

SUBJECT: Management of Research Laboratory Spaces

1. **PURPOSE:** The purpose of this plan is to outline proper procedures for laboratory initiation, closeout, decommissioning, or transfer to a new Principal Investigator (PI).
2. **POLICY AND PROCEDURES:**
 - a) Request for Initiation
 - i) Guidelines for researchers new to the VA can be found here.
 - ii) Lab space is only assigned to researchers who have at least one VA approved research protocol that has undergone review from the Research & Development Committee (RDC), as well as all applicable subcommittees.
 - iii) Work that involves radioactive, chemical, biological, or physical hazards must happen in approved laboratory research spaces.
 - iv) An annual laboratory program review is conducted by the Subcommittee on Research Safety (SRS) for all active laboratories and protocols with hazards.
 - 1) VA Research laboratory spaces are subject to corrective action, as appropriate, if there is continuing noncompliance; a genuine risk to the safety, rights, or welfare of VA personnel or research subjects (human or animal); or indications that standards of the VA medical facility's research review/oversight programs may be compromised.
 - b) Request for Closeout
 - i) The request for authorization by the PI to closeout, decommission or transfer laboratory space must be made in writing at least 1 month prior to implementation.
 - ii) When the Principal Investigator (PI) or other responsible individual leaves the MVAHCS or moves to a different laboratory, the presence of hazards in the laboratory requires completion of the Laboratory Closeout/Transfer/Decommissioning Checklist (Attachment A).
 - c) Chemicals
 - i) Check all storage areas (i.e., fume hoods, storerooms, chemical storage cabinets), common service areas, refrigerators, freezers, and ultra-low freezers for chemicals.
 - ii) Determine which chemicals are usable and transfer responsibility for these materials to another investigator who is willing to take charge of them or contact the Industrial Hygiene Officer (IHO) (31-3928 or 31-2647) for further instruction. When transferring chemicals determine if any container labels and/or chemical inventories need to be updated. If a new user cannot be found, the materials should be disposed of properly. Hazardous chemicals must not be sewered or trashed; they must be collected for disposal.
 - iii) To prepare chemicals for disposal:
 - 1) Label all containers with the full name of the chemical.
 - 2) Securely close all containers.
 - 3) Remove the chemicals or residues from beakers, flasks, evaporating dishes, etc., and rinse with appropriate solvent until clean. If the solvent used is a hazardous chemical, the rinsate must be collected as hazardous waste. If the solvent used for rinsing is water, the rinsate can be sewered. If the chemicals or residues are [P or U-listed](#) turn the container in as hazardous waste.
 - 4) An updated inventory of the chemicals prepared for disposal must be available prior to calling the IHO (31-3928 or 31-2647) or the Research Safety Coordinator (31-5180) who will assist with proper disposal.
 - 5) Current Safety Data Sheet (SDS) must be available.

- 6) Chemical pickup must be completed before the laboratory is vacated. Waste collection will take at least 1 week after submitting chemical disposal list. Unlabeled chemicals will not be accepted without prior approval from the IHO (31-3928 or 31-2647).
- iv) Contact the GEMS Manager (31-3928) or Chemical and Environmental Safety (31-4501) with questions.
- d) Gas Cylinders
 - i) Close the gas valves.
 - ii) Remove gas connections and regulators.
 - iii) Fasten the cylinder caps.
 - iv) Return all gas cylinders to room 4P-106.
 - v) Lecture bottles containing hazardous gas that cannot be returned to distributor are to be turned in for hazardous waste disposal.
- e) Biological Samples: Animal and Human Tissues, Microorganisms, and Cultures.
 - i) Locate all stored tissue samples, microorganisms or cultures in the refrigerators, freezers, ultra-low freezers, incubators, and cold rooms.
 - ii) Disposal:
 - 1) If biological sample is stored in a liquid preservative, separate the solid sample and liquid. Place the solid waste sample in a biohazard bag and seal the bag. Do **not** assume that (liquid) preservatives can be sewered. Liquid preservatives such as formalin should be disposed of as hazardous waste unless the formalin is treated with Aldex, in which case it can be sewered.
 - 2) Place culture plates and vials into biohazard waste bags. Solid samples in glass containers/vials should be placed into the plastic disposable biohazard waste containers (dual sharps containers) or into red bags lining a satellite biohazard waste container.
 - 3) Treat liquid samples (i.e., microbial cultures) with the appropriate amount of 10% bleach, allow to sit for 1 hour, and then pour down the drain, running water for at least 5 minutes afterward.
 - iii) Any tissue that is radioactive must be disposed of as radioactive waste. Place bags in the appropriate freezer.
 - iv) If any samples are to be saved and transferred:
 - 1) Identify the investigator who will take responsibility for them.
 - 2) If samples are stored in common service areas, then ensure that the samples are appropriately labeled with the new study number and the new responsible PI.
 - 3) Information for the new emergency contact must be available at storage location.
 - v) Defrost and clean refrigerators and freezers once they are empty. Disinfect all biological sample storage areas with 10% bleach or other appropriate disinfectant.
 - vi) If you have questions, then contact:
 - 1) Chemicals: GEMS Manager (31-3928) or Chemical and Environmental Safety (31-4501)
 - 2) Biohazard Waste: EMS (31-2009)
 - 3) Dual Waste (ex: biohazardous chemical waste): see Chemicals (a) above
 - 4) Radioactive Material: RSO (31-2620) or Assistant RSO (31-4574)
 - 5) Other questions: Research Safety Coordinator (31-5180)
- f) Controlled Substances (CS)
 - i) The person in custody of the CS must dispose of outdated, surplus, waste, and no longer intended for use CS according to Federal regulations to maintain the hospital's DEA permit.
 - ii) If a container has been opened:
 - 1) Non-Hazardous: with a witness, sewer it and document it on the "green sheet" (form VA 10-2638), both signatures required. Return the "green sheet" to the Pharmacy.

- 2) Hazardous (e.g., toxic, flammable, carcinogenic, corrosive): call the Controlled Substance Officer (31-7444) for pick up.
 - iii) An un-opened container can be returned to the pharmacy with the green sheet.
 - iv) If there is no "green sheet" associated with the CS contact the Controlled Substance Officer (31-7444) for pick-up.
- g) Radioactive Materials (RAM)
- i) Prior to closeout of labs in which RAM was used, contact the RSO (31-2620) or Assistant RSO (31-4574) for specific guidance.
 - ii) Gather all RAM and label it with:
 - 1) Isotope
 - 2) Amount of isotope
 - 3) PI Name
 - 4) Date
 - iii) Call RSO for disposal of labeled container of RAM designated as Radioactive Waste, and to schedule a closeout survey.
 - iv) Perform a final contamination survey (wipe test) of all storage and use areas within the lab and decontaminate contaminated areas or equipment and perform a follow-up survey.
 - v) Provide a copy of the final contamination survey to the RSO.
 - vi) When RAM contains other hazardous materials contact the RSO (31-2620) or Assistant RSO (31-4574) for disposal of the material.
- h) Equipment
- i) All (VA and UMN) equipment must be cleaned and decontaminated before the lab is closed.
 - ii) All parts of equipment used in a radioactive environment must be cleaned and decontaminated. Notify the RSO (31-2620) or Assistant RSO (31-4574).
 - iii) If the equipment is to be discarded, note that capacitors, circuit boards, transformers, mercury switches, mercury thermometers, and radioactive sources must be removed prior to disposal. Contact the Laboratory Coordinator (31-1812) for assistance. The equipment **must** be cleaned and decontaminated prior to contacting anyone about disposal.
 - iv) If the equipment has been used in a biohazardous environment, clean and decontaminate all parts of the equipment with appropriate disinfectant.
 - v) If the equipment is the property of the VAHCS (it will have a VAHCS barcode), notify the Laboratory Coordinator (31-1812) for help in disposal/transfer.
 - vi) If the equipment is the property of the University of Minnesota, contact the University of Minnesota Coordinator for disposal/transfer instructions.
 - vii) Do **not** place (or abandon) equipment in hallways.
- i) Shared Storage Areas
- i) Check all common service ultra-low freezers, refrigerators, etc. where you may have samples/reagents/equipment stored. Discard all items prior to lab closure or transfer to an investigator who will assume responsibility.
 - ii) Contact the GEMS Manager (31-3928), Chemical and Environmental Safety (31-4501), or the Research Safety Coordinator (31-5180) with any questions regarding disposal of hazardous materials from shared storage areas (e.g., cold rooms, stock rooms, flammable liquid cabinets and waste disposal areas).

3. INVESTIGATOR'S RESPONSIBILITIES:

- a) The PI (or designee) must obtain authorization (i.e., permission) from the SRS and the ACOS for Research prior to modifying (including vacating, reassigning, converting to non-laboratory use) existing laboratory space. The procedure is as follows:
 - i) The request for authorization to decommission/closeout/transfer laboratory space must be made in writing at least 1 month prior to implementation (email request is satisfactory).
 - ii) Upon receiving such a request, the ACOS (or designee) shall:
 - a) Notify the Facility Safety Office to coordinate inventory and removal of hazardous materials, removal of infectious agents, and/or decontamination of equipment
 - b) Provide a written response to the PI's request (email response is satisfactory).
 - iii) Decommissioning laboratory space without ACOS authorization is considered a reportable incident requiring reports by the ACOS (or designee) to the Medical Director, RCO, and RDC; and a report by the Medical Director to ORO (see VHA Directive 1058.01 for reporting details).
- b) Any regulatory action or fines resulting from an inappropriate management or disposal of hazardous materials may be the responsibility of the PI and the Research Service.
- c) Investigators who do not prepare chemicals, reagents, or samples for disposal or transfer according to the above procedures may be charged for costs incurred by the Research Service to remove these materials.
- d) If an Investigator is unsure of proper disposal procedures, it is their responsibility to contact the IHO (31-3928 or 31-2647), or the Research Safety Coordinator (31-5180).
- e) Research records shall be prepared for storage per [SOP Res Svc – R&D-016](#) upon termination of research and the discontinuance of all research activities. Guidelines for research records can be found at the Research website under [Records Management](#).

4. SECURITY OF RESEARCH SPACES

- a) Identification
 - i) Each employee, vendor, and/or contractor (Without Compensation or WOC) working in a research area must wear a badge at all times.
 - ii) Vendors, contractors, visitors, and employees without authorized access are required to sign in and out at the Research Visitor's Logbook (Research Office Bldg. 70 3M-112) or at the VMU's Visitor Log Book for Building 49 (at time of each entry and exit). Visitors must be accompanied at all times by an authorized VA staff member.
- b) Authorized access
 - i) Only properly trained personnel will be granted access to research areas.
 - ii) Do not allow tailgating into secure research areas.
 - iii) For access to Building 49 and the VMU specific training with the VMU Supervisor is required.
- c) Visitors
 - i) All visitors to restricted Research areas shall be accompanied and escorted by authorized personnel, i.e., individuals with PIV card access. The number of visitors per escort is restricted to 10 or fewer individuals.
 - ii) All non-authorized persons are required to sign in as detailed in a) ii) above.
 - iii) Unescorted visits are prohibited. Visitors should never be left unattended.

5. REFERENCES:

1. VHA Handbook 1058.01. Research Compliance Reporting Requirements.
https://www.va.gov/vhapublications/publications.cfm?pub=1&order=asc&orderby=pub_Number
2. Environment of Care Plans, including Hazardous Waste Materials Plan.
<https://dvagov.sharepoint.com/sites/min/SiteDirectory/ECare/Environment%20of%20Care%20Plans/Forms/AllItems.aspx>
3. VHA Handbook 1200.08, Safety of Personnel and Security of Laboratories Involved in VA Research. April 24, 2019 (Amended January 8, 2021).
https://www.va.gov/vhapublications/publications.cfm?pub=1&order=asc&orderby=pub_Number

6. SRS Approved: August 29, 2023

7. RESCISSION: SRS-001 - Security of Research Facilities. February 4, 2020; Laboratory Closeout/Decommissioning SOP. September 7, 2021.

8. EXPIRATION DATE: N/A

9. FOLLOW-UP RESPONSIBILITY: Subcommittee on Research Safety (SRS)

10. ATTACHMENTS:

Attachment A: Research Laboratory Closeout/Transfer/Decommissioning Checklist
Attachment B: List of Equipment Transferred

11. Attachment A: Research Laboratory Closeout/Transfer/Decommissioning Checklist

Principal Investigator _____ Phone _____ Bldg./Room _____

Project Lead _____ Phone _____ Date Completed _____

	Requirements	Check
Chemicals	Prepared for disposal _____	
	Prepared for re-use: _____	
	Chemicals transferred to: _____	
Gas Cylinders	Number of cylinders returned: _____	
Biohazards Animal/ Human Tissues:	Location of animal tissues prepared for disposal: _____	
	Location of human tissues prepared for disposal: _____	
	Location of vacated/cleaned freezers/refrigerators: _____	
	Samples transferred to: _____	
Microorganisms and Cultures	Location of the vacated/cleaned freezers, refrigerators, incubators/, etc. used for storage: _____	
	Samples transferred to: _____	
Controlled Substances	Controlled substances disposed: _____ (Attach copies of tracking sheets)	
Radioactive Materials	Closeout Survey by RSO: _____	
	Location of RAM prepared for disposal: _____	
Equipment in Common Service	Location of VA equipment prepared for disposal: _____	
	Before transferring any VA equipment to another PI complete VA form 90-2237. Location of UMN equipment prepared for disposal: _____	
	See Attachment for transfer list (if no equipment transfer, don't include)	

Research Service Sign-off

Laboratories Closed Out (Bldg. & Rooms) _____

Investigator's Signature

Date: _____

Verification of Implementation by the Laboratory Coordinator

Date: _____

ACOS/Research Signature

Date: _____

