

Standard Operating Procedure Chemical-free Areas in UT Arlington Laboratories

Purpose

The purpose of this SOP is to describe the eligibility requirements and application process for obtaining a Chemical-free Area designation in UT Arlington laboratories where potential biological, chemical, or physical hazard exposure risks exist and facility space limitations require a break area be designated in the active laboratory work area.

For the purposes of this SOP the term laboratory means all facilities covered by the EH&S Laboratory Evaluation Program at UT Arlington, which include the following:

- Research and teaching laboratories such as chemistry, biology, engineering, physics, geology, biomedical engineering, kinesiology etc.
- Animal and plant facilities such as animal holding rooms, surgical suites, greenhouses, etc.
- Environmental laboratories such as ecology outdoor nature laboratory, etc.
- Other facilities posing similar risks that are routinely surveyed by EH&S, such as ceramics and art studios and academic/non-academic shops.

Principal Investigators (PIs) may use this document to determine if their laboratory is eligible for a Chemical-free Area designation and, if eligible, the process for obtaining a Chemical-free Area designation.

Background

Eating, drinking, handling contact lenses, applying cosmetics, and storing of food for human consumption is not permitted in University laboratory work areas. In cases where the need is justified (i.e. existing break facilities are not reasonably accessible) and it can be demonstrated that proposed locations are sufficiently separated from actual laboratory work areas, Environmental Health & Safety (EH&S) will consider and review for approval a designated Chemical-free Area where laboratory staff may eat, drink, apply cosmetics, and conduct other personal activities not related to laboratory operations.

Restrictions and Eligibility

The following type of laboratories are not eligible for Chemical-free Area designations. Eating, drinking, handling contact lenses, applying cosmetics and storing food for human consumption is strictly prohibited in these laboratories:

- Biological laboratories designated as BSL-2 or greater.
- Radioactive material laboratories.
- Laboratories where OSHA regulated carcinogens are used/stored.
- Laboratories where research animals are housed and/or procedures with research animals take place, to include satellite locations.
- Shared laboratory spaces where there is no primary responsible PI.
- Laboratories located within reasonable access to an existing break room.

Eligible laboratories which may qualify for chemical-free area designation include laboratories operating under BSL-1 and/or laboratories whose operations involve hazardous chemicals that meet the following conditions:

1. If present, the Chemical-free Area should be located in a separate room/anteroom with a door. If a separate room is not present, the laboratory must have ample space available to provide sufficient separation from laboratory work areas where active use/storage of the biological/chemical hazards is taking place. The room shall be large enough with adequate counter/desk space to provide complete physical separation of the food area and laboratory use area. Adequacy of sufficient separation will be determined by EH&S staff during their hazard assessment and facility inspection.
2. The laboratory PI must have conducted a physical inventory of the laboratory in the CEMS system within the previous three months to ensure the accuracy of information during the review process.
3. The lab must possess suitable engineering controls for minimizing contamination (biological safety cabinets and/or fume hoods, properly placed sinks for hand washing, nonporous chemical resistant and readily cleanable lab/equipment surfaces, etc.)
4. The PI provides a hazard assessment identifying potential chemical/biological hazard exposure routes, potential for exposure, potential hazards associated with exposures, and means for minimizing potential exposure through personal protective equipment, engineering controls, administrative controls, and staff training.
5. The PI provides justification for establishing a Chemical-free Area within the space under their charge. Only applications which clearly demonstrate that existing facilities do not provide a reasonably accessible break area for laboratory staff will be considered.

Application Process

1. If the laboratory meets the eligibility requirements, the PI may complete and submit [Form 8-106, Chemical-free Area Designation Application](#) to EH&S for approval.
2. EH&S will review the application and contact the applicant to schedule a facility inspection.
3. Upon completion of the review and facility inspection, if EH&S approves of the Chemical-free Area designation, they will submit the application to the Vice President of Research and Vice President of Administration and Campus Operations for final approval.

Post Approval

1. Following notification of approval, the PI must clearly mark the floor areas forming the borders of the designated chemical-free area with tape or other appropriate means.
2. The PI must post [“Chemical-free Area” signs](#), as well as [“Hazardous Area” signs](#) to clearly identify these areas of the laboratory.
3. The PI must provide and document training to all laboratory users regarding the implementation of the Chemical-free Area.

4. EH&S will conduct periodic inspections of laboratories authorized to have a Chemical-free Area to ensure continued compliance by verifying that the conditions of the Chemical-free Area designation are being followed and that the laboratory and Chemical-free Areas are being maintained appropriately.
5. Reevaluation of designated Chemical-free Areas may be conducted at any time to ensure adequacy of the space, controls, and hazardous material use. Reevaluation may also occur if there is a significant change in laboratory use or practices.
6. Chemical-free Area designations must be renewed every three years.
7. There will be a zero tolerance policy and Chemical-free Area designations will be revoked by EH&S for any violation of the Chemical-free Area requirements and report the revocation to the VP of Research and/or VP of Administration and Campus Operations.
8. If the PI fails to uphold the conditions of the annual physical chemical inventory requirement, or significant compliance or safety violations are noted during laboratory assessments, EH&S will suspend the Chemical-free Area designation and report the suspension to the VP of Research and/or VP of Administration and Campus Operations.

General Rules

The following general rules must be observed in laboratories with an approved Chemical-free Area designation:

1. Laboratory cleanliness must be maintained at a very high level to ensure no inadvertent contamination of laboratory and food areas.
2. Gloves must be removed and hands washed with soap and water after working with hazardous materials and before working in a Chemical-free Area.
3. The Chemical-free Area must be equipped with a waste receptacle marked for non-laboratory trash only.
4. Glassware and other equipment/supplies used for laboratory operations should not be used to prepare or consume food or beverages.
5. If there is a sink located in the Chemical-free Area it must be designated as sanitary use only (hand and dish washing, etc.) If a sink is needed for laboratory operations, a second sink must be available outside of the Chemical-free Area. Sinks located outside the Chemical-free Area may not be used for dishwashing, food preparation etc.
6. Laboratory refrigerators, ice chests, cold rooms, microwaves, and ovens should not be used for food storage or preparation.
7. The use of any small appliances (microwaves, coffee makers, etc.) for food preparation in the Chemical-free Area must be in accordance with [Handbook of Operating Procedure 5-310, Space Heaters and High-Current Small Appliances Use in UT Arlington Facilities](#). If present, the written permission allowing these appliances must be available in the laboratory for review by EH&S staff.