For amendment to REGULATION FOR LIMITING OZONE EMISSIONS FROM INDOOR AIR CLEANING DEVICES

Certification Requirements [§ 94804(b)] • any portable air cleaning device using only UVGI lamp(s), with or without mechanical filtration, and no other electronic air cleaning technology, is exempt from the testing requirement for the ozone emission standard of 0.050 ppm as determined in Section 94805...

To my understanding, the same certification requirement for in-duct stands as the above mentioned [§ 94804(b)] that any induct air cleaning device using only UVGI lamp(s).....are exempt. In section § 94805. Test Method. It does not state that UVGI lamp(s) are exempt. If the exemption of UVGI non-ozone emitting lamps are the same for portable and in-duct, they should be stated as such in § 94805.

This brings us to the next comment. The definition of ozone producing wavelength.

It is understood there are *four wavelengths of UV light.

- UVA between 315-400 nanometers (nm)
- UVB between 280-315 nm
- UVC between 200-280 nm
- vacuum UV (UVV) between 100-200 nm

A by-product of UVV is ozone. The specific wavelength of light that is ozone procuring is exclusively 100-240 nanometers.

Making the broad statement that only UVGI / 254 nanometer lamps are exempt puts an undue burden on manufactures that use the other UV wavelengths knowing full-well they are zero ozone emitting.

Examples of manufacturers that use other wavelengths of UV light for air treatment would be:

- Lennox PureAir uses UVA lamps <u>https://www.lennox.com/products/indoor-air-quality/air-purification</u>
- Fresh-Aire UV Mini LED use UV LED diodes near the visible spectrum of 400 nanometers https://www.freshaireuv.com/residential/mini-uv-led/

As it is excepted that ONLY the 100-240 nanometer wavelength produces ozone, it would be unfair to only exempt 254 nanometers when all other wavelengths besides the aforementioned 100-240 do not produce ozone. It is my suggestion that the exemption definition should be broadened to include all wavelengths of light except the 100-240 ozone producing wavelength.

Finally, the language of the amendment assumes that the only UV source would be a conventional coated lamp. See § 94801. Definitions (38). In fact with new advancements in technology, LEDs can also produce UV light. I would suggest we change the language to reflect any lighting source and define not the source itself but the specific nanometer wavelength. UVC LEDs are not coated and do not fall into the description of § 94801 (38).

Thank you,

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^{*}as defined by ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers)