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Greetings!

## **Air Ionization: Reality vs. Myth #1 - Ozone**

During one of my recent presentations of the Aerisa air purification technology, a client asked an interesting question, ***"Why do your odor control systems not create any significant ozone but I suspect that others do?"***

I certainly can understand why this concern is raised as a result of inaccurate, misleading, or non-information given by others. Further, improper configuration or operation of air ionization equipment have possibly led to detectable ozone (O<sub>3</sub>) readings above background.

I want you to be certain that Aerisa air ionization systems are completely safe and are specifically configured to not create any increased O<sub>3</sub> levels within the application area. As proof, see these videos from three of our installations. (Note that some of these installations are over 5 years old.)

Ozone Readings at  
Liberty Utilities - Palm Valley WRF  
Goodyear AZ  
July 29, 2014  
using a calibrated, "warmed-up"  
EcoSensors Model A-21ZX

[CLICK HERE](#) to play video

Ozone Readings at  
Cottonwood (AZ) WWTP  
July 30, 2014  
using a calibrated, "warmed-up"  
EcoSensors Model A-21ZX

[CLICK HERE](#) to play video

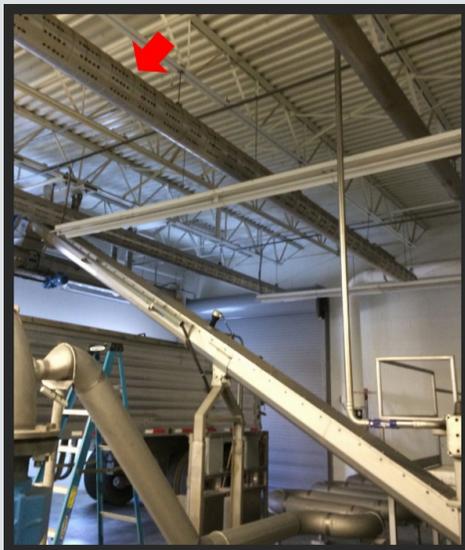
Ozone Readings at  
PERC - Santa Paula (CA) WRF  
August 5, 2014  
using a calibrated, "warmed-up"  
EcoSensors Model A-21ZX

[CLICK HERE](#) to play video

As you know, ozone can be an effective oxidizer of odorous gasses; however, relatively small

concentrations may be irritating or worse. Ozone is naturally occurring--background readings may be 0.01-0.04 ppm. The OSHA standard for ozone is 0.10 ppm average over an 8-hour work shift--so, it doesn't take much more to be an issue.

We at Aerisa recognize that all electronic equipment creates some ozone--those that say otherwise are simply disingenuous. However, if ionization equipment is manufactured correctly and the overall air purification system is engineered properly, there will be no increased levels of O<sub>3</sub>--again, see the videos.



Ceiling Mounted Ion Distribution Ductwork



Ion Generator Rack

**One very important reason that Aerisa achieves superior results is that our ionizer units use voltages below 3000V to maximize ion production (e.g., O<sub>2</sub><sup>+</sup>, O<sub>2</sub><sup>-</sup>) and negate O<sub>3</sub> formation.** Legacy manufacturers (such as the former Bentax Sweden) use voltages at 5000V and above. The electron energies produced by these higher voltages will produce considerably higher levels of ozone.

**Secondly, effective ionization system configuration necessarily includes an engineered ventilation design.** Project-specific ion distribution ductwork and exhaust systems must be engineered properly. **Aerisa wants to help you with this--we are ventilation experts with many years of HVAC experience.** Simplistic systems with improper distribution or inappropriately recirculated air lead to poor results.

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**Aerisa will continue to lead the air ionization industry through successful installations as well as conveying truthful information about our technology.**

Please visit [Aerisa.com](http://Aerisa.com) or call us.

Sincerely,

*Stuart Humphries*

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