

**From:** [Chen, Wenhao \(CDPH-DEODC\)](mailto:Chen.Wenhao@CDPH-DEODC)  
**To:** [aircleaners@listserv.arb.ca.gov](mailto:aircleaners@listserv.arb.ca.gov)  
**Subject:** Comments for regulatory amendments to the air cleaner regulation discussed at the June 12, 2009 workshop.  
**Date:** Wednesday, July 08, 2009 4:39:43 PM

---

My comment is about "Limit exemption for in-duct devices"

I support the proposed amendment of "limiting exemption for in-duct devices". In-duct air cleaner has a considerable market share. Several types of in-duct devices, including electrostatic precipitators, actively charged filtration systems, UVGI and/or UVCPO air cleaners, have the potential to emit ozone. There is a need to address this concern. On the other hand, I feel the current test protocol for stand-alone air cleaning devices can not be directly applied to in-duct devices. The test rig specified in current ASHRAE 145.2P (Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Air Cleaning Devices) may be used to directly measure the ozone emission rate under nominal flow rate of the device. However, due to the interaction between ozone and HVAC/duct system, the implications of ozone emission rate of the device on the resulting indoor ozone concentration level are complex. Further research is needed on test protocol and evaluation method development for in-duct devices and should be considered during the planning stage.

Wenhao Chen, Ph.D.,  
Research Scientist  
Indoor Air Quality Section  
Environmental Health Laboratory Branch  
California Department of Public Health  
850 Marina Bay Pkwy, G365/EHLB, Richmond, CA 94804  
Phone: 510-620-2868  
Email: [wenhao.chen@cdph.ca.gov](mailto:wenhao.chen@cdph.ca.gov)