State of California
California Environmental Protection Agency
AIR RESOURCES BOARD

STAFF REPORT:
INITIAL STATEMENT OF REASONS FOR PROPOSED RULE MAKING
PUBLIC HEARING TO CONSIDER THE AMENDMENT OF
STATIONARY SOURCE TEST METHODS

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I. Introduction and Recommendations

A. Introduction

The Air Resources Board (ARB or Board) staff proposes to revise twenty existing test methods for measuring emissions from stationary sources. These emission measurement procedures can be used to determine compliance with local air pollution control or air quality management district emission regulations, to evaluate the effectiveness of air pollution control equipment, and to support control measure development for the criteria and toxic pollutant stationary source programs. In addition, the test methods can be used to develop emission inventories, including emissions information mandated by the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (Stats. 1987, Chapter 1252).

Section 39607(d) of the Health and Safety Code requires the ARB to adopt test procedures to determine compliance with ARB and district non-vehicular emission standards. Since 1983, the Board has adopted 61 test methods which are applicable to a wide variety of non-vehicular, stationary sources and additional test methods applicable to gasoline vapor recovery. The adopted test methods are referenced in Sections 94101-94161, Title 17, California Code of Regulations (CCR). However, if a district has established a test method for a specific source, section 94100 of Title 17, CCR directs that the district test method be used to determine compliance with the district's emission limit for that source.

B. Public Process

The proposed revised test methods are the result of consultation with the U.S. Environmental Protection Agency (EPA) and the districts. We conducted a public workshop on April 14, 1998 for all of the proposed revised methods. The workshop notice was sent to an extensive list of districts and organizations involved in source testing. In meetings, written correspondence, and consultation by phone, ARB staff has exchanged information with U.S. EPA staff regarding the source test methods. Finally, written comments have been received from the U.S. EPA and districts and these comments have been addressed in the proposed revisions.

C. Recommendations

We recommend that the Board adopt the following:

(1) Amendments to the California Code of Regulations to incorporate the revised test methods by reference (as outlined in Appendix 1), and

(2) Amendments to the stationary source test methods (Appendix 2)

II. Proposed Amendment and Adoption of Test Methods

A. Need for Adoption of Revised Source Test Methods

As this proposed action is part of our continuing effort to update and improve the ARB source test methods, staff has revised existing test methods to reflect advances in emission measurement technology, and to improve the accuracy and precision of source test data. The proposed changes correct a variety of minor defects in existing methods and address comments from U.S. EPA requesting improvements and corrections. The revised test methods are consistent with the corresponding U.S. EPA test methods. Maintaining test methods which are functionally equivalent to U.S. EPA methods (when appropriate EPA methods are available) but still subject to ARB administrative authority satisfies the requirements of Health and Safety Code 39607(d), provides for uniform testing standards, and allows ARB staff to provide Californians involved in source testing with effective support less readily available from U.S. EPA.

The proposed revised ARB test methods will assist district staff in evaluating source test data to demonstrate compliance with permit conditions and other district regulations. The consistency between federal and revised state source testing procedures will avoid duplicative source tests for the same pollutant.

We have altered each of the proposed revised test methods to require that modifications be approved only by the ARB Executive Officer, as in all proposed method revisions in recent years. Previously, modifications were approved by either the districts or the ARB. However, source test companies and other industry representatives have in the past requested the change to provide for greater consistency in source test requirements throughout the state. The districts retain the option of adopting their own test methods, as authorized in the California Code of Regulations, section 94100. Several districts have exercised this option: the South Coast Air Quality Management District, the Bay Area Air Quality Management District, and the San Diego County Air Pollution Control District have adopted a number of their own test methods for determining compliance with district regulations.

B. Proposed Revision of Existing Test Methods

We propose that the following test methods be revised:

Method 1 Sample and Velocity Traverses for Stationary Sources

Method 2 Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)

Method 2A Direct Measurement of Gas Volume through Pipes and Small Ducts

Method 3	Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight
Method 4	Determination of Moisture Content in Stack Gases
Method 5A	Determination of Particulate Emissions from the Asphalt Processing and Asphalt Roofing Industry
Method 5E	Determination of Particulate Emissions from the Wool Fiberglass Insulation Manufacturing Industry
Method 6	Determination of Sulfur Dioxide Emissions from Stationary Sources
Method 8	Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources
Method 10	Determination of Carbon Monoxide Emissions from Stationary Sources
Method 11	Determination of Hydrogen Sulfide Content of Fuel Gas Streams in Petroleum Refineries
Method 12	Determination of Inorganic Lead Emissions from Stationary Sources
Method 13A	Determination of Total Fluoride Emissions from Stationary Sources (SPADNS Zirconium Lake Method)
Method 13B	Determination of Total Fluoride Emissions from Stationary Sources (Specific Ion Electrode Method)
Method 15	Determination of Hydrogen Sulfide, Carbonyl Sulfide and Carbon Disulfide Emissions from Stationary Sources
Method 16	Semicontinuous Determination of Sulfur Emissions from Stationary Sources
Method 16A	Determination of Total Reduced Sulfur Emissions from Stationary Sources (Impinger Technique)
Method 17	Determination of Particulate Matter Emissions from Stationary Sources (In-Stack Filtration Method)
Method 20	Determination of Nitrogen Oxides, Sulfur Dioxide and Oxygen Emissions from Stationary Gas Turbines
Method 21	Determination of Volatile Organic Compound Leaks

The text of the proposed amended regulations is appended to this Staff Report in Appendix 1. The text of the proposed amended test methods, which the proposed regulations incorporate by reference, is appended to this Staff Report in Appendix 2.

III. Environmental and Economic Impacts

The proposal is not expected to have any adverse environmental impacts. Rather, the revised test methods will assist air quality decision-makers with improved information regarding emissions from stationary sources. The revised test methods will provide greater uniformity and improved quality assurance practices for source testing performed in California. As a result, source test data used in such air quality programs as permitting, emission inventory and air quality modeling will be more consistent and comparable.

The economic impacts of this proposal are expected to be minimal for source test firms and the industrial community. With greater uniformity between state and federal test methods, a plant operator can lower costs by consolidating the source tests needed to determine compliance to permit requirements and other emission regulations. In eliminating the provision that allows districts to modify the ARB test methods, the Board will also promote state-wide uniformity of source-testing requirements.

IV. Alternatives Considered

We have considered two options to the proposed adoption of revised ARB test methods. The first option discussed below is not to adopt the proposal; the second option is to rely on U.S. EPA test methods rather than on ARB test methods. Not adopting the revised source test procedures would be detrimental for the following reasons:

(1) Without revision, the existing source test methods listed above would remain inconsistent with corresponding EPA test methods. Further, these methods may continue to be used without the improvements, corrections, and more rigorous quality assurance practices contained in the proposed revisions; their use in determining compliance with federal requirements could thus be questioned.

(2) The improvements and corrections embodied in the proposed revised methods may be considered departures from currently prescribed procedures and thus prohibited without approval, and the authority for approval of such modifications is not centralized under the current methods. This could act to the detriment of the quality and comparability of emissions test results in the state.

The second option, relying on U.S. EPA test methods, would also be detrimental due to the need for test methods which support California's unique emission control programs. ARB adoption of test methods for determining compliance with state and district regulations is required by Health and Safety Code Section 39607(d). Several of the source test methods adopted by the board over the years were originally developed by ARB staff or districts before

EPA methods were available. The proposed revised test methods are substantially equivalent to current EPA methods since comparability of measurements and recognition of the merit and equivalence of ARB methods by EPA is desirable. Where EPA has improved upon the sampling, analysis, or quality assurance aspects of an ARB test method, we have incorporated the improvements in the proposed revisions to the ARB test methods. However, the proposed revised methods differ from EPA methods in certain provisions which have historically been found to serve unique needs in California, for instance in determining hydrogen sulfide (H_2S) emissions at geothermal facilities. The proposed methods also differ in vesting authority to approve modifications at the state level rather than the federal or district levels, i.e., at an appropriate level to ensure statewide consistency and to provide districts and testing organizations with faster decisions on modifications than the U.S. EPA. Citation of comparable EPA methods instead of the proposed revised methods would not yield these benefits.

V. Summary of Proposed Revisions to Existing Test Methods

All of the proposed revisions are to existing ARB test methods. The proposed revisions will in every case make ARB Methods more consistent with comparable U.S. EPA Methods. The proposed revisions in every case include minor changes and corrections requested by U.S. EPA except that no such changes were requested for Methods 2 and 2A. Each method has been changed to make the ARB Executive Officer the sole authority to approve modifications. Unnecessary references have been deleted from the bibliography of each method and references to comparable U.S. EPA methods and to related ARB methods have been added. Where methods include figures, these have been copied from EPA methods or redrawn to improve graphic quality. Features of ARB methods that depart from EPA methods to serve special needs in California have been preserved. Each of the methods proposed for revision has a counterpart U.S. EPA test method having a similar number and title in U.S. EPA test methods found in the Code of Federal Regulations, Title 40, Part 60, Appendix A.

We consider the proposed revisions minor since they include no change in fundamental principles or procedures of measurement.

We have briefly summarized below the existing methods for which we are proposing revisions.

ARB Method 1 Sample and Velocity Traverses for Stationary Sources

ARB Method 1 was adopted in 1983 and subsequently amended in 1986. The method prescribes requirements for selecting sampling locations and organizing multipoint traversing necessary to obtain representative samples and measurements. Method 1 is widely referenced in various other ARB methods. Approximately 13 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 2 Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)

ARB Method 2 was adopted in 1983 and has not been previously amended. The method sets out procedures for measurement of velocity and volumetric flow in stacks and ducts using a pitot tube and other instrumentation. Method 2 is widely referenced in various other ARB methods. Approximately 43 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 2A Direct Measurement of Gas Volume through Pipes and Small Ducts

ARB Method 2A was adopted in 1986 and has not been previously amended. It provides for measurement of gas flow in pipes and small ducts with a gas meter where use of a pitot tube is impractical. As an alternative to Method 2, Method 2A is referenced in various other ARB methods. Approximately 5 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 3 Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight

ARB Method 3 was adopted in 1983 and amended in 1986. It provides for measurement of carbon dioxide, oxygen and when necessary carbon monoxide using an inexpensive wet-chemistry Orsat or Fyrite analyzer. Method 3 is referenced in various other ARB methods. ARB Method 3 supports determination of excess air percentage, while EPA Method 3 does not. Approximately 49 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 4 Determination of Moisture Content in Stack Gases

ARB Method 4 was adopted in 1983 and has not been previously amended. It provides for measurement of stack gas moisture content by condensation from a sampled gas stream. Method 4 is referenced in various other ARB methods. Approximately 36 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 5A Determination of Particulate Emissions from the Asphalt Processing and Asphalt Roofing Industry

ARB Method 5A was adopted in 1986 and has not been previously amended. It provides

for measurement of particulate matter by isokinetic sampling and collection on a filter at 108 ±18° F, a lower temperature than Method 5. Approximately 47 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 5E Determination of Particulate Emissions from the Wool Fiberglass Insulation Manufacturing Industry

ARB Method 5E was adopted in 1986 and has not been previously amended. It provides for measurement of particulate matter including filterable material and condensible organics. Approximately 44 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 6 Determination of Sulfur Dioxide Emissions from Stationary Sources

ARB Method 6 was adopted in 1983 and has not been previously amended. It provides for measurement of sulfur dioxide emissions, with wet chemical analysis involving barium titration with a thorin indicator. Method 6 is referenced in various other methods related to sulfur compounds. Approximately 36 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 8 Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources

ARB Method 8 was adopted in 1983 and has not been previously amended. It provides for measurement of sulfuric acid mist and sulfur dioxide emissions using isokinetic sampling with wet chemical analysis involving barium titration with a thorin indicator. Approximately 38 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources

ARB Method 10 was adopted in 1983 and has not been previously amended. It provides for measurement of carbon monoxide using a Luft-type non-dispersive infrared analyzer. Approximately 13 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 11 Determination of Hydrogen Sulfide Content of Fuel Gas Streams in Petroleum Refineries

ARB Method 11 was adopted in 1983 and has not been previously amended. It provides for measurement of hydrogen sulfide by absorption in a cadmium sulfate solution and wet chemical analysis by iodometric titration. Approximately 107 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are

proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 12 Determination of Inorganic Lead Emissions from Stationary Sources

ARB Method 12 was adopted in 1986 and has not been previously amended. It provides for measurement of lead by isokinetic sampling and analysis using atomic absorption spectrometry. Approximately 37 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 13A Determination of Total Fluoride Emissions from Stationary Sources (SPADNS Zirconium Lake Method)

ARB Method 13A was adopted in 1986 and has not been previously amended. It provides for measurement of fluoride by isokinetic sampling with analysis using wet chemistry and spectrophotometry. Approximately 55 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 13B Determination of Total Fluoride Emissions from Stationary Sources (Specific Ion Electrode Method)

ARB Method 13B was adopted in 1986 and has not been previously amended. It provides for measurement of fluoride by isokinetic sampling with analysis using a specific ion electrode instrument. Approximately 16 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 15 Determination of Hydrogen Sulfide, Carbonyl Sulfide and Carbon Disulfide Emissions from Stationary Sources

ARB Method 15 was adopted in 1983 and has not been previously amended. It provides for measurement of individual sulfur compounds by gas chromatography using a flame photometric detector. Approximately 45 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 16 Semicontinuous Determination of Sulfur Emissions from Stationary Sources

ARB Method 16 was adopted in 1983 and has not been previously amended. It provides for measurement of individual sulfur compounds by gas chromatography using a flame

photometric detector. Approximately 63 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 16A Determination of Total Reduced Sulfur Emissions from Stationary Sources (Impinger Technique)

ARB Method 16A was adopted in 1987 and has not been previously amended. It provides for measurement of total reduced sulfur compounds by removing sulfur dioxide from a sampled gas stream with a citrate buffer and oxidizing the remaining sulfur compounds to sulfur dioxide which is absorbed, with analysis by wet chemical barium titration using a thorin indicator. ARB Method 16A departs from EPA Method 16A to provide an optional alternative of determining hydrogen sulfide in acid gas by the Tutwiler procedure. Approximately 14 minor revisions (including addition of an alternative procedure from EPA Method 16A) address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 17 Determination of Particulate Matter Emissions from Stationary Sources (In-Stack Filtration Method)

ARB Method 17 was adopted in 1983 and has not been previously amended. It provides for measurement of particulate matter using isokinetic sampling and an in-stack filter at stack temperature (as opposed to the external filter in a heated filter box used in Method 5). Approximately 42 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 20 Determination of Nitrogen Oxides, Sulfur Dioxide and Oxygen Emissions from Stationary Gas Turbines

ARB Method 20 was adopted in 1986 and has not been previously amended. It provides for measurement of nitrogen oxides and oxygen using continuous analyzer instruments, with concurrent, sulfur dioxide runs using Method 6 apparatus. Changes proposed include provision for optional carbon dioxide measurement and changing the method title to "Determination of Nitrogen Oxides, Sulfur Dioxide and *Diluent* Emissions from Stationary Gas Turbines." Approximately 66 minor revisions address U.S. EPA comments and correct minor errors noted by ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

ARB Method 21 Determination of Volatile Organic Compound Leaks

ARB Method 21 was adopted in 1986 and has not been previously amended. It provides for location of leaks using a portable instrument to detect VOC at possible leak locations. Approximately 9 minor revisions address U.S. EPA comments and correct minor errors noted by

ARB staff and others. No major revisions are proposed. Proposed revisions to the text of the method are as marked in Appendix 2.

VI. References

Code of Federal Regulations, Title 40, Part 60, Appendix A - Test Methods

Appendix 1

APPENDIX 1

PROPOSED MODIFICATIONS TO CALIFORNIA CODE OF REGULATIONS

Note: Redline indicates deleted text; Underline indicates inserted text.

Amend Section 94101, Title 17, California Code of Regulations to read as follows:

94101. Method 1 - Sample and Velocity Traverse.

The test method for determining traverse points for sample and velocity measurements is set forth in the Air Resources Board's Method 1, Sample and Velocity Traverses for Stationary Sources, adopted June 29, 1983, as last amended March 28, 1986 [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94102, Title 17, California Code of Regulations to read as follows:

94102. Method 2 - Velocity and Volumetric Flow Rate.

The test method for determining stack gas velocity and volumetric flow rate using a type S pitot tube is set forth in the Air Resources Board's Method 2, Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube), adopted June 19, 1983, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94103, Title 17, California Code of Regulations to read as follows:

94103. Method 3 - Gas Analysis.

The test method for determining carbon dioxide, oxygen, excess air, and molecular weight on a dry basis in stack gases is set forth in the Air Resources Board's Method 3, Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight, adopted June 29, 1983, as last amended March 28, 1986 [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94104, Title 17, California Code of Regulations to read as follows:

94104. Method 4 - Moisture Content.

The test method for determining the moisture content in stack gases is set forth in the Air Resources Board's Method 4, Determination of Moisture Content in Stack Gases, adopted June 29, 1983, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94106, Title 17, California Code of Regulations to read as follows:

94106. Method 6 - Sulfur Dioxide.

The test method for determining sulfur dioxide emissions is set forth in the Air Resources Board's Method 6, Determination of Sulfur Dioxide Emissions from Stationary Sources, adopted June 29, 1983, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94108, Title 17, California Code of Regulations to read as follows:

94108. Method 8 - Sulfuric Acid Mist and Sulfur Dioxide.

The test method for determining sulfuric acid mist and sulfur dioxide emissions is set forth in the Air Resources Board's Method 8, Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources, adopted June 29, 1983, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94109, Title 17, California Code of Regulations to read as follows:

94109. Method 10 - Carbon Monoxide.

The test method for determining carbon monoxide emissions is set forth in the Air Resources Board's Method 10, Determination of Carbon Monoxide Emissions from Stationary Sources,

adopted June 29, 1983, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94110, Title 17, California Code of Regulations to read as follows:

94110. Method 11 - Hydrogen Sulfide.

The test method for determining the hydrogen sulfide content in petroleum refinery fuel gas streams is set forth in the Air Resources Board's Method 11, Determination of Hydrogen Sulfide Content of Fuel Gas Streams in Petroleum Refineries, adopted June 29, 1983, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94111, Title 17, California Code of Regulations to read as follows:

94111. Method 15 - Sulfides.

The test method for determining hydrogen sulfide, carbonyl sulfide, and carbon disulfide emissions is set forth in the Air Resources Board's Method 15, Determination of Hydrogen Sulfide, Carbonyl Sulfide, and Carbon Disulfide Emissions from Stationary Sources, adopted June 29, 1983, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94112, Title 17, California Code of Regulations to read as follows:

94112. Method 16 - Sulfur.

The test method for determining emissions of total reduced sulfur is set forth in the Air Resources Board's Method 16, Semicontinuous Determination of Sulfur Emissions from Stationary Sources, adopted June 29, 1983, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94113, Title 17, California Code of Regulations to read as follows:

94113. Method 17 - Particulate Matter Emissions (In-Stack).

The test method for determining particulate matter emissions using an in-stack filtration method is set forth in the Air Resources Board's Method 17, Determination of Particulate Matter Emissions from Stationary Sources (In-Stack Filtration Method), adopted June 29, 1983, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94117, Title 17, California Code of Regulations to read as follows:

94117. Method 2A - Gas Volume Through Pipes and Small Ducts.

The test method for determining gas flow in pipes and small ducts is set forth in the Air Resources Board's Method 2A, Direct Measurement of Gas Volume Through Pipes and Small Ducts, adopted March 28, 1986, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94118, Title 17, California Code of Regulations to read as follows:

94118. Method 5A - Particulate Matter Emissions (Asphalt Processing and Roofing Sources).

The test method for determining particulate emissions from asphalt roofing industry sources is set forth in the Air Resources Board's Method 5A, Determination of Particulate Emissions from the Asphalt Processing and Asphalt Roofing Industry, adopted March 28, 1986, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94119, Title 17, California Code of Regulations to read as follows:

94119. Method 5E - Particulate Matter Emissions (Wool Fiberglass).

The test method for determining wool fiberglass particulate emissions is set forth in the Air Resources Board's Method 5E, Determination of Particulate Emissions from the Wool Fiberglass

Insulation Manufacturing Industry, adopted March 28, 1986, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94120, Title 17, California Code of Regulations to read as follows:

94120. Method 12 - Inorganic Lead Emissions.

The test method for determining inorganic lead emissions is set forth in the Air Resources Board's Method 12, Determination of Inorganic Lead Emissions from Stationary Sources, adopted March 28, 1986, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94121, Title 17, California Code of Regulations to read as follows:

94121. Method 13A - Fluoride Emissions (SPADNS Zirconium Lake Method).

The test method for determining total fluorides emissions is set forth in the Air Resources Board's Method 13A, Determination of Total Fluoride Emissions from Stationary Sources (SPADNS Zirconium Lake Method), adopted March 28, 1986, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94122, Title 17, California Code of Regulations to read as follows:

94122. Method 13B - Fluoride Emissions (Specific Ion Electrode Method).

The test method for determining total fluoride emissions is set forth in the Air Resources Board's Method 13B, Determination of Total Fluoride Emissions from Stationary Sources — (Specific Ion Electrode Method), adopted March 28, 1986, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94123, Title 17, California Code of Regulations to read as follows:

94123. Method 20 - Gas Turbines.

The test method for determining emissions from stationary gas turbines is set forth in the Air Resources Board's Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide and Oxygen Diluent Emissions from Stationary Gas Turbines, adopted March 28, 1986, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.

Amend Section 94124, Title 17, California Code of Regulations to read as follows:

94124. Method 21 - Volatile Organic Compound Leaks.

The test method for determining volatile organic compound leaks from process equipment is set forth in the Air Resources Board's Method 21, Determination of Volatile Organic Compound Leaks, adopted March 28, 1986, as last amended [Insert date of amendment], which is incorporated herein by reference.

Note: Authority cited: Sections 39600, 39601, and 39607, Health and Safety Code. Reference: Sections 39515, 39516, 39605, 39607 and 40001, Health and Safety Code.