized distilled water” in the context of the regulation.

Section 3.2.1

Changes were made to make wording and intent consistent with EPA Method 6.

Section 3.2.2

Changes were made to make wording and intent consistent with EPA Method 6.

Section 3.3.1

Changes were made to make wording and intent consistent with EPA Method 6.

Section 3.3.3

Changes were made to make wording and intent consistent with EPA Method 6.

Section 3.3.4

Changes were made to make wording and intent consistent with EPA Method 6.

Section 3.3.6

This section was added to make wording and intent consistent with EPA Method 6.

Section 4.1.2

The approval authority was changed from the “Control Agency’s authorized representative” to

the “Executive Officer” of the Air Resources Board as in Section 1.2.

Other changes were made to make wording and intent consistent with EPA Method 6. Where EPA Method 6 has “A leak check prior to the sampling run is optional” ARB Method 6 has “A leak check prior to the sampling run is optional but strongly recommended” since failure to detect leaks at the earliest opportunity can cause the a test run to be invalidated resulting in wasted effort and expense.

Section 4.1.3

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Other changes were made to make wording and intent consistent with EPA Method 6.

Section 4.3

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Section 4.4 and Subsections Thereof

This section and it’s subsections was added to make wording and intent consistent with EPA Method 6. The reference to EPA and EPA audit samples is deliberate and is intended to support nationwide uniformity in the audit sample program. Authority granted to the EPA Administrator in Subsection 4.4.4 of EPA Method 6 has been granted to the ARB Executive Officer in the ARB version since this does not impact the audit sample program as such and is consistent with changes elsewhere.

Section 5.5

Changes were made to make wording and intent consistent with EPA Method 6.

Section 6.1

Changes were made to make wording and intent consistent with EPA Method 6.

Section 6.3

Changes were made to make wording and intent consistent with EPA Method 6.

Section 6.4

Changes were made to make wording and intent consistent with EPA Method 6.

Section 7

This section was added to make wording and intent consistent with EPA Method 6.

Section 8

This section was renumbered in sequence to support addition of Section 7.

A reference to EPA Method 6 was added based on the intended close relationship between ARB Method 6 and EPA Method 6. The methods are substantially equivalent but EPA Method 6 is revised frequently and may contain provisions or errors not found in ARB Method 6.

A reference to EPA Method 5 was added to support reference to Section 7.1 of EPA Method 5 in the new Section 7. ARB Method 5 does not contain the corresponding section..

References to ARB Methods 5 and 8 were added because these test methods are referred to in the other sections and need to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 8

Section 1.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board. The change from the “Control Agency’s authorized representative” to the “Executive Officer” makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB’s method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words “Control Agency’s authorized representative” appear.

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB’s Executive Officer and defining “Executive Officer” as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: “‘Permit’ means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act.” [Government Code section 15375(a). Emphasis added.] The Board’s adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 8, because districts are not required to use Method 8, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Other changes were made to make wording and intent consistent with EPA Method 8.

Section 2.1

This section was modified to include a description of the APTD-0581 and APTD-0576 documents previously referenced without explanation of how they might be obtained. This information is not in EPA Method 8.

Section 2.1.5

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Section 2.1.6

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Other changes were made to make wording and intent consistent with EPA Method 8.

Section 2.2.3

Changes were made to make wording and intent consistent with EPA Method 8.

Section 2.2.4

Changes were made to make wording and intent consistent with EPA Method 8.

Section 3.3.6

This section was added to make wording and intent consistent with EPA Method 8.

Section 4.1.3

Changes were made to make wording and intent consistent with EPA Method 8.

Section 4.1.4

Changes were made to make wording and intent consistent with EPA Method 8.

Section 4.1.5

Changes were made to make wording and intent consistent with EPA Method 8.

Section 4.2.2

Changes were made to make wording and intent consistent with EPA Method 8. The ARB’s method is amended to specify “water” rather than “de-ionized distilled water” because “water” is defined in Section 3.1.3. With explicit specifications for required purity in section 3.1.3, “water” is a more restrictive specification than “de-ionized distilled water” in the context of the regulation.

Section 4.3

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Section 4.4

This section was added to make wording and intent consistent with EPA Method 8.

Section 4.5

This section was added to make wording and intent consistent with EPA Method 8.

Section 6.1

Changes were made to make wording and intent consistent with EPA Method 8.

Section 6.3

Changes were made to make wording and intent consistent with EPA Method 8.

Section 6.7

Changes were made to make wording and intent consistent with EPA Method 8.

Section 6.8

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 1.2.

Section 6.9

This section was added to make wording and intent consistent with EPA Method 8.

Section 6.10

This section was added to make wording and intent consistent with EPA Method 8.

Section 7

A reference to EPA Method 8 was added based on the intended close relationship between ARB Method 8 and EPA Method 8. The methods are substantially equivalent but EPA Method 8 is revised frequently and may contain provisions or errors not found in ARB Method 8.

References to ARB Methods 2, 5 and 6 were added because these test methods are referred to in the other sections and need to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 10

Section 1.1

Changes were made to make wording and intent consistent with EPA Method 10.

Section 1.2

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB's Executive Officer and defining "Executive Officer" as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: "'Permit' means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act." [Government Code section 15375(a). Emphasis added.] The Board's adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 10, because districts are not required to use Method 10, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 5

Changes were made to make wording and intent consistent with EPA Method 10. Where EPA Method 10 has "endorsement by the Environmental Protection Agency" ARB Method 10 has simple "endorsement." since endorsement will not be by EPA.

Section 5.1.1

Changes were made to make wording and intent consistent with EPA Method 10.

Section 5.1.3

The approval authority was changed from the "Control Agency's authorized representative" to the "Executive Officer" of the Air Resources Board. The change from the "Control Agency's authorized representative" to the "Executive Officer" makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB's method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words "Control Agency's authorized representative" appear.

Section 5.2.1

Changes were made to make wording and intent consistent with EPA Method 10.

Section 5.2.2

Changes were made to make wording and intent consistent with EPA Method 10.

Section 5.2.5

Changes were made to make wording and intent consistent with EPA Method 10.

Section 5.3.1

Changes were made to make it explicit that the test method referred to is ARB Method 100.

Section 5.3.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in section 5.1.3.

Other changes were made to make it explicit that the test method referred to is ARB Method 100.

Section 5.3.5

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in section 5.1.3.

Section 5.3.8

Changes were made to make wording and intent consistent with EPA Method 10.

Section 6.1

Changes were made to make wording and intent consistent with EPA Method 10.

Section 6.2

Changes were made to make wording and intent consistent with EPA Method 10.

Section 7.1.1

Changes were made to make wording and intent consistent with EPA Method 10.

Section 7.1.2

Changes were made to make it explicit that the test method referred to is ARB Method 3 as distinct from EPA Method 3.

Section 7.2

Changes were made to make wording and intent consistent with EPA Method 10.

Section 8

Changes were made to make wording and intent consistent with EPA Method 10.

Section 10

This section was added to make wording and intent consistent with EPA Method 10. EPA Method 10A is referred to explicitly because there is no comparable ARB test method.

Addenda Section A

Changes were made to make wording and intent consistent with EPA Method 10.

Addenda Section B

Changes were made to make wording and intent consistent with EPA Method 10.

Bibliography

A reference to EPA Method 10 was added based on the intended close relationship between ARB Method 10 and EPA Method 10. The methods are substantially equivalent but EPA Method 10 is revised frequently and may contain provisions or errors not found in ARB Method 10.

References to ARB Methods 3 and 100 were added because these test methods are referred to in the other sections and need to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 11

Section 1.2

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB's Executive Officer and defining "Executive Officer" as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: "'Permit' means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act." [Government Code section 15375(a). Emphasis added.] The Board's adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 1, because districts are not required to use Method 1, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Other changes were made to make wording and intent consistent with EPA Method 11.

Section 3.2

Changes were made to make wording and intent consistent with EPA Method 11.

Section 5

Changes were made to make wording and intent consistent with EPA Method 11.

Section 5.1.1

Changes were made to make wording and intent consistent with EPA Method 11.

Section 5.1.4

Changes were made to make wording and intent consistent with EPA Method 11.

Section 5.1.5

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board. The change from the “Control Agency’s authorized representative” to the “Executive Officer” makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB’s method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words “Control Agency’s authorized representative” appear.

Section 5.1.11

Changes were made to make wording and intent consistent with EPA Method 11.

Section 5.1.14

Changes were made to make wording and intent consistent with EPA Method 11.

Section 5.3.1

Changes were made to make wording and intent consistent with EPA Method 11.

Section 5.3.4

Changes were made to make wording and intent consistent with EPA Method 11.

Section 5.3.5

Changes were made to make wording and intent consistent with EPA Method 11.

Section 5.3.6

Changes were made to make wording and intent consistent with EPA Method 11.

Section 6.1.1

Changes were made to make wording and intent consistent with EPA Method 11. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.1.3. With explicit specifications for required purity in section 6.1.3, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 6.1.2

Changes were made to make wording and intent consistent with EPA Method 11.

Section 6.2.1

This section was added to make wording and intent consistent with EPA Method 11.

Section 6.2.2

Changes were made to make wording and intent consistent with EPA Method 11. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.1.3. With explicit specifications for required purity in section 6.1.3, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 6.2.3

Changes were made to make wording and intent consistent with EPA Method 11. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.1.3. With explicit specifications for required purity in section 6.1.3, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 6.2.4

Changes were made to make wording and intent consistent with EPA Method 11. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.1.3. With explicit specifications for required purity in section 6.1.3, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 6.3.1

This section was added to make wording and intent consistent with EPA Method 11.

Section 6.3.3

Changes were made to make wording and intent consistent with EPA Method 11.

Section 6.3.4

Changes were made to make wording and intent consistent with EPA Method 11. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.1.3. With explicit specifications for required purity in section 6.1.3, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 6.3.5

Changes were made to make wording and intent consistent with EPA Method 11. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is

defined in Section 6.1.3. With explicit specifications for required purity in section 6.1.3, “water” is a more restrictive specification than “de-ionized distilled water” in the context of the regulation.

Section 7.1.1

Changes were made to make wording and intent consistent with EPA Method 11.

Section 7.1.2

Changes were made to make wording and intent consistent with EPA Method 11.

Section 7.1.6

Changes were made to make wording and intent consistent with EPA Method 11.

Section 7.2.1

Changes were made to make wording and intent consistent with EPA Method 11.

Section 7.2.2

Changes were made to make wording and intent consistent with EPA Method 11.

Section 7.2.3

Changes were made to make wording and intent consistent with EPA Method 11.

Section 7.2.4

Changes were made to make wording and intent consistent with EPA Method 11.

Section 7.3

Changes were made to make wording and intent consistent with EPA Method 11.

Section 7.3.1

Changes were made to make wording and intent consistent with EPA Method 11.

Section 8.1.1

Changes were made to make wording and intent consistent with EPA Method 11.

Section 8.1.2

Changes were made to make wording and intent consistent with EPA Method 11. The ARB’s method is amended to specify “water” rather than “de-ionized distilled water” because “water” is defined in Section 6.1.3. With explicit specifications for required purity in section 6.1.3, “water” is a more restrictive specification than “de-ionized distilled water” in the context of the regulation.

Section 8.1.3

Changes were made to make wording and intent consistent with EPA Method 11. The ARB’s method is amended to specify “water” rather than “de-ionized distilled water” because “water” is defined in Section 6.1.3. With explicit specifications for required purity in section 6.1.3, “water” is a more restrictive specification than “de-ionized distilled water” in the context of the regulation.

Section 8.2.1.1

Changes were made to make wording and intent consistent with EPA Method 11.

Section 9.1

Changes were made to make wording and intent consistent with EPA Method 11.

Section 9.2

Changes were made to make wording and intent consistent with EPA Method 11.

Section 9.3

Changes were made to make wording and intent consistent with EPA Method 11.

Section 9.4

Changes were made to make wording and intent consistent with EPA Method 11.

Section 9.5

Changes were made to make wording and intent consistent with EPA Method 11.

Section 10

Changes were made to make wording and intent consistent with EPA Method 11.

Bibliography

A reference to EPA Method 11 was added based on the intended close relationship between ARB Method 11 and EPA Method 11. The methods are substantially equivalent but EPA Method 11 is revised frequently and may contain provisions or errors not found in ARB Method 11.

A reference to ARB Method 6 was added because this test method is referred to in the other sections and needs to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 12

Section 1.2

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB's Executive Officer and defining "Executive Officer" as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform

Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: “‘Permit’ means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act.” [Government Code section 15375(a). Emphasis added.] The Board’s adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 12, because districts are not required to use Method 12, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 2.1

Changes were made to make wording and intent consistent with EPA Method 12.

Section 2.2

Changes were made to make wording and intent consistent with EPA Method 12.

Section 3.2.3

Changes were made to make wording and intent consistent with EPA Method 12.

Section 3.3.3

Changes were made to make wording and intent consistent with EPA Method 12.

Section 4.1

Changes were made to make wording and intent consistent with EPA Method 12.

Section 4.1.4

Water (as defined in Section 4.1.3) has been specified instead of deionized distilled water. “Water” is defined in Section 4.1.3 as deionized distilled water conforming to ASTM Specification D 1193-77. Use of the term “water” is more restrictive in the context of this definition than use of “deionized distilled water”. Although EPA Method 12 currently uses “deionized distilled water” in place of “water” in many places, other more recently revised EPA methods show preference for use of the carefully defined term “water” over “distilled water” in the context of a definition of water such as in Section 4.1.3. “Water” has generally been used in revising ARB Method 12 and other ARB methods where the same definition prevails, regardless of EPA wording, since this is the most consistent and precise approach in the context of the regulation.

Section 4.2

Water (as defined in Section 4.1.3) has been specified instead of deionized distilled water. See the discussion in Section 4.1.4. for the necessity of this amendment.

Section 4.3

Changes were made to make wording and intent consistent with EPA Method 12.

Section 4.4.1

Changes were made to make wording and intent consistent with EPA Method 12.

Section 4.4.3

Water (as defined in Section 4.1.3) has been specified instead of deionized distilled water. See the discussion in Section 4.1.4. for the necessity of this amendment.

Section 4.4.4

Water (as defined in Section 4.1.3) has been specified instead of deionized distilled water. See the discussion in Section 4.1.4. for the necessity of this amendment.

Section 4.4.5

Water (as defined in Section 4.1.3) has been specified instead of deionized distilled water. See the discussion in Section 4.1.4. for the necessity of this amendment. Other changes were made to make wording and intent consistent with EPA Method 12.

Section 4.4.8

Water (as defined in Section 4.1.3) has been specified instead of deionized distilled water. See the discussion in Section 4.1.4. for the necessity of this amendment.

Section 5.1.4

Changes were made to make wording and intent consistent with EPA Method 12.

5.2.2

Changes were made to make wording and intent consistent with EPA Method 12.

Section 5.3.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board. The change from the “Control Agency’s authorized representative” to the “Executive Officer” makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB’s method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words “Control Agency’s authorized representative” appear.

Other changes were made to make wording and intent consistent with EPA Method 12.

Section 5.3.3

Water (as defined in Section 4.1.3) has been specified instead of deionized distilled water. See the discussion in Section 4.1.4. for the necessity of this amendment.

Section 5.3.4

Water (as defined in Section 4.1.3) has been specified instead of deionized distilled water. See the discussion in Section 4.1.4. for the necessity of this amendment.

Section 5.4.2

Changes were made to make wording and intent consistent with EPA Method 12. The revised wording departs from the wording of EPA Method 12 slightly to eliminate unnecessary references to hard to find documents.

Section 6 and Subsections Thereof

Changes were made to make wording and intent consistent with EPA Method 12.

Section 7.1

Changes were made to make wording and intent consistent with EPA Method 12.

Section 7.3

Changes were made to make wording and intent consistent with EPA Method 12.

Sections 8.1, 8.2 and 8.3

Editorial changes were made to eliminate unnecessary gender-specific assumptions.

Section 8.4

This section was added in response to a public comment. Alternative analytical instrumentation has been allowed, using wording paraphrased from EPA guidance documents which also allow use of the same alternative instrumentation.

Section 8.5

This section was added in response to a public comment to indicate explicitly that ARB Method 436 is an acceptable alternative test method.

Section 9

A reference to EPA Method 12 was added based on the intended close relationship between ARB Method 12 and EPA Method 12. The methods are substantially equivalent but EPA Method 12 is revised frequently and may contain provisions or errors not found in ARB Method 12.

References to ARB Methods 5 and 2 were added because these test methods are referred to in other sections and need to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the

bibliography of the comparable EPA test method.

Method 13A

Section 1.2

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB's Executive Officer and defining "Executive Officer" as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: "'Permit' means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act." [Government Code section 15375(a). Emphasis added.] The Board's adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 13A, because districts are not required to use Method 13A, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 4.1

Changes were made to make wording and intent consistent with EPA Method 13A.

Section 5.1.3

The approval authority was changed from the "Control Agency's authorized representative" to the "Executive Officer" of the Air Resources Board. The change from the "Control Agency's authorized representative" to the "Executive Officer" makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB's method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words "Control Agency's authorized representative" appear.

Section 5.1.4

The approval authority was changed from the "Control Agency's authorized representative" to the "Executive Officer" of the Air Resources Board as in Section 5.1.3.

Other changes were made to make wording and intent consistent with EPA Method 13A.

Section 5.3.5

The list of beaker sizes required was revised based on requirements elsewhere in the method. Sizes listed in EPA Method 13A are inappropriate.

Section 5.3.6

The list of flask sizes was revised based on requirements elsewhere in the method. Sizes listed in EPA Method 13A are inappropriate.

Section 6

Changes were made to make wording and intent consistent with EPA Method 13A.

Section 6.1

Changes were made to make wording and intent consistent with EPA Method 13A.

Section 6.1.1.2

Changes were made to make wording and intent consistent with EPA Method 13A.

Section 6.3.2

Changes were made to make wording and intent consistent with EPA Method 13A. “Water” is defined with explicit specifications for required purity in Section 6.1.2, so “water” is a more restrictive specification than “deionized distilled water” in the context of the regulation. “Water” has been substituted for “deionized distilled water” numerous places in this test method for this reason regardless of whether the identical wording appears in EPA 13A (although in most cases it does) and this is considered consistent with EPA intent.

Section 6.3.6

Changes were made to make wording and intent consistent with EPA Method 13A. The ARB’s method is amended to specify “water” rather than “de-ionized distilled water” because “water” is defined in Section 6.1.2. With explicit specifications for required purity in section 6.1.2, “water” is a more restrictive specification than “de-ionized distilled water” in the context of the regulation.

Section 6.3.9

Changes were made to make wording and intent consistent with EPA Method 13A.

Section 6.3.10

Changes were made to make wording and intent consistent with EPA Method 13A. The ARB’s method is amended to specify “water” rather than “de-ionized distilled water” because “water” is defined in Section 6.1.2. With explicit specifications for required purity in section 6.1.2, “water” is a more restrictive specification than “de-ionized distilled water” in the context of the regulation.

Section 6.3.11

Changes were made to make wording and intent consistent with EPA Method 13A. The ARB’s method is amended to specify “water” rather than “de-ionized distilled water” because “water” is defined in Section 6.1.2. With explicit specifications for required purity in section 6.1.2, “water” is a more restrictive specification than “de-ionized distilled water” in the context of the regulation.

Section 6.3.12

Changes were made to make wording and intent consistent with EPA Method 13A. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.1.2. With explicit specifications for required purity in section 6.1.2, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 6.3.13

Changes were made to make wording and intent consistent with EPA Method 13A. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.1.2. With explicit specifications for required purity in section 6.1.2, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 7.1.3

Changes were made to make wording and intent consistent with EPA Method 13A. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.1.2. With explicit specifications for required purity in section 6.1.2, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 7.1.4

Changes were made to make wording and intent consistent with EPA Method 13A.

Section 7.2.1

The approval authority was changed from the "Control Agency's authorized representative" to the "Executive Officer" of the Air Resources Board as n Section 5.1.3.

Other changes were made to make wording and intent consistent with EPA Method 13A. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.1.2. With explicit specifications for required purity in section 6.1.2, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 7.3

The approval authority was changed from the "Control Agency's authorized representative" to the "Executive Officer" of the Air Resources Board as n Section 5.1.3.

Section 7.3.1.2

Changes were made to make wording and intent consistent with EPA Method 13A. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.1.2. With explicit specifications for required purity in section 6.1.2, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 7.3.3

Changes were made to make wording and intent consistent with EPA Method 13A. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.1.2. With explicit specifications for required purity in section 6.1.2, "water"

is a more restrictive specification than “de-ionized distilled water” in the context of the regulation.

Section 7.3.4

Changes were made to make wording and intent consistent with EPA Method 13A. The ARB’s method is amended to specify “water” rather than “de-ionized distilled water” because “water” is defined in Section 6.1.2. With explicit specifications for required purity in section 6.1.2, “water” is a more restrictive specification than “de-ionized distilled water” in the context of the regulation.

Section 7.4.1

Changes were made to make wording and intent consistent with EPA Method 13A. The ARB’s method is amended to specify “water” rather than “de-ionized distilled water” because “water” is defined in Section 6.1.2. With explicit specifications for required purity in section 6.1.2, “water” is a more restrictive specification than “de-ionized distilled water” in the context of the regulation.

Section 8.1

Changes were made to make wording and intent consistent with EPA Method 13A.

Section 8.2

Changes were made to make wording and intent consistent with EPA Method 13A. The ARB’s method is amended to specify “water” rather than “de-ionized distilled water” because “water” is defined in Section 6.1.2. With explicit specifications for required purity in section 6.1.2, “water” is a more restrictive specification than “de-ionized distilled water” in the context of the regulation.

Section 9.1

Changes were made to make wording and intent consistent with EPA Method 13A.

Section 9.3

Changes were made to make wording and intent consistent with EPA Method 13A.

Section 9.4

Changes were made to make wording and intent consistent with EPA Method 13A.

Section 9.5.1

Changes were made to make wording and intent consistent with EPA Method 13A.

Section 10

A reference to EPA Method 13A was added based on the intended close relationship between ARB Method 13A and EPA Method 13A. The methods are substantially equivalent but EPA Method 13A is revised frequently and may contain provisions or errors not found in ARB Method 13A.

A reference to ARB Method 5 was added because this test method is referred to in other sections and needs to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 13B

Section 1.2

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB's Executive Officer and defining "Executive Officer" as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: "'Permit' means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act." [Government Code section 15375(a). Emphasis added.] The Board's adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 13B, because districts are not required to use Method 13B, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 5

Changes were made to make wording and intent consistent with EPA Method 13B, except that the Air Resources Board was substituted for EPA in the disclaimer.

Section 6.2.2

Changes were made to make wording and intent consistent with EPA Method 13A. "Water" is defined in 6.2.6 of Method 13B as meeting the explicit specifications for required purity in Section 6.1.2 of Method 13A, so "water" is a more restrictive specification than "deionized distilled water" in the context of that definition. "Water" has been substituted for "deionized distilled water" numerous places in this test method for this reason regardless of whether the identical wording appears in EPA 13B (although in most cases it does) and this is considered consistent with EPA intent.

Section 6.2.6

Changes were made to make wording and intent consistent with EPA Method 13B.

Section 6.2.7

Changes were made to make wording and intent consistent with EPA Method 13B. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.2.6. With explicit specifications for required purity in section 6.2.6, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 6.2.8

Changes were made to make wording and intent consistent with EPA Method 13B. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.2.6. With explicit specifications for required purity in section 6.2.6, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 6.2.9

Changes were made to make wording and intent consistent with EPA Method 13B. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.2.6. With explicit specifications for required purity in section 6.2.6, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 6.2.10

Changes were made to make wording and intent consistent with EPA Method 13B. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.2.6. With explicit specifications for required purity in section 6.2.6, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 7.2.1

Changes were made to make wording and intent consistent with EPA Method 13B. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.2.6. With explicit specifications for required purity in section 6.2.6, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 8.2

Changes were made to make wording and intent consistent with EPA Method 13B. The ARB's method is amended to specify "water" rather than "de-ionized distilled water" because "water" is defined in Section 6.2.6. With explicit specifications for required purity in section 6.2.6, "water" is a more restrictive specification than "de-ionized distilled water" in the context of the regulation.

Section 9.3

Changes were made to make wording and intent consistent with EPA Method 13B.

Section 10

A reference to EPA Method 13B was added based on the intended close relationship between ARB Method 13B and EPA Method 13B. The methods are substantially equivalent but EPA Method 13B is revised frequently and may contain provisions or errors not found in ARB Method 13B.

A reference to ARB Method 13A was added because this test method is referred to in other sections and needs to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 15

Section 1.2

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB's Executive Officer and defining "Executive Officer" as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: "'Permit' means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act." [Government Code section 15375(a). Emphasis added.] The Board's adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 15, because districts are not required to use Method 15, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 3.1

Changes were made to make wording and intent consistent with EPA Method 15.

Section 3.2

Changes were made to make wording and intent consistent with EPA Method 15.

Section 3.3

Changes were made to make wording and intent consistent with EPA Method 15.

Section 3.4

This section was added to make wording and intent consistent with EPA Method 15.

Section 3.5

This section was added to make wording and intent consistent with EPA Method 15.

Section 5.1

Numbered section title was added to make wording and intent consistent with EPA Method 15.

Section 5.1.1

Changes were made to make wording and intent consistent with EPA Method 15.

Section 5.1.2

This section was added to make wording and intent consistent with EPA Method 15.

Section 5.1.3

This section was added to make wording and intent consistent with EPA Method 15.

Section 5.1.4

Changes were made to make wording and intent consistent with EPA Method 15.

Section 5.1.5

Changes were made to make wording and intent consistent with EPA Method 15.

Section 5.2

Changes were made to make wording and intent consistent with EPA Method 15.

Section 5.3

Changes were made to make wording and intent consistent with EPA Method 15.

Section 5.3.4.4

This section has been added to make wording and intent consistent with EPA Method 15.

Section 5.4

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board. The change from the “Control Agency’s authorized representative” to the “Executive Officer” makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB’s method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words “Control Agency’s authorized representative” appear.

Other changes were made to make wording and intent consistent with EPA Method 15.

Section 5.5

Changes were made to make wording and intent consistent with EPA Method 15.

Section 5.5.1

Changes were made to make wording and intent consistent with EPA Method 15.

Section 5.5.2

Changes were made to make wording and intent consistent with EPA Method 15.

Section 5.5.3

Changes were made to make wording and intent consistent with EPA Method 15.

Section 6.6

This section has been added to make wording and intent consistent with EPA Method 15.

Section 6.7

This section has been added to make wording and intent consistent with EPA Method 15.

Section 7.1

Changes were made to make wording and intent consistent with EPA Method 15.

Section 7.1.1

Changes were made to make wording and intent consistent with EPA Method 15.

Section 7.1.2

Changes were made to make wording and intent consistent with EPA Method 15.

Section 8.3

Changes were made to make wording and intent consistent with EPA Method 15.

Section 8.4

Changes were made to make wording and intent consistent with EPA Method 15.

Section 8.5

Changes were made to make wording and intent consistent with EPA Method 15.

Section 9.2.2

Changes were made to make wording and intent consistent with EPA Method 15.

Section 10.2

Changes were made to make wording and intent consistent with EPA Method 15.

Section 10.3

Changes were made to make wording and intent consistent with EPA Method 15.

Section 11.3

Changes were made to make wording and intent consistent with EPA Method 15.

Old Section 12(deleted)

This section has been deleted to make wording and intent consistent with EPA Method 15.

Section 12

A reference to EPA Method 15 was added based on the intended close relationship between ARB Method 15 and EPA Method 15. The methods are substantially equivalent but EPA Method 15 is revised frequently and may contain provisions or errors not found in ARB Method 15.

A reference to ARB Method 16A was added because this test method is referred to in other sections and needs to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 16

“Introduction” Section (Not Numbered)

Changes were made to make wording and intent consistent with EPA Method 16.

Section 1.1

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB’s Executive Officer and defining “Executive Officer” as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: “‘Permit’ means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act.” [Government Code section 15375(a). Emphasis added.] The Board’s adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 16, because districts are

not required to use Method 16, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Other changes were made to make wording and intent consistent with EPA Method 16.

Section 2.1

Changes were made to make wording and intent consistent with EPA Method 16.

Section 2.2

Changes were made to make wording and intent consistent with EPA Method 16.

Section 3.1

Changes were made to make wording and intent consistent with EPA Method 16.

Section 3.2

Changes were made to make wording and intent consistent with EPA Method 16.

Section 3.4

Changes were made to make wording and intent consistent with EPA Method 16.

Section 5

Changes were made to make wording and intent consistent with EPA Method 16. Several subsections have been changed, added and renumbered to make wording and intent consistent with EPA Method 16.

Section 5.1.1

Changes were made to make wording and intent consistent with EPA Method 16.

Section 5.1.1.1

This section was added to make wording and intent consistent with EPA Method 16.

Section 5.1.1.2

This section was added to make wording and intent consistent with EPA Method 16.

Section 5.1.2

This section was added to make wording and intent consistent with EPA Method 16.

Section 5.1.3 and Subsections Thereof

This section was added to make wording and intent consistent with EPA Method 16.

Section 5.1.4

Changes were made to make wording and intent consistent with EPA Method 16.

Section 5.2

Changes were made to make wording and intent consistent with EPA Method 16.

Section 5.3

Changes, including deletion of the old section with this number, were made to make wording and intent consistent with EPA Method 16.

Section 5.3.4.4

This section was added to make wording and intent consistent with EPA Method 16.

Section 5.4

Changes were made to make wording and intent consistent with EPA Method 16.

Section 5.5.2

Changes were made to make wording and intent consistent with EPA Method 16.

Section 5.5.4

Changes were made to make wording and intent consistent with EPA Method 16.

Section 6.4

Changes were made to make wording and intent consistent with EPA Method 16.

Section 6.5

Changes were made to make wording and intent consistent with EPA Method 16.

Section 6.6

Changes were made to make wording and intent consistent with EPA Method 16.

Section 6.7

This section was added to make wording and intent consistent with EPA Method 16.

Section 7.1.1

Changes were made to make wording and intent consistent with EPA Method 16.

Section 8.1

Reference to citations deleted from the bibliography has been deleted.

Other changes were made to make wording and intent consistent with EPA Method 16.

Section 8.3

Changes were made to make wording and intent consistent with EPA Method 16.

Section 8.4

Changes were made to make wording and intent consistent with EPA Method 16.

Old Section 8.5

This section has been deleted to make wording and intent consistent with EPA Method 16.

Section 9.1

Changes were made to make wording and intent consistent with EPA Method 16.

Section 9.2

Changes were made to make wording and intent consistent with EPA Method 16.

Section 9.2.1

Changes were made to make wording and intent consistent with EPA Method 16.

Section 9.2.2

Changes were made to make wording and intent consistent with EPA Method 16.

Section 10.1

Changes were made to make wording and intent consistent with EPA Method 16.

Section 10.2

Changes were made to make wording and intent consistent with EPA Method 16.

Section 10.3

Changes were made to make wording and intent consistent with EPA Method 16.

Section 11.2

Changes were made to make wording and intent consistent with EPA Method 16.

Section 11.3

Changes were made to make wording and intent consistent with EPA Method 16.

Old Section 12

This section was deleted to make wording and intent consistent with EPA Method 16 and the subsequent section was renumbered in sequence.

Section 12

A reference to EPA Method 16 was added based on the intended close relationship between ARB Method 16 and EPA Method 16. The methods are substantially equivalent but EPA Method 16 is revised frequently and may contain provisions or errors not found in ARB Method 16.

References to ARB Methods 16A and 4 were added because these test methods are referred to in

other sections and need to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 16A

Section 1.2

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB's Executive Officer and defining "Executive Officer" as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: "'Permit' means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act." [Government Code section 15375(a). Emphasis added.] The Board's adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 16A, because districts are not required to use Method 16A, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 2.1

Changes were made to make wording and intent consistent with EPA Method 16A.

Section 2.1.1

Changes were made to make wording and intent consistent with EPA Method 16A.

Section 2.1.3

Changes were made to make wording and intent consistent with EPA Method 16A.

Section 2.1.4

Changes were made to make wording and intent consistent with EPA Method 16A.

Section 2.1.10

Changes were made to make wording and intent consistent with EPA Method 16A.

Section 3.1.4

Changes were made to make wording and intent consistent with EPA Method 16A.

Section 4.1.3

Changes were made to make wording and intent consistent with EPA Method 16A.

Section 4.4

Changes were made to make wording and intent consistent with EPA Method 16A. An outdated reference to an EPA office from which audit samples are no longer available was deleted.

Old Section 4.5

This section was deleted to make wording and intent consistent with EPA Method 16A.

Section 6.2

Changes were made to make wording and intent consistent with EPA Method 16A.

Section 6.3

Changes were made to make wording and intent consistent with EPA Method 16A.

Section 7 and Subsections thereof

This extensive body of text was added to make wording and intent consistent with EPA Method 16A.

Section 8

A reference to EPA Method 16A was added based on the intended close relationship between ARB Method 16A and EPA Method 16A. The methods are substantially equivalent but EPA Method 16A is revised frequently and may contain provisions or errors not found in ARB Method 16A.

References to ARB Methods 6, 11 and 16 were added because these test methods are referred to in other sections and need to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Appendix Sections (c)2 and (d)

Minor clarifications to ARB's appendix to Method 16A were made to correct spelling and

grammar. Note that the appendix does not appear in EPA Method 16A.

Method 17

Introduction

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board. The change from the “Control Agency’s authorized representative” to the “Executive Officer” makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB’s method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words “Control Agency’s authorized representative” appear.

Other changes were made to make wording and intent consistent with EPA Method 17.

Section 1.1

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB’s Executive Officer and defining “Executive Officer” as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: “‘Permit’ means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act.” [Government Code section 15375(a). Emphasis added.] The Board’s adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 17, because districts are not required to use Method 17, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 2.1

Reference was deleted to citations which have been deleted from the bibliography. Appropriate descriptions of the documents involved were substituted in the text of Section 2.1, following the practice used in a recent revision of ARB Method 5 which also describes these references in the text of the method rather than in the bibliography.

Section 2.1.1

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 2.1.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 2.1.4

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 2.1.7

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 2.1.9

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 2.2.4

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 3.1.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 3.1.4

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 3.1.5

This section was added to make wording and intent consistent with EPA Method 17.

Section 3.3.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 4.1.1

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 4.1.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

EPA Method 17 refers incorrectly to “Approximation Method 4” as did ARB Method 17; an appropriate reference to Method 4 Section 1.2 has been substituted in ARB Method 17.

Other changes were made to make wording and intent consistent with EPA Method 17.

Section 4.1.4.1

Changes were made to make wording and intent consistent with EPA Method 17.

Section 4.1.5

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

An unnecessary reference to a citation which has been deleted from the bibliography was deleted.

Section 4.1.6

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 4.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 5.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 5.3

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in the introduction.

Section 6.1

Changes were made to make wording and intent consistent with EPA Method 17.

Section 6.4

Changes were made to make wording and intent consistent with EPA Method 17.

Section 6.6

Changes were made to make wording and intent consistent with EPA Method 17.

Section 6.7

Changes were made to make wording and intent consistent with EPA Method 17.

Section 6.11.1

Changes were made to make wording and intent consistent with EPA Method 17.

Section 6.11.2

Changes were made to make wording and intent consistent with EPA Method 17.

Section 6.11.3

Changes were made to make wording and intent consistent with EPA Method 17.

Section 7

A reference to EPA Method 17 was added based on the intended close relationship between ARB Method 17 and EPA Method 17. The methods are substantially equivalent but EPA Method 17 is revised frequently and may contain provisions or errors not found in ARB Method 17.

References to ARB Methods 1, 2, 3, 4 and 5 were added because these test methods are referred to in other sections and need to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 20

Section 1.1

Changes were made to make wording and intent consistent with EPA Method 20.

Section 1.2

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB's Executive Officer and defining "Executive Officer" as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: "'Permit' means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act." [Government Code section 15375(a). Emphasis added.] The Board's adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 20, because districts are not required to use Method 20, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Other changes were made to make wording and intent consistent with EPA Method 20.

Section 2.1.4

This section was added to make wording and intent consistent with EPA Method 20.

Section 2.1.5

This section was added to make wording and intent consistent with EPA Method 20.

Section 3.3

Changes were made to make wording and intent consistent with EPA Method 20.

Section 4.1

Changes were made to make wording and intent consistent with EPA Method 20.

Section 4.1.4

Changes were made to make wording and intent consistent with EPA Method 20.

Section 4.1.5

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board. The change from the “Control Agency’s authorized representative” to the “Executive Officer” makes specific the authority to make technical decisions related to any proposed departure from the test method: For the ARB’s method, the authorized representative is the Executive Officer. This same change has been made throughout the method wherever the words “Control Agency’s authorized representative” appear.

Other changes were made to make wording and intent consistent with EPA Method 20.

Section 4.1.9

Changes were made to make wording and intent consistent with EPA Method 20. The final regulation order has been revised to correctly show the amended text of the regulation.

Section 4.1.10

Changes were made to make wording and intent consistent with EPA Method 20.

Section 4.4

Changes were made to make wording and intent consistent with EPA Method 20.

Section 5.1(a)

Changes were made to make wording and intent consistent with EPA Method 20.

Section 5.1(b)

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 4.1.5.

A reference to a citation which has been deleted from the bibliography has been deleted and replaced with an admonition to conform to EPA guidance in analyzing audit samples. Changes in the organization and policy of U.S. EPA related to audit samples make the more general admonition highly desirable since analysis instructions are commonly provided with audit samples under the current EPA audit sample program.

Other changes were made to make wording and intent consistent with EPA Method 20. The final regulation order is revised to correctly show the amended text of the regulation.

Section 5.2

Changes were made to make wording and intent consistent with EPA Method 20.

Section 5.3

Changes were made to make wording and intent consistent with EPA Method 20.

Section 5.4

Changes were made to make wording and intent consistent with EPA Method 20.

Section 5.6.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 4.1.5.

The reference to procedures in 40 CFR 86 has been clarified by indicating the specific section where the procedures appear since 40 CFR 86 is quite large.

Section 6.1.2

The approval authority was changed from the “Control Agency’s authorized representative” to the “Executive Officer” of the Air Resources Board as in Section 4.1.5.

Other changes were made to make wording and intent consistent with EPA Method 20.

Section 6.1.2.1

Changes were made to make wording and intent consistent with EPA Method 20.

Section 6.1.2.2

Changes were made to make wording and intent consistent with EPA Method 20.

Section 6.1.2.4

Changes were made to make wording and intent consistent with EPA Method 20.

Section 6.2

Changes were made to make wording and intent consistent with EPA Method 20.

Section 6.2.1

Changes were made to make wording and intent consistent with EPA Method 20.

Section 6.3

Changes were made to make wording and intent consistent with EPA Method 20.

Section 7.1

This section was added to make wording and intent consistent with EPA Method 20.

Section 7.2 and Subsections Thereof

This section was added to make wording and intent consistent with EPA Method 20.

Section 7.3

Changes were made to make wording and intent consistent with EPA Method 20.

Section 7.3.1

Changes were made to make wording and intent consistent with EPA Method 20.

Section 7.3.2

Changes were made to make wording and intent consistent with EPA Method 20.

Section 7.4

Changes were made to make wording and intent consistent with EPA Method 20.

Section 7.5

This section was added to make wording and intent consistent with EPA Method 20.

Section 8

A reference to EPA Method 20 was added based on the intended close relationship between ARB Method 20 and EPA Method 20. The methods are substantially equivalent but EPA Method 20 is revised frequently and may contain provisions or errors not found in ARB Method 20.

A reference to EPA Method 19 was added to support the reference to this method in Section 7.2. There is no comparable ARB test method at this time.

References to ARB Methods 1,3,4,5,6 and 7 were added because these test methods are referred to in other sections and need to be identified clearly in this section.

References to various documents were deleted based on precedent in recently adopted and

approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

Method 21

Section 1.2

Provisions were added declaring modifications not expressly provided for to be major modifications subject to approval of the ARB's Executive Officer and defining "Executive Officer" as meaning the Executive Officer of the Air Resources Board.

The directive for Executive-Officer approval does not trigger the provisions of the Permit Reform Act, Government Code sections 15374-15378. The Permit Reform Act applies only to permits as defined in the statute: "'Permit' means any license, certificate, registration, permit, or any other form of authorization **required** by a state agency to engage in a particular activity or act." [Government Code section 15375(a). Emphasis added.] The Board's adopted test procedures do not come within this statutory definition of a permit because districts are not required to use the Board-adopted test procedures (17 CCR section 94100). The Board-adopted test procedures operate as the default when districts have not adopted their own test procedures. Thus, while Executive-Officer approval is directed for major modifications to Method 21, because districts are not required to use Method 21, approval from the Executive Officer is not a form of authorization required by a state agency.

If Executive-Officer approval for major modifications were a permit, however, the timeframes specified in 17 CCR section 60030 would apply.

Section 2.4

Changes were made to make wording and intent consistent with EPA Method 21.

Section 2.5

Changes were made to make wording and intent consistent with EPA Method 21.

Section 2.6

Changes were made to make wording and intent consistent with EPA Method 21.

Section 3.1.1(b)

Changes were made to make wording and intent consistent with EPA Method 21.

Section 3.1.1(c)

Changes were made to make wording and intent consistent with EPA Method 21.

Section 3.1.1(d)

Changes were made to make wording and intent consistent with EPA Method 21.

Section 3.1.1(e)

Changes were made to make wording and intent consistent with EPA Method 21.

Section 3.1.1(f)

This section was added to make wording and intent consistent with EPA Method 21.

Section 3.1.2(a)

Changes were made to make wording and intent consistent with EPA Method 21.

Section 3.1.2(b)

Changes were made to make wording and intent consistent with EPA Method 21.

Section 4.3.1(a)

Changes were made to make wording and intent consistent with EPA Method 21.

Section 4.3.3

Changes were made to make wording and intent consistent with EPA Method 21.

Section 4.4.1

Reference to the bibliography of ARB Method 21 has been replaced by reference to the bibliography of EPA Method 21 since the pertinent citations have been deleted from the bibliography of ARB Method 21.

Section 5

A reference to EPA Method 21 was added based on the intended close relationship between ARB Method 21 and EPA Method 21. The methods are substantially equivalent but EPA Method 21 is revised frequently and may contain provisions or errors not found in ARB Method 21.

References to various documents were deleted based on precedent in recently adopted and approved ARB test methods and the following considerations. Many of the deleted references are old and extremely difficult to obtain, and all are principally of scholarly interest. The deletions do not substantially impair the clarity of the test method or alter its meaning. The test method can be executed correctly without consulting the referenced documents. The references remain in the bibliography of the comparable EPA test method.

III. SUMMARY OF, AND RESPONSE TO, COMMENTS

The ARB received one comment letter by electronic mail. The comment, from Quanterra, is summarized and responded to below:

COMMENT: Quanterra commented that flame AA, required by Method 12, is no longer used by many labs and asked that “graphite furnace(7421), ICP(6010), and ICPMS(6020) be added as options.”

RESPONSE: The ARB notes that the numbers in parentheses in the comment refer to numbered

procedures in SW-846, "Test Methods for Evaluating Solid Waste Physical/Chemical Methods", accessible on the Internet at "<http://www.epa.gov/epaoswer/hazwaste/test/main.htm>". EPA Method 12 does not allow any of these analytical methods as alternatives, but EPA's "Emission Measurement Center Approved Alternative Method ALT-006", available on the Internet at "<http://www.epa.gov/ttn/emc/approalt.html>" allows use of ICP-AES (inductively coupled plasma - atomic emission spectrometry) subject to certain restrictions. Additionally, ARB Method 436, available on the Internet at "<http://arbis.arb.ca.gov/testmeth/vol3/vol3.htm>," allows use of all of the analytical principles listed by Quanterra. Based on the comment the ARB has amended Method 12. Section 8.4 is added to allow ICP-AES as modeled on ALT-006. Use of ARB Method 436 is allowed by insertion of Section 8.5.

COMMENT: Quanterra commented that Method 12 Section 5.4.1 requires duplicate analyses and recommended that samples be analyzed at most 2 times.

RESPONSE: ARB disagrees since the provision is consistent with EPA Method 12 and reducing the required number of replicates would adversely impact the statistical significance of results.

COMMENT: Quanterra suggests that the provision in Section 5.3.2 and Section 5.3.5 that solutions be taken to dryness may result in loss of some analyses of interest and proposes that the solutions should be taken to "near dryness".

RESPONSE: ARB disagrees since the use of the prescribed steam bath is not expected to result in loss of inorganic lead-containing compounds, no evidence exists documenting such loss, and the provisions are consistent with EPA Method 12.

COMMENT: Quanterra suggests that the requirement in Section 5.3.3 to add HNO₃ proportional to particulate catch is impractical since particulate catch is unknown.

RESPONSE; ARB disagrees since the section clearly specifies that particulate loading is to be estimated and such estimates can be readily performed by any of a number of methods including established emission factors, particulate testing history at the facility, or even visual examination of the filter and probe catch.

COMMENT: Quanterra suggests that final volumes of the blanks specified in Section 5.3.5 (100 ml) differ from the final volume of the sample solution specified in Section 5.3.3 (250 ml), purportedly making reporting limits different and hypothetically confusing the analyst.

RESPONSE: ARB disagrees since further adjustments to concentration are prescribed in Section 5.4.1 to bring each sample's concentration into the linear range of the spectrophotometer, the method contains no requirement for calculating reporting limits, reporting limits will in any case be roughly equivalent under the provisions of Section 5.4.1, and analysts normally deal with potential "confusion" by use of a multitude of routine practices such as keeping careful laboratory notes regarding dilutions, use of data entry forms to ensure all necessary data is recorded, and use of computerized spreadsheets to limit calculation errors.

COMMENT: Quanterra asks why not discard Method 12 entirely and substitute ARB Method 436.

RESPONSE: ARB considers it inadvisable to do so since at extremely low concentrations ARB Method 436 may lack the ability of Method 12 to detect and quantify lead emissions appropriately, elimination of ARB Method 12 could impact enforcement of any regulation which specifies its use, and Method 12 remains a practical alternative for determination of lead emissions. There would further be no substantial benefit derived from abandoning Method 12.