# REGULATION FOR LIMITING OZONE EMISSIONS FROM INDOOR AIR CLEANING DEVICES

California Code of Regulations
Title 17. Public Health
Division 3. Air Resources
Chapter 1. Air Resources Board
Subchapter 8.7. Indoor Air Cleaning Devices
Article 1. Indoor Air Cleaning Devices

## § 94800. Applicability.

Except as provided in Section 94803, this article shall apply to any person who manufactures, sells, supplies, offers for sale, or introduces into commerce in the state of California indoor air cleaning devices, including both medical and non-medical devices, used or intended for use in occupied spaces.

#### § 94801. Definitions.

- (a) For the purpose of this article, the following definitions apply:
  - (1) "Air exchange rate" means the rate at which outdoor air replaces the volume of indoor air within a given space.
  - (2) "ANSI" means American National Standards Institute.
  - (3a) "ANSI/UL Standard 507" means the version of ANSI/UL Standard 507 for Safety for Electric Fans, Ninth Edition, published on September 27, 2007 by Underwriters Laboratories, Inc. (UL).
  - (3b) "ANSI/UL Standard 867" means the version of ANSI/UL Standard 867 for Electrostatic Air Cleaners, Fourth Edition, published on December 21, 2007 by Underwriters Laboratories, Inc. (UL), and the associated Certification Requirement Decisions published by UL on March 4, 2008; April 17, 2008; April 18, 2008; July 8, 2009; July 9, 2009; and November 23, 2009.
  - (3c) "ANSI/UL Standard 484" means the version of the ANSI/UL Standard for Safety for Room Air Conditioners, Eighth Edition, dated December 21, 2007 with revisions through March 27, 2009, and most recently approved by ANSI on March 27, 2009.
  - (3d) "ANSI/UL Standard 1278" means the version of ANSI/UL Standard for Safety for Movable and Wall- or Ceiling-Hung Electric Room Heaters, Third Edition, dated June 21, 2000 with revisions through July 30, 2008, and most recently approved by ANSI on July 30, 2008.

- (3e) "ANSI/UL Standard 1017" means the version of the ANSI/UL Standard for Safety for Vacuum Cleaners, Blower Cleaners, and Household Floor Finishing Machines, Seventh Edition, dated December 7, 2001 with revisions through June 15, 2006, and most recently approved by ANSI on June 15, 2006.
- (3f) "ANSI/UL Standard 1993" means the version of the ANSI/UL Standard for Safety for Self-Ballasted Lamps and Lamp Adapters, Third Edition, dated August 28, 2009.
- (4) "ARB" means the California Air Resources Board.
- (5) "Certification mark" means the symbol used by a recognized testing organization to indicate that a representative sample of the product bearing the symbol meets certain quality or safety criteria. For this regulation the organizations of interest are the nationally recognized testing laboratories that verify compliance with the applicable ANSI/UL Standards for indoor air cleaning devices.
- (6) "CCR" means the California Code of Regulations.
- (7) "CFR" means the U. S. Code of Federal Regulations.
- (8) "Concentration" means the amount of a specified substance in a unit amount of another substance.
- (9) "de minimis" refers to a quantity so little, small, miniscule or tiny that the law does not refer to it and will not consider it.
- (10) "Distributor" means any person to whom an indoor air cleaning device is sold or supplied for the purposes of resale or distribution in commerce.
- (11) "Emission" means the release or discharge of a substance into the environment.
- (12) "Executive Officer" means the Executive Officer of the Air Resources Board or the Executive Officer's designee.
- (13) "Half-life" means the time required for the concentration of a substance to be reduced to half of its initial value.
- (14) "Indoor air cleaning device" means an energy-using product whose stated function is to reduce the concentration of airborne pollutants, including but not limited to allergens, microbes (e.g., bacteria, fungi, viruses, and other microorganisms), dusts, particles, smoke, fumes, gases or vapors, and odorous chemicals, from the air inside an enclosed space. Such devices include, but are

not necessarily limited to, portable devices of any size intended for cleaning the air nearest a person, in a room of any size, in a whole house or building, or in a motor vehicle; and stand-alone devices designed to be attached to a wall, ceiling, post, or other indoor surface.

- (15) "Industrial use" or "industrial application" means the use of ozone in the following manner:
  - (A) purification of water in an industrial plant, water treatment facility, municipal water facility, or similar facility, and swimming pools and spas
  - (B) the destruction of microbes on produce in an agricultural processing plant, refrigerated transport truck, or related facility
  - (C) chemical oxidation and disinfection in the electronics, pharmaceutical, biotechnology and chemical industries
  - (D) bleaching and other processing purposes in the pulp and paper industry
  - (E) odor control from industrial stack gases or wastewater treatment facilities
  - (F) odor and smoke control in the hotel industry, provided no people are physically present
  - (G) mold remediation, provided no people are physically present
  - (H) fire and smoke damage remediation, provided no people are physically present
  - (I) odor control in the motor vehicle reconditioning and detailing industry provided no people are physically present.
- (16) "Label" means an area containing the required statement in an easily readable format, separate from unrelated text. This is printing on the product packaging, or, for air cleaners sold prior to October 1, 2012, may be an adhesive sticker.
- (17) "Listing mark" means the symbol used by Underwriters Laboratories, Inc. to indicate that a representative sample of the product bearing the symbol meets certain UL safety criteria. The safety criteria are found in UL nationally recognized Standards 867 and 507 for air cleaning device safety, and where applicable in Standards 484, 1017, 1278 and 1993 for other appliances and devices.
- (18) "Manufacturer" means any person who imports, manufactures, assembles, produces, or packages an indoor air cleaning device.
- (19) "Medical device" means "device" as defined in subsection (h) of Section 321 of Title 21 of the United States Code.
- (20) "Mechanical filtration only" means removal of contaminants from air only via filtration with physical barrier, non-electronic techniques, i.e. air is forced through a filter medium. Materials used in the construction of the filter media may include substances such as activated charcoal, paper, foam, synthetics, ceramics, or natural fibers.

- (21) "Model group" means indoor air cleaning devices sharing the same design, operational features, device output, and performance characteristics, and manufactured by the same manufacturer. Units in the same model group may be marketed under different brand names. Units that differ only in decorative treatments such as color, remote control, or other cosmetic features not related to ozone output would belong to the same model group.
- (22) "NIST" means the U. S. National Institute of Standards and Technology.
- (23) "Non-medical device" means any indoor air cleaning device that does not meet the definition of "medical device" above.
- (24) "NRTL" means Nationally Recognized Testing Laboratory, as recognized by U. S. OSHA per section 1910.7 of Title 29 of the Code of Federal Regulations.
- (25) "Occupied space" means an enclosed space intended to be occupied by people for extended periods of time, e.g., houses, apartments, hospitals and offices.
- (26) "OSHA" means U. S. Occupational Safety and Health Administration.
- (27) "Packaging" means the materials around the consumer or institutional product which serve only to contain, enclose, incorporate, deliver, dispense, wrap or store the product. "Packaging" includes any article onto or into which the principal display panel and other accompanying literature or graphics are incorporated, etched, printed or attached. "Packaging" does not refer to a secondary container used for shipping purposes.
- (28) "ppm" is a unit of concentration measure meaning parts per million by volume. For the purposes of this regulation the volume considered is air and the substance of interest is ozone.
- (29) "Retailer" means any person who sells, supplies, or offers for sale, indoor air cleaning devices, directly to consumers.
- (30) "Supply" means to make available for purchase or use.
- (31) "UL" means Underwriters Laboratories, Inc.
- (32) "U. S." means United States of America.

#### § 94802. Standards for Indoor Air Cleaning Devices.

Except as provided in Section 94803 (Exclusions and Exemptions), title 17, California Code of Regulations, no person shall manufacture for use in California 24 months after the effective date of this regulation, or sell, supply, offer for sale, or introduce into

commerce, any indoor air cleaning device for use or intended for use in occupied spaces unless the device is certified by ARB to produce an ozone emission concentration not exceeding 0.050 ppm, as specified in Section 94804; is labeled as required in Section 94806; meets all requirements of this article; and continues to meet all requirements of this article, including the ozone emissions limit as determined by the test procedure in Section 94805.

## § 94803. Exclusions and Exemptions.

- (a) Industrial use: The provisions of this article do not apply to indoor air cleaning devices manufactured, advertised, marketed, labeled, and used solely for industrial use as defined in Section 94801(a)(15) above, provided that they are marketed solely through industrial supply outlets or businesses and prominently labeled as "Solely for industrial use. Potential health hazard: emits ozone."
- (b) *In-duct systems*: Air cleaning devices designed, marketed, and used solely as a physically integrated part of a central heating, air conditioning, or ventilating system, such as an "in-duct system," are exempt from this regulation.

## § 94804. Certification Requirements.

- (a) Each manufacturer of an indoor air cleaning device subject to Section 94802 is required to submit an application for certification to the ARB Executive Officer, P.O. Box 2815, Sacramento, CA 95812, Attn: Indoor Air Cleaning Device Certification. Information submitted on the certification application must be true and correct. Applications may be submitted by a professional association or certification organization on behalf of a manufacturer, as long as all required information and signatures from the manufacturer and test laboratory representatives are included. Upon verification of compliance with the test methods described in Section 94805, from a laboratory meeting the performance specifications in Section 94805(d), the ARB will issue an Executive Order that the indoor air cleaning device has completed certification for sale of the device within California. Certification will be granted to manufacturers, who have the responsibility to comply with all provisions of this article.
- (b) Any indoor air cleaning device using only mechanical filtration for pollutant removal is exempt from the testing requirement for the ozone emission standard of 0.050 ppm as determined in Section 94805, based on their known de minimis ozone emissions. Verification of this mechanical-filtration-only exclusion from ozone emission testing will be made by the ARB Executive Officer based on the submission of product design specifications and documentation by the manufacturer, distributor, or retailer. Documentation to the ARB shall include a description of the air cleaning performance technology employed, as well as a block diagram and schematic of the model. Indoor air cleaning devices qualifying as "mechanical filtration only" devices shall be certified under ANSI/UL Standard

507, which is hereby incorporated by reference as defined in Section 94801. Multi-function devices that include an air cleaning component that would qualify as "mechanical filtration only" but would normally be tested for their electrical safety under another ANSI/UL Standard shall be tested for electrical safety under the applicable ANSI/UL Standard. Mechanical filtration only devices certified to ANSI/UL Standard 507 or to another applicable ANSI/UL Standard for their electrical safety prior to the enactment of this regulation are eligible for certification without further testing provided documentation of compliance with ANSI/UL Standard 507 or the relevant ANSI/UL Standard is submitted and the model continues to comply with requirements of that standard. To be certified under this regulation, manufacturers of such indoor air cleaning devices must submit the information required in Sections 94804(c)(1) through 94804(c)(3) below, and Sections 94804(c)(4)(A) and 94804(c)(4)(F) below. These products are still subject to the labeling requirements specified in Sections 94806(b) and 94806(d).

- (c) The application for certification of air cleaning devices other than those covered in Section 94804(b) above must include the information in subsections (c)(1) through (c)(5) below, and any other information deemed necessary by the ARB Executive Officer. If the requested information is not applicable to the indoor air cleaning device in question, the applicant must indicate "not applicable". If the Executive Officer concurs with the applicant's judgment, the Executive Officer may waive the requirement to provide the information requested.
  - (1) Manufacturer name, mailing address, physical address, phone number, email address, and website, and name and phone number of the primary contact person for purposes of this certification;
  - (2) Applicant or representative name, mailing address, physical address, phone number, and email address, if different from manufacturer;
  - (3) Indoor air cleaning device information:
    - (A) Brand name
    - (B) Model name
    - (C) Model number
    - (D) Serial number of devices submitted for testing (where applicable)
    - (E) Manufacture date of devices submitted for testing
    - (F) Model group, and other models included in model group, where applicable
    - (G) Discussion of the principles of operation and design
    - (H) Device schematics depicting operation
    - (I) Maintenance requirements
    - (J) Operations manual, if available
    - (K) Marketing materials, if available

- (4) Indoor air cleaning device test information:
  - (A) Test facility identification and proof of current Nationally Recognized Testing Laboratory (NRTL) accreditation
  - (B) Ozone emission concentrations for all units tested, as measured according to Section 94805, including both the 24-hour measurement as well as information regarding whether any transitory measurements exceeded 0.050 ppm
  - (C) Whether a device failed the ozone emission test for any reason during final certification testing, and if so, the reason (e.g., excess transitory excursions, motor failure during the test, device not received with packaging intact, electrical part overheated/unsafe to continue, etc.)
  - (D) Chain of custody of test device(s)
  - (E) Statement from the testing laboratory that the ozone emissions were determined in accordance with the protocols in the December 21, 2007 Revision of Section 37 of ANSI/UL Standard 867, and the associated Certification Requirement Decisions published by UL.
  - (F) Notification by a testing laboratory or certification organization of compliance with the electrical safety provisions of ANSI/UL Standard 867, ANSI/UL Standard 507, or other applicable ANSI/UL Standard, where applicable, for all units tested.
- (5) Any additional information the laboratory needs to communicate.
- (d) A written notification will be provided within 30 days of receipt indicating whether the certification application has been accepted for review or, if incomplete, what additional information is required. Within 30 days after application acceptance, written notification of certification approval or disapproval will be provided. These time periods may be extended by the Executive Officer if deemed necessary because of extenuating circumstances.
- (e) Notification must be provided to the Executive Officer within 30 days if the indoor air cleaning device fails any post-certification testing conducted to verify compliance with ANSI/UL Standard 867 or ANSI/UL Standard 507, whichever is applicable.
- (f) ARB may revoke certification for any device deemed noncompliant in the future when tested according to procedures described in Section 94805, or if any other ARB certification requirements are no longer met.

#### § 94805. Test Method.

(a) For the purpose of compliance with this regulation only a single model of indoor air cleaning device within a model group, if one exists, must be evaluated under the test methods.

- (b) Testing to determine compliance with the requirements of this article, shall be performed following the ANSI/UL Standard 867 or ANSI/UL Standard 507, whichever is applicable, in their entirety, which are hereby incorporated by reference as defined in Section 94801. Appliances with a primary purpose other than air cleaning that include an air cleaning component that meets the definition of an indoor air cleaning device given in Section 94801 shall meet the applicable ANSI/UL electrical safety standard for its primary purpose, including ANSI/UL Standards 484, 1017, 1278, and 1993, which are hereby incorporated by reference as defined in Sections 94801(a)(3c), 94801(a)(3e), 94801(a)(3d), and 94801(a)(3f), respectively.
- (c) Ozone emissions will be determined using Section 37 of ANSI/UL Standard 867 and the associated Certification Requirement Decisions, which are hereby incorporated by reference as defined in Section 94801.
- (d) Testing of indoor air cleaning devices must be conducted by a laboratory currently recognized as an NRTL by the U.S. Occupational Safety and Health Administration (OSHA), to perform testing for the entire ANSI/UL Standard 867, ANSI/UL Standard 507, or other UL or ANSI/UL Standard, as applicable. If included within its scope of recognition, such an NRTL may also utilize OSHA Supplemental Programs #2, 3, 4, 5, and 6, as published in Volume 60, Federal Register, pages 12980 to 12985 (March 9, 1995), which is hereby incorporated by reference, for the ANSI/UL Standard 507, 867, or other electrical safety testing required in this regulation. Additionally, if included within its scope of recognition, an NRTL may also utilize OSHA Supplemental Program 10 (also called Satellite Notification and Acceptance Program, or "SNAP") as published in Volume 74, Federal Register, pages 923 to 927 (January 9, 2009) for the electrical safety testing, including use of test data from Programs 2 through 6 where qualified and overseen by a Program 10 (SNAP) facility. However, the ANSI/UL Standard 867 Section 37 ozone testing required in this regulation may only be performed by an NRTL or an NRTL utilizing a Supplemental Program 2 testing laboratory that has passed an ARB audit to verify their ability to accurately perform the ozone emissions testing procedure as described in ANSI/UL Standard 867 Section 37. The ARB audit may include, and is not necessarily limited to, review of written test protocol operating procedures, test chamber and analyzer configuration, background ozone measurements, air exchange rate, ozone half-life test results, equipment calibration and maintenance records, and other related information; and an onsite review. The audit may also include a requirement for annual submittal of internal audit reports on the ANSI/UL Standard 867 Section 37 test protocol and the performance of the chamber(s) in which ANSI/UL Standard 867 Section 37 tests are conducted, and any related follow up internal audit reports.

## § 94806. Labeling and Safety Mark Requirements.

- (a) All indoor air cleaning devices are required to display an ozone emissions certification label [as defined in Section 94801(a)(16)] on the product packaging after completion of requirements of Section 94804 prior to sale in California, unless satisfying the requirements for exemption as specified in Section 94803. Indoor air cleaning devices submitted to an approved laboratory for certification testing within 12 months of the effective date of this regulation, but unable to obtain certification pursuant to Section 94804 by the end of the 18th month after the effective date of this regulation, shall be allowed an additional 180 days after the postmark date of notification of product certification by ARB to meet the labeling requirements of this section. Indoor air cleaning devices that have been certified by October 18, 2010 may still be sold without the required labeling on the package until October 18, 2011, and may use an adhesive label until October 1, 2012.
- (b) For non-medical devices, the label shall be at least 1 inch by 2 inches in size, easily readable, and shall state "This air cleaner complies with the federal ozone emissions limit. ARB certified" in bold type whose uppercase letters are not less than 3 mm high.
- (c) For medical devices, the label shall be in compliance with federal law, including Section 801.415 of Title 21 of the Code of Federal Regulations. The label shall also state "ARB certified".
- (d) All indoor air cleaning devices (both medical and non-medical) are required to display the ANSI/UL Standard 867 safety certification or listing mark on the device, consistent with the ANSI/UL Standard 867 requirements of the appropriate NRTL safety certification organization, after completion of requirements of Sections 94804 and 94805 and prior to sale in California, unless the device satisfies the requirements for exemption as specified in Section 94803. Devices qualifying as "mechanical filtration only" devices as described in Section 94801(a)(20) and Section 94804(b) shall display the ANSI/UL Standard 507 certification mark.
- (e) Any indoor air cleaning device for non-industrial use that is advertised or sold via the Internet or by catalog but that has not been certified according to Section 94804 must display the following advisory in a prominent place on the primary web pages, catalog pages, and related materials where such device is advertised or displayed for sale: "Does not meet California requirements; cannot be shipped to California."

#### § 94807. Notice to Distributors, Retailers, and Sellers.

Within 12 months of the effective date of this regulation, manufacturers of indoor air cleaning devices manufactured, sold, supplied, offered for sale, or introduced into

commerce in California must submit documentation that they have provided to all of their known distributors, retailers, and sellers true and accurate copies of the final regulation adopted by the ARB and filed with the California Secretary of State. Accepted documentation of a mailed notification will include a hard copy of the materials mailed and the associated mailing list with complete contact information for each address submitted to the ARB Executive Officer. Accepted documentation of an email notification will include a copy of the email and the complete contact information for each email address submitted to the ARB Executive Officer. Such information may be kept confidential upon request as specified in Sections 91000 et seq. of title 17, chapter 1, subchapter 4 (Disclosure of Records) of the California Code of Regulations. For new distributors, retailers and sellers who become known to manufacturers after manufacturers' initial notification to their distributors and retailers, manufacturers must provide similar notice to them and provide contact information to the ARB. Noncompliance with this provision may result in rejection or revocation of certification.

# § 94808. Recordkeeping Requirements.

Manufacturers, distributors, retailers, sellers, and test laboratories are required to maintain production, quality control, sales, or testing records for products sold, supplied, offered for sale, introduced into commerce, or manufactured for sale within California for at least three years, and to make them available to the ARB upon request. Such information may be kept confidential upon request as specified in Sections 91000 et seq. of title 17, chapter 1, subchapter 4 (Disclosure of Records) of the California Code of Regulations.

#### § 94809. Rejection, Revocation, Recall, and Penalties.

An application for certification may be denied, or a certification may be revoked or suspended, for failure to comply with any provision of this article. If the Executive Officer determines that a violation of this article has occurred, he or she may order that the products involved in or affected by the violation be recalled and replaced with products that comply with this article. In the event of a violation of this article, all other penalties authorized by law apply as well.

#### § 94810. Severability.

Each part of this article shall be deemed severable, and in the event that any part of this article is held to be invalid, the remainder of this article shall continue in full force and effect.