

1.0 PURPOSES

- 1.1. To provide direction for proper laboratory closure and the associated disposition of hazardous materials (chemicals and biological agents).
- 1.2. To reduce the number of unwanted and unknown hazardous materials and associated waste disposal costs in laboratory closures.
- 1.3. To comply with hazardous waste minimization requirements of the Illinois Environmental Protection Agency.

2.0 SCOPE

- 2.1 This policy applies to the relocation or shutdown of all UIC laboratories (including shared laboratories) that utilize biological materials or chemicals that are being relocated, shutdown, or the Principal Investigator/Supervisor is leaving the campus permanently.

3.0 AUTHORITY

- 3.1 Occupational Health and Safety Administration 29 Code of Federal Regulations 1910.1450 Occupational Exposure to Hazardous Chemicals in Laboratories
http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_to_c_level=1&p_part_number=1910
- 3.2 Environmental Protection Agency 42 Code of Federal Regulations 82, Standards Applicable To Generators Of Hazardous Waste
<http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>
- 3.3 Centers for Disease Control 42 CFR 73 Possession, Use and Transfer of Select Agents and Toxins <http://www.cdc.gov/od/sap/docs/42cfr73.pdf>
- 3.4 35 Illinois Administrative Code Part 722 - Standards Applicable to Generators of Hazardous Waste
<http://www.ipcb.state.il.us/Archive/dscgi/ds.py/Get/File-13838>
- 3.5 420 Illinois Compiled Statutes 40/1 Title 32, Chapter II, Subchapter b: Radiation Protection
<http://www.ilga.gov/legislation/ilcs/ilcs2.asp?ChapterID=37>
- 3.6 The General Rules Concerning University Organization and Procedure, Article V, Section 1 (a)

4.0 DEFINITIONS

- 4.1 **Biohazardous material** – Any material containing biohazardous organisms in sufficient quantity that if exposed to this material, a susceptible host may become infected or can have an adverse reaction.

- 4.2 **Hazardous material/chemical** - Any chemical, any solid, liquid or gaseous substance, any mixture, which can produce a physical hazard or a health hazard.
- 4.3 **Principal Investigator (PI)**– A faculty member or guest member, who is assigned laboratory space in order to conduct research.
- 4.4 **Radioactive material** – any solid, liquid or gaseous substance or mixture which emits radiation spontaneously.
- 4.5 **Select Agents** – Specifically regulated pathogens and toxins as defined in Title 42 CFR, Part 73 including pathogens and toxins regulated by both DHHS CDC and USDA.

5.0 PROCEDURE

- 5.1 This process must be started at least three months before vacating the chemical use room/laboratory to allow ample time to properly dispose of all materials and should be completed at least 10 days prior to departure.
- 5.2 The Environmental Health and Safety Office (EHSO) must be notified as soon as the PI or Laboratory Supervisor is informed that his/her lab will be closed or relocated. EHSO will provide consultation to ensure a successful laboratory closeout survey. Notification can be made by email to chemwaste@uic.edu or in a memorandum to the Assistant Director for Chemical Safety, EHSO MC 645.
- 5.3 The checklist provided in *Appendix A* is to be completed prior to vacating the space. All handling of hazardous materials shall be in accordance with proper disposal procedures, and regulations governing disposal of hazardous materials available at www.uic.edu/depts/envh. For additional information, contact EHSO at 6-7411 or chemwaste@uic.edu .
- 5.4 Once completed, the checklist should be signed and submitted to the user's Department Head and to the EHSO.
- 5.5 EHSO will conduct a laboratory closeout survey within 30 days of the actual closing of the lab. This survey should be scheduled as soon as possible, at least two weeks in advance of the requested date.
- 5.6 Upon completion of the survey, EHSO will give closure and clearance to the department, utilizing the form in *Appendix B*.

- 5.7 If this procedure is not followed and the laboratory is not properly closed out, any costs incurred, EHSO time, disposal costs, fines, etc. will be charged back to the Department involved.
- 5.8 EHSO acknowledges that a departmental policy towards cost recovery from the PI/Laboratory supervisor is the purview of individual departments.

6.0 RESPONSIBILITY

- 6.1 PI or Laboratory Supervisor- proper disposition of all hazardous materials used in laboratories.
- 6.2 Department Head and Dean- any cleanup costs, regulatory action or fines and cost-recovery of such resulting from non-compliance with this policy.
- 6.3 Environmental Health and Safety Office (EHSO)
 - 6.3.1 Pre-close out survey consultation with PI/Laboratory Supervisor.
 - 6.3.2 Conducting the closeout survey.
 - 6.3.3 Oversight of correction/remediation of any problems created by failure to follow procedures described in the *Hazardous Waste Management Manual*.

7.0 REFERENCES

- 7.1 UIC Environmental Health and Safety Office, *Chemical Hygiene Plan* (Current Year)
- 7.2 UIC Environmental Health and Safety Office, *Hazardous Waste Management Manual* (Current Year)
- 7.3 29 CFR 1910.1450 Occupational Exposure to Hazardous Chemicals in Laboratories
- 7.4 35 Ill. Adm. Code Part 722 - Standards Applicable to Generators of Hazardous Waste
- 7.5 42 CFR 73 Possession, Use and Transfer of Select Agents and Toxins
- 7.6 420 ILCS 40/1 Title 32, Chapter II, Subchapter b: Radiation Protection
- 7.7 UIC Environmental Health and Safety Office, *Biohazard Safety Program Manual* (Current Year)
- 7.8 42 CFR 82, Standards Applicable To Generators of Hazardous Waste

8.0 APPROVALS

__(Signature on File)_Silvia Manning_____ 5/20/05_____
Chancellor Date

__(Signature on File)_Eric A. Gislason_____ 9/24/04_____
Vice Chancellor for Research Date

__(Signature on File)_Joe Muscarella_____ 5/17/05_____
Vice Chancellor for Administrative Services Date

__(Signature on File)_Marilyn L. Hau_____ 9/23/04_____
Director of Environmental Health & Safety Date

Appendix A

CHEMICAL/BIOLOGICAL LABORATORY CLOSE-OUT CHECKLIST

This process should be started at least three months before vacating the chemical use room/laboratory to allow ample time to properly dispose of all materials. **Under no circumstances may any hazardous chemical be disposed of down sewer drains or into the regular trash receptacles.** Refer to www.uic.edu/depts/envh *Hazardous Waste Management Manual* Chapter 3 for additional information.

- ❑ If radioactive material was present or used, the University of Illinois at Chicago Radiation Safety Section was contacted and a completed closeout survey performed.
- ❑ Select Agent organisms and toxins (www.cdc.gov/od/sap/docs/salist.pdf) were disposed of according to the *Select Agent Policy*, available at the EHSO website www.uic.edu/depts/envh, as per proper procedures. Abandonment, unauthorized transfer, or unauthorized destruction of a Select Agent is a violation of the Select Agent Act.
- ❑ Controlled substances were disposed of or transferred as specified by the Drug Enforcement Agency (DEA) permit under which they were held. Abandonment of a controlled substance is a violation of the DEA requirements.
- ❑ Chemical compounds, reagents and samples were removed from refrigerators, freezers, cold rooms, storage rooms, closets, etc., including common areas. In shared laboratories, all PIs/Laboratory Supervisors must agree upon these areas.
- ❑ All chemicals targeted for hazardous waste disposal or the Chemical Redistribution Program were removed by following EHSO procedures (see www.uic.edu/depts/envh *Hazardous Waste Management Manual* Chapter 4).
- ❑ All usable chemicals were transferred to another party in your department who took charge of them. The receiving party must be a signatory to the transfer (see *Laboratory Closure and Clearance Authorization* form) and will thereafter be responsible for proper storage, usage, and disposal of the materials.
- ❑ Chemicals and biological samples that will be transferred to a laboratory in another location at UIC or off-campus have been appropriately packaged for transfer and appropriate authorization for transfer has been obtained.

- ❑ All biohazardous waste was placed in the properly marked biohazard red bag or boxed and labeled with the biohazard symbol and removed from the laboratory.
- ❑ All glassware was cleaned and packed according to Departmental instruction.
- ❑ All broken glassware was boxed, taped shut, labeled “BROKEN GLASS” and placed for regular trash disposal.
- ❑ All compressed gas cylinders were returned to suppliers. If cylinders are non-returnable, EHSO was contacted for removal.
- ❑ All laboratory equipment has been cleaned or decontaminated with a 5% calcium or sodium bicarbonate wash, 10% bleach or soap water, as appropriate for the respective chemical and/or biological agent usage.
- ❑ Chemical Fume hood/Biosafety Cabinet surfaces, bench tops and areas where chemicals or biological agents were used or stored, were washed with a 5% calcium or sodium bicarbonate wash, 10% bleach or soap water, as appropriate.
- ❑ Prior to discarding laboratory equipment, the following items were removed:
 - capacitors or transformers (in high-voltage generating equipment)
 - mercury from lab apparatus
 - mercury switches and thermometers
 - refrigerant fluids containing chlorofluorocarbons (in freezers and refrigerators)
 - radioactive sources and chemicals
- ❑ The only items remaining are those requested by the new tenant and they are tagged with his/her name.
- ❑ No items or equipment have been left in the hallway.
- ❑ All signage for specific hazards was removed.
- ❑ After vacating the laboratory, the ID cards for access to the room/laboratory were marked “NG” (no good) with indelible ink and submitted to EHSO.

Contact Information:

Environmental Health and Safety Office 6-7412 www.uic.edu/depts/envh
Chemical Waste Removal 3-2436 chemwaste@uic.edu
Biological Safety 3-7411 health-safety@uic.edu
Radiation Safety 6-7429 radsafety@uic.edu

Biohazard waste and sharps containers disposal contacts

Building	Contact	Phone no
Hospital and Clinics	Hospital Environmental Services	6-3688
College of Dentistry	Fred Chappa	6-7633
MBRB	Bernie Greski (problems only)	6-6963
BRL	Jimmy Bowers	3-1241
IIDD	Dale Mitchell	3-1504
West side	Building Services	6-7468
East side	Building Services	5-6103

Appendix B

University of Illinois at Chicago
ENVIRONMENTAL HEALTH AND SAFETY
LABORATORY CLOSURE & CLEARANCE AUTHORIZATION

DATE: _____

Principal Investigator (PI)/Laboratory Supervisor: _____

The following issues must be addressed before this laboratory may be reassigned:

This statement is to declare that as of the above date, the following laboratory area(s) have been inspected by EHSO and ownership may be passed on. This authorization is based on visual inspection and/or information submitted to EHSO by the past users of the identified location(s):

EHSO Representative

Title

Signature

The following person(s) attest(s) to receiving chemical and/or biological agents from the above stated PI/Laboratory Supervisor and agree(s) to be responsible for their proper storage, usage, and disposal:

Printed name

Signature

Printed name

Signature

(USE BACK OF FORM AS NEEDED FOR ADDITIONAL DETAILS)