A. Installation Criteria

Aircuity® may be installed in all labs, except:

1. High Risk Laboratories (based upon the Arizona State University Laboratory Risk Categories). This includes:
   - Select agents labs
   - Biosafety level 3 labs (BSL3)
   - Labs with equipment or areas that have higher-than-usual ventilation requirements (regulated areas, select agent storage areas, clean rooms, etc.)
   - Labs with highly toxic gases in any quantity
   - Any areas that require specific ventilation for compliance with regulations or certification (i.e. TB isolation rooms)
   - Lab rooms identified as high risk by bench top screening criteria or follow-up exposure monitoring studies*

*Bench top risk assessments will be conducted by EH&S in laboratory rooms to identify “high risk laboratories” as defined above and to evaluate work with chemicals of concern that are not detected by OptiNet sensors (and are conducted outside of a fume hood on the bench top).

2. Bench Top Screening Criteria for Exclusion from Proposed 4/2 ACH Ventilation Rates

If the following conditions are found within a laboratory space, EH&S will recommend that the space be excluded from the proposed 4 ACH (occupied) and 2 ACH (unoccupied) ventilation rate setting:

1) Asphyxiation hazard (e.g. use of large quantities of nitrogen (N2) gas or liquid);
2) Use of protocols outside of a fume hood in which any of the chemicals listed in the document “High Acute Toxicity by Inhalation” may be inhaled (potential immediately dangerous to life and health (IDLH) scenario);
3) Autoclave rooms with strong odor (odor control)

3. Exposure Monitoring Study Criteria for an Increase of Ventilation Rate

EH&S will recommend an increase in ventilation from 4 ACH (occupied) and 2 ACH (unoccupied), to a higher rate under the following conditions:

1) Data indicating any detectable exposure to a select carcinogen. A select carcinogen is any substance which meets one of the following criteria:

   (1) It is regulated by Cal/OSHA as a carcinogen; or
   
   (2) It is listed under the category, "known to be carcinogens," in the Annual Report on Carcinogens published by the National Toxicology Program (NTP); or
   
   (3) It is listed under Group 1 ("carcinogenic to humans") by the International Agency for Research on Cancer Monographs (IARC); or
   
   (4) It is listed in either Group 2A or 2B by IARC or under the category, "reasonably anticipated to be carcinogens" by NTP.
2) Data indicating any detectable exposure to a Reproductive Toxin via Inhalation.

3) Data indicating that a chemical exposure limit has been exceeded.

**B. Plan for Future Reduction of Ventilation Rate**

Whenever the conditions listed in Sections A.2 or A.3 of this document require increased laboratory ventilation, EH&S will strive to make a reduction in laboratory ventilation possible by elimination, control, or reduction of exposure risk. These efforts may include:

1) Encouraging researchers to conduct specific experiments inside a fume hood;
2) Substituting less hazardous chemicals in existing bench top protocols;
3) Encouraging researchers to buy pre-made solutions rather than creating their own (e.g. gels with ethidium bromide, sodium azide solutions).