

16th July 2010



Paul Wonnacott
President
Vectair Systems Inc.
P.O. Box 11068
Memphis
TN 38111

Dear Member,

Airsan Environmental Health and Safety Declaration

The WHO (World Health Organisation) is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends.

The WHO recommended level for ozone in occupied environments is 0.05ppm level of ozone. This is the level that is most representative of air from standard exterior environments. Using the sizing chart below you have the ability to set the Airsan unit to this level.

ROOM VOL Ft ³	MIN	LO	MED	HI
<353	✓	✗	✗	✗
353-706	✓	✗	✗	✗
706-1059	✓	✓	✗	✗
1059-1766	✗	✓	✗	✗
1766-2472	✗	✓	✓	✗
2472-3178	✗	✗	✓	✗
3178-5297	✗	✗	✓	✓

✗ TOO LOW OR TOO HIGH

✓ ACCEPTABLE

This upper level of 0.05ppm is supported by the EPA's (Environmental Protection Agency) National Ambient Air Quality Standard for ozone which is a maximum 8 hour average outdoor concentration of 0.08ppm, and the FDA (Food and Drug Administration) who requires ozone output of indoor medical devices to be no more than 0.05ppm.

The OSHA (Occupational Safety and Health Administration) guidelines for Ozone in the workplace is at twice the above level, as they recommend never exceeding the average of 0.10ppm for 8 hours exposure per day. This level is the same for NIOSH (National Institute of Occupational Health and Safety) who recommend an upper limit of 0.10ppm, not to be exceeded at any time.

In addition, the ACGIH (American Conference of Governmental Industrial Hygienists) threshold limit value for heavy work is 0.05ppm and 0.10ppm for light work.

0.2ppm is considered and accepted as the legal limit for ozone (regulated by the Environment Agencies and WHO), however our experience has been that 0.05ppm is sufficient for eliminating most odors and is the globally accepted level required for air purifying. The Airsan unit also has the ability of a timer which can be used to avoid times of occupancy if required.

When Airsan is installed according to the installation instructions it ensures that the Ozone level does not exceed the OSHA, EPA, NIOSH, FDA or ACGIH limits.

To our minds, our product is almost certainly the safest, most reliable and genuinely controllable ozone generator in the market. If it is deemed desirable to comply with the harshest exposure limits applicable in the US (mentioned in the EPA paper of 0.05ppm for indoor medical devices), then the Airsan unit is capable of being safely installed and set to produce such a level.

Testing and Benchmarks:

Vectair Systems have an independent laboratory Ozone test that was conducted against bacteria *Micrococcus luteus*. *Micrococcus luteus* is a Gram positive bacteria (bacteria are those that can be stained dark blue or violet by Gram staining) spherical, bacterium that belongs to the family Micrococcaceae. (An obligate aerobe - an organism that can survive and grow in an oxygenated environment). It is found in soil, dust, water and air, and as part of the normal flora of the mammalian skin. The bacterium also colonizes the human mouth, mucosae, oropharynx and upper respiratory tract.

This is essentially a bacteria that is used as a bench mark / representative for destroying other bacteria. Ozone will destroy anaerobic bacteria because they lack the enzymes to break down toxic forms of oxygen (Ozone O³). The anti-bacterial/fungal activity of ozone is several thousand times greater than that of chlorine. Gram positive bacteria families are Bacillaceae, Micrococcaceae, Mycobacteriaceae and Peptococcaceae. More info can be found at this link; <http://www.microbionet.com.au/grampositivebacteria.htm>

Sincerely,



Paul Wonnacott

President of Vectair Systems Inc.