

23 00 10 Subsection 12 Lab Vent Systems - EHS Interim Guidance

Modify subsection .12 Laboratory Ventilation Systems, part C. in Section 23 00 10 Systems Selection and Application per the following (deletions are shown struck through and additions are double underlined). Remainder of section is unchanged.

C. PSU Environmental Health and Safety, ~~Lab Safety~~ Requirements:

1. NOTE – Part C. is Under Revision:

2. For any project scope that includes new or renovated laboratory ventilation systems, consult EH&S for requirements and guidance, including but not necessarily limited to:

Design Phase Collaboration

Hazard/Risk Assessments

Operating parameters and testing criteria for fume hoods and other containment devices

3. EH&S Office Phone: 814-865-6391

- ~~1. Coordinate and review all laboratory designs with PSU Environmental Health and Safety, **Laboratory Safety Program**, <http://www.ehs.psu.edu/occhealth/labsafety.cfm>~~
- ~~2. Work with representatives of University's scientific staff and PSU EH&S to perform a hazard assessment to determine risk level for each lab application.~~
- ~~3. Use definitions and associated occupied/unoccupied minimum lab ventilation rates being developed within PSU Environmental Health and Safety "Lab Banding" guidelines. Minimum ventilation rates shall be established and clearly defined/scheduled on the construction documents on a room-by-room basis considering the hazard level of materials expected to be used in the room and the operation and procedures to be performed.~~
- ~~4. Be advised that the company EH&S has retained to develop methodology for laboratory hazard assessment and associated ventilation rates (i.e. lab banding) is also developing a Laboratory Ventilation Management Plan, based on ANS/AIHA Z9.5. Contact EH&S to request current document.~~
- ~~5. Comply with the following fume hood guidelines from EH&S:
 - ~~a. Review and confirm most current requirements with EH&S during the Design Phase.~~
 - ~~b. The following shall be included with regards to low flow/high performance hoods:
 - ~~1. Low Flow or Velocity Hoods—At a 12" vertical sash height, the minimum face velocity should be 60 fpm.~~~~~~

- ~~2. Existing hoods shall not be adapted to function as low flow/high performance hoods. Low flow/velocity hoods shall be purchased as hoods designed for high performance at low flow operation.~~
- ~~c. Other considerations for fume hoods:
 - ~~1. Fume hoods should not be situated directly opposite normally occupied work stations.~~
 - ~~2. Air distribution devices shall be carefully located within the laboratory to avoid turbulence and cross currents at the fume hood face that can negatively affect the fume capturing performance of the fume hood.~~
 - ~~3. Note: The 2008 National Institutes of Health (NIH) Design Requirements Manual for Biomedical Laboratories and Animal Research Facilities (DRM), formerly called the NIH Design Policy and Guidelines, is the only detailed design requirements and guidance manual for biomedical research laboratory and animal research facilities in the U.S. Compliance to the DRM, which promulgates minimum performance design standards for NIH owned and leased new buildings and renovated facilities, ensures that those facilities will be of the highest quality to support Biomedical research.~~
 - ~~4. The DRM requirement that fume hood face velocity never falls below 80 feet per minute applied to buildings that are constructed using NIH funding, and also applied to NIH funded renovations if the entire building is renovated, or if more than 50% of the building is renovated.~~~~

END of revision

Update Commentary:

Section was updated primarily for the following reasons:

- 1) *To remove prior guidance relative to EH&S and establish interim communication plan until updated requirements are published.*