

Subject: arbcombo -- Air Cleaner Regulation Comments
From: Rick_Roth@accessbusinessgroup.com
Date: Thu, 26 Apr 2007 13:05:03 -0400
To: aircleaners@listserv.arb.ca.gov
CC: Daniel_Edwards@accessbusinessgroup.com

Dear Ms. Jenkins

This response is provided in addition to those submitted under separate cover by Access Business Group (ABG) and those of the Association of Home Appliance Manufacturers (AHAM) of which ABG is a member company.

This response comments upon the related technical application of the ozone concentration test results obtained through UL867 and subsequently applied to the Proposed Regulation.

Best Regards,

Rick

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April 24, 2007

Ms. Peggy L. Jenkins
California Air Resources Board
Research Division, Fifth Floor
1001 I Street, P.O. Box 2815
Sacramento, CA 95814

Dear Ms. Jenkins,

This response is provided in addition to those submitted by Access Business Group (ABG) and those of the Association of Home Appliance Manufacturers of which ABG is a member company. This response comments upon the related technical application of the ozone concentration test results obtained through UL867 and applied to the Proposed Regulation.

The regulation and testing within this Proposed Regulation should fully serve its two intended purposes:

1. Test air cleaners for deliberate high ozone output and eliminate those that do not comply from the California market. I believe this will be accomplished through the short distance "throat" emission concentration portion of the Proposed Regulation.

The test method and result clearly identifies any air cleaner (or other product) that has the potential to emit elevated concentrations of ozone.

2. Test air cleaners for those that comply with Item #1 but that may through "time and concentration build-up" create room ozone concentrations in excess of the regulation requirement and eliminate those from the California market. I believe this is not entirely accomplished through the testing and application of the test result. In reality, the 24 hour test simply provides an estimate of the air cleaner's ozone performance in a single room. The public would be better served and protected by application of the same results of the test toward providing a minimum room size below which the stated product may not be safely operated.

The regulation requirements are not gauged to the air cleaner's defined space of operation. While the short term transient measurement is fair, equitable, and technically sound, the 24 hour measurement is not. Typically, a chamber determined IAQ value is applied to a modeled scenario that is then proportioned to the product tested. That is not the case with the test method employed – in this regulation a single room (chamber) result is universally applied to all air cleaners regardless of operation parameters, size and capacity.

Within the Proposed Regulation, sale of an air cleaner intended for a small room and providing an excess level of ozone would pass the regulation requirements as the chamber may be larger than the air cleaner's intended room/volume capacity. In this case the Proposed Regulation permits the continued sale of the air cleaner and does not protect the consumer from elevated ozone concentrations when the product is used according to the label.

Conversely, within the Proposed Regulation, sale of an air cleaner intended for a large room and providing an excess level of ozone would fail the regulation requirements as the chamber may be smaller or significantly smaller than the air cleaner's intended room/volume capacity. In this case, the Proposed Regulation protects the consumer from elevated ozone concentrations when the air cleaner is used in small rooms, but

prevents the sale of the air cleaner for use in larger rooms where ozone concentrations may be well within the regulation requirements. Thus, an air cleaner intended for large room use and operating acceptably in large rooms would be eliminated from the market based upon performance in a small room (chamber). I would suggest that this is neither the intent of the Proposed Regulation nor the intent of AB2276.

To address this issue, I would suggest a **minimum room size** be considered as a viable alternative. The **minimum room size** would be the square footage of a room (standard ceiling height) below which the air cleaner would be estimated to provide an ozone concentration greater than 0.05 ppmv. A means to achieve this is through standard modeling and use of the indicated 24 hour test result. As an example, a suggested maximum room size is indicated within the ANSI/AHAM AC-1 test method (a well known and document air cleaner performance standard). In AC-1, the room size (in square feet) is determined based upon the air cleaner's capacity for particle removal (CADR) that is modeled and applied to the actual potential use application of the individual air cleaner. The ANSI/AHAM AC-1 test method thus supplies a good estimate of the largest room size the air cleaner is intended to perform within. *Similarly, a modeled **minimum room size** could readily be determined utilizing the UL867 Section 37, 24-hour test result. The California Certification label would define the minimum room size for safe use. It would then be important for the "intended operating room size" to be a required manufacturer reporting parameter within Section 94804(c)(3).*

These inclusions would not change the current AB2276, or the Proposed Regulation except by addition to Section 94804(c)(3) of "intended operating room size"; addition of a subsection for a model calculation for minimum room size to Section 94805(a); and inclusion of "*Minimum Room Size for Use = ___ ft²*" within Section 94806(b).

I believe that through the use of the minimum room size label the consumer would be best informed and protected while still having a wide variety of safe and effective products available for selection and purchase. Air cleaners that are safe and effective products would not be unduly eliminated from the California market, and both the letter and intent of AB2276 would be fulfilled.

Best regards,

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