Seneca Building 4716 Pontiac Street, Suite 0103 College Park, MD 20742 301.405.3960 TEL 301.314.9294 FAX

Checklist for Vacating Laboratories

Cleaning out laboratories in preparation of a move-out can be complex and may present unique safety challenges. The Department of Environmental Safety, Sustainability and Risk (ESSR) assists Principal Investigators (PIs) in managing a safe vacating laboratory process. This checklist applies to PIs moving to new spaces on campus and those leaving the university. The form is organized by hazard type and provides actions to complete <u>prior</u> to the ESSR's "Laboratory Move-Out Inspection". At any time, contact <u>labsafety@umd.edu</u> with questions or for consultation.

Notifications & ESSR Lab Move-Out Inspection

| 1110 | JUII | ications & ESSN Lab Move-Out inspection | | | | |
|--------------------------------------|------|---|--|--|--|--|
| Yes | N/A | | | | | |
| | | Notify the department that owns the space if it is not the PI's primary department. | | | | |
| | | At least 30 days prior to the planned final move-out date, complete ESSR's <u>Vacating Laboratory Notification Form</u> at | | | | |
| | | essr.umd.edu. ESSR will alert laboratory safety, biosafety, and radiation safety staff, and schedule a Laboratory Move - | | | | |
| | | Out Inspection. | | | | |
| General Safety – Applies to All Labs | | | | | | |
| Yes N/A | | | | | | |
| | | Ensure all personnel assigned vacating laboratory tasks are trained and proficient in the recognition of hazards and the utilization of the necessary controls to ensure their safety. For example, using proper lifting techniques for heavy objects or identifying and properly addressing expired and potentially shock sensitive chemicals. | | | | |
| | | Provide personnel with personal protective equipment (PPE) for their specific tasks. This may include standard laboratory PPE appropriate for hazardous materials, or steel toe shoes and work gloves for moving heavy objects. | | | | |
| | | Transfer or dispose of all lab materials and equipment. Mark items still present in the lab during ESSR's Laboratory Move-Out Inspection with the name of the party who has agreed to take possession of the items or the disposition plan. | | | | |
| | | Prepare surplus lab equipment to be removed by <u>Terrapin Trader</u> according to Terrapin Trader's forms and procedures. | | | | |
| | | Universal waste (e.g., lead-acid batteries, aerosol cans) must be disposed of through the ESSR Regulated Waste System. | | | | |
| | | Follow ESSR's Shipping Hazardous Materials guidelines to transfer or ship samples and hazardous material off-campus. | | | | |
| | | Dispose of broken glass boxes, non-hazardous materials, and other trash according to the PI's departmental procedures. | | | | |
| | | Coordinate large/heavy equipment moves with equipment service providers or <u>Facilities Management Special Services</u> . | | | | |
| | | Clean all laboratory surfaces including fume hoods, storage cabinets, and other enclosures with a compatible solvent or | | | | |
| | | detergent (e.g., Alconox®, Simple Green®) to remove residues. Wipe down with water after cleaning. | | | | |
| | | Thoroughly check all laboratory areas for hazardous materials that may have been overlooked. | | | | |
| | | Laboratory chemical clean-outs/fee-for-service is arranged by ESSR's Environmental Affairs envaffairs@umd.edu . | | | | |
| | | Hazardous waste label tags, sharps containers, incinerator boxes, autoclave bags, and broken glass boxes can be purchased at ChemStores. | | | | |
| Chemical Safety | | | | | | |
| Yes | N/A | | | | | |
| | | Sort chemicals and compressed gas cylinders by hazard class and based upon whether they will be disposed, returned to distributor, or transferred to another research group. | | | | |
| | | Contact envaffairs@umd.edu with questions about appropriate waste management and complicated waste submissions. | | | | |
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| | | To relocate chemicals to another lab on campus, segregate by hazard class and secure containers on a cart inside compatible secondary containment. Walk the cart across campus on a preplanned safe route. Chemical containers and lids must be CLOSED, free of dents, cracks, leaks, and surface contamination. Have appropriate spill response supplies on the cart. Single chemical containers may be transported in a battle corrier. Cas sulinders must be contained and moved |
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| | | on the cart. Single chemical containers may be transported in a bottle carrier. Gas cylinders must be capped and moved using appropriate cylinder cart, dolly, or hand truck, secured with a chain or strap. |
| | | Return rented gas cylinders and cryogen dewars or liquid canisters to suppliers. |
| | | Dispose of unwanted and unclaimed chemicals or gases via the <u>ESSR Regulated Waste System</u> following campus <u>Waste</u> <u>Disposal Guidelines</u> . Place all hazardous waste and unwanted chemicals in secondary containers, segregated from |
| | | incompatible wastes. Identify all waste chemicals using <u>UMD Hazardous Waste</u> tags. If unknown chemicals or gas cylinders are found, submit a pickup request via the ESSR Regulated Waste System. A KFS |
| ш | Ш | number will be requested to pay removal fees for unknown chemicals and unknown gas cylinders. |
| | | Address controlled substances according to US DEA license requirements. If unexpected controlled substances are found, contact envaffairs@umd.edu for appropriate waste management. |
| Bi | osa | fety |
| | N/A | · |
| | | Communicate with Biosafety at biosafety@umd.edu for questions related to biological materials. |
| | | Sort biological material based upon whether they will be disposed, relocated, or transferred to another research group. |
| | | Prior to moving or relocating biological materials to a new laboratory or transferring to other research groups, an amendment with the Institutional Biosafety Committee (IBC) is required. |
| | | Biological materials to be moved within campus are transported in a sealed container placed within a secondary container and labeled appropriately. Containers and lids must be free of dents, cracks, leaks, and surface contamination. |
| | | Dispose of unwanted biological material following campus <u>Waste Disposal Guidelines</u> . After disinfection, label and submit waste contaminated with hazardous chemicals (e.g. formalin) via the <u>ESSR Regulated Waste System</u> . Contact |
| | П | envaffairs@umd.edu for assistance with determining appropriate disinfection method. |
| | | Place all sharps (e.g. needles, razorblades, Pasteur pipettes) in sharps containers and request pickup via the ESSR Regulated Waste System. Sharps containers must be purchased by the lab. |
| | | Clean all benches, equipment, and surfaces of any biological safety cabinets with disinfectant appropriate for the biological materials handled in the space. |
| | | Arrange professional decontamination using vaporized hydrogen peroxide (VHP) <u>prior</u> to any relocation or move of a biosafety cabinet. Contact <u>biosafety@umd.edu</u> for assistance in scheduling this decontamination of any biological safety cabinet. |
| | | Place animal carcasses or tissues and human tissue in plastic bags inside an approved cold storage area or incinerator box, and request pickup via the ESSR Regulated Waste System . |
| Ra | adia | ation Safety |
| | N/A | • |
| | | Communicate with Radiation Safety <u>radiationsafety@umd.edu</u> for questions related to radioactive material, radiation producing machines, and lasers. |
| | | Prior to ESSR's Laboratory Move-Out Inspection, Radiation Safety will work directly with PIs to address all radioactive material, equipment previously used with radioactive material, and radiation producing machines. |
| | | Unwanted radioactive material inventory and waste must be disposed in accordance with <u>Radioactive Waste Guidelines</u> . Request pickup via the <u>ESSR Regulated Waste System</u> . |
| | | If sealed sources, including equipment containing sealed sources (LSCs, GC ECDs) will be relocated or disposed of, |
| | | contact <u>radiationsafety@umd.edu</u> for assistance. |
| Ш | П | Items and equipment labeled "Caution Radioactive Material" require a documented wipe test and a meter survey, reviewed and approved by Radiation Safety <u>before</u> markings and labels can be removed. Utilize appropriate detectors |
| | | (e.g. LSC, gamma counter, PGM, NaI) sensitive to detect the radionuclides handled. Decontamination must be |
| | | performed to achieve levels that are As Low As Reasonably Achievable (ALARA) and within acceptable release limits. |

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| Ш | Ш | Transfer or shipments of any radioactive material, inventory, or equipment that was used with radioactive material, |
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| | | requires preapproval by Radiation Safety. These transfers on campus or to an off-campus location, are to be conducted |
| | | only by review and approval of Radiation Safety. |
| | | Ensure no outstanding orders of radioactive materials are scheduled. |
| | | An amendment to the Radioactive Material Authorization from <u>radiationsafety@umd.edu</u> is required if moving laboratory operations to a new laboratory within the university. |
| | | Equipment with the potential for internal contamination requires careful decontamination and assessment. If appropriate, flush non-radioactive solutions through equipment with potential internal contamination (e.g. HPLCs); document an analysis of effluent indicating no residual contamination. Contact Radiation Safety to develop a decontamination and survey method for equipment meeting this description. |
| | | After all radioactive material, including waste, is removed from the laboratory, conduct a final wipe test of all areas and equipment where radioactive material was used or stored. Decontaminate areas exceeding isotope specific release limits. Document a survey of areas after decontamination. Provide Radiation Safety with all survey records. |
| | | Radiation Safety will conduct an independent closeout survey and formal decommissioning. Radiation Safety's survey may include confirmation surveys of equipment used with radioactive material. |
| | | Only Radiation Safety is approved to remove "Caution Radioactive Material" postings from equipment (e.g. freezers, fume hoods) and area/room postings. |
| | | Contact <u>labsafety@umd.edu</u> if moving lasers to a new laboratory location within the university or transferring lasers to other research groups to update laser registry. |

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