

# **NOTICE OF PUBLIC HEARING TO CONSIDER THE ADOPTION OF A NEW TEST METHOD FOR THE DETERMINATION OF VOLATILE ORGANIC COMPOUNDS (VOC) IN CONSUMER PRODUCTS, AND**

## **THE ADOPTION OF AMENDMENTS TO THE TEST METHOD SECTIONS OF THE CALIFORNIA REGULATIONS FOR REDUCING VOC EMISSIONS FROM ANTIPERSPIRANTS AND DEODORANTS, CONSUMER PRODUCTS, AND AEROSOL COATING PRODUCTS**

### **Updated Informative Digest**

**Sections Affected:** Amendments to sections 94506(a), 94515(a), and 94526, Title 17, California Code of Regulations (CCR), and the incorporation by reference of a new test method for the Determination of VOC in Consumer Products.

#### **Background**

Section 41712 of the California Health and Safety Code requires the ARB to adopt regulations to achieve the maximum feasible reduction in volatile organic compounds (VOCs) emitted by consumer products. To date, the Board has adopted three regulations which establish VOC limits for various categories of consumer products. These regulations are the Regulation for Reducing VOC Emissions from Antiperspirants and Deodorants (the “antiperspirant and deodorant regulation”; sections 94500-94506.5, Title 17, CCR), the Regulation for Reducing VOC Emissions from Consumer Products (the “consumer products regulation”; sections 94507-94517, Title 17, CCR), and the Regulation for Reducing VOC Emissions from Aerosol Coating Products (the “aerosol coatings regulation”; sections 94520-94528, Title 17, CCR).

Each of these regulations contains a section specifying the applicable test methods. The test methods sections of the regulations are section 94506 (antiperspirants and deodorants), section 94515 (consumer products), and section 94526 (the aerosol coating products), Title 17, CCR. These sections incorporate by reference a number of different test methods. Some of the incorporated test methods are used to determine compliance with the applicable VOC limits, and some of the test methods are used for other compliance determinations.

#### **Description of the Regulatory Action**

The Board adopted a regulation establishing a new Test Method 310 for the Determination of Volatile Organic Compounds (VOC) in Consumer Products (Method 310). Method 310 will be used for determining compliance with the applicable VOC limits, and was incorporated by reference in the test methods sections of the ARB regulations for antiperspirants and deodorants, consumer products, and aerosol coating products. In addition to incorporating Method 310 by reference, the test method sections of these regulations were also modified by placing in them the language that appears in sections 3.5 and 3.6 of Method 310. Sections 3.5 and 3.6 are an integral

part of the testing procedure in Method 310, and describe the process for the Initial and Final Determination of VOC content.

Method 310 specifies that a number of tests be performed on consumer product samples. The initial testing procedure is different for nonaerosol and aerosol products. For aerosol products, the propellant is first vented and a small portion is collected in a tedlar bag to quantify the amount of exempt compounds. The amount of propellant remaining after subtracting the exempt compounds is considered to be a VOC. The VOC content of the remaining liquid portion of the aerosol product is then tested in the same way a nonaerosol product is tested. The tests include the determination of total volatiles, ammonia, water, and exempt compounds.

Method 310 also specifies an equation for calculating the percent VOC content of a product. Using the results of the various tests performed on the product, the equation essentially takes the total volatile content of a product and arrives at the percent VOC by subtracting the water, acetone, and other substances that are exempt under the regulations. If the initial determination of VOC content indicates that a product does not comply with the applicable VOC standard, Method 310 provides that the ARB Executive Officer will request the product manufacturer or responsible party to supply formulation data. Further testing may then be performed as necessary to verify the supplied formulation data. If there exists a discrepancy that cannot be resolved between the results of Method 310 and the supplied formulation data, then the results of Method 310 take precedence and may be used to establish a violation of ARB regulations.

Method 310 incorporates by reference some of the same testing procedures previously referenced in the regulations, but it also includes eight additional testing procedures. These additional procedures expand the applicability and flexibility of Method 310 and correct the limitations in the currently specified test methods. The testing procedures incorporated in Method 310 are consistent with U.S. Environmental Protection Agency (U.S.EPA), American Society for Testing and Materials (ASTM) and National Institute for Occupational Safety and Health (NIOSH) test methods.

### **Comparable Federal Regulations**

The U.S. EPA has published a proposed rule, *National Volatile Organic Compound Emission Standards for Consumer Products*, which appeared in the April 2, 1996 Federal Register (Vol. 61, No. 64, pages 14531-14543). The proposed rule specifies VOC standards for antiperspirants and deodorants and other consumer products (but not for aerosol coatings), and is similar to the ARB consumer products regulation. However, the U.S. EPA's proposed rule does not include a test method that is comparable to ARB Method 310. Instead, the U.S. EPA's proposed rule relies predominately on formulation information to demonstrate compliance.

In addition, Method 310 incorporates by reference a number of U.S. EPA, NIOSH, and ASTM test methods. Many of these same test methods are also incorporated by reference in the Code of Federal Regulations. However, the test methods incorporated in the Code of Federal Regulations

are not used for the same purpose as these test methods are used in Method 310 (i.e., to determine compliance with VOC regulatory standards for consumer products).