

Preparing to Vacate Your Laboratory

The Office of Clinical and Research Safety (OCRS) Phone: 322-2057 Fax: 343-4957 Emergency: 875-3779 www.vumc.org/safety

ADMINISTRATIVE/GENERAL

Inventory: Look at what you have on hand – in all your cabinets, on all your shelves and in your storage areas. Decide what is unwanted and what is to be moved. Due to strict regulatory requirements, please reduce your on-hand inventory to minimized levels.

Old or Damaged Equipment: Schedule to have damaged equipment (i.e., frayed wires, missing guard) scheduled for repair during the move, accomplishing the repair during lab downtime.

CHEMICAL

Outdated, unwanted, or waste chemicals: OCRS operates Waste Collection and Chemical Redistribution programs. Information about these programs can be found on the OCRS website or by calling 322-2057.

Unknowns or unlabeled chemicals: Attempt to relabel unmarked containers as soon as they are located. Once they are moved, their identity may be lost. If the chemicals are true unknowns, tag the unknown chemical container as waste and submit it to the Hazardous Waste Collection program as an unknown. Additional disposal costs are incurred for the identification of unknown chemicals; these additional costs may be charged back to your department.

OCRS Quick Facts:

Common Causes of Accidents During Packaging and Transport

The most common acts that result in chemical spills or accidents during chemical transport are avoidable. They include:

- Knocking bottles against each other—the bottom of the containers often drop out.
- Not using impermeable secondary containers during the transport of liquid hazardous materials which are large enough to contain a spill
- Attempting to lift containers or bottles by the cap. Caps may be loose or not fit correctly, causing the container to drop.
- Placing bottles in boxes without adequate packing.
- Trying to save trips by stacking boxes too high on carts; trying to move too much at once.
- Box bottoms splitting or opening when the box is lifted by the sides; or, by not supporting the bottom while lifting.
- Use of makeshift carts. For instance, stacking boxes on chairs with wheels. Carts with side railings are preferable to open carts.

"Surprises" left under the fume hood or tucked behind equipment: Look for old supplies from previous lab staff and students. Most labs have relics and artifacts from times past that should be identified and disposed of before moving to the new location.

Old lecture bottles or other gas cylinders: Gas cylinders and lecture bottles that are no longer used should be returned to the vendor. Contact OCRS if you have any cylinders with unknown contents. Empty cylinders should be labeled "empty." Always leave at least a minimum 25-psi pressure in all "empty" cylinders to prevent contamination and the formation of explosive materials.

Peroxide-forming materials: Peroxide-forming materials should be disposed of and not moved to the new laboratory if the container has been opened and is more than six months old or has not been opened and is more than one year old. Always dispose of peroxidizables before the expiration date listed by the supplier. Contact OCRS if more instructions are needed.

Chemically contaminated equipment: Equipment, which is contaminated with hazardous chemicals, must be thoroughly cleaned and decontaminated prior to relocation or disposal. Contact OCRS if more instructions are needed.

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Chemical Containers: Hazardous materials should not be moved in compromised containers. Containers should be intact, and caps should be in good shape. This is one of the major causes of accidental spills. Use sturdy, partitioned boxes to pack chemical containers. To prevent breakage and contain spills, cushion the containers with absorbent materials such as vermiculite. For liquid chemicals, secondary containers should be used which will completely contain a spill of the materials within.

Chemical Compatibility. Separate chemicals into compatible groups and provide separate, labeled boxes for each group. This is extremely important to prevent serious mishaps should boxes be dropped or damaged in transport. Since packing chemicals for moving requires substantial individual handling, it is a good time to lay the groundwork for segregated storage in your new lab.

Separate chemicals into these categories:

Acids (mineral) Oxidizers Caustics (bases) Poisons (toxics) Flammables (including organic acids) Water Reactives

*Non- Hazardous / Non-Reactive solid chemicals should be segregated and separated so they may be moved by the movers.

Contact OCRS (322-2057) for instructions on how to move laboratory equipment containing potentially harmful materials or chemicals, such as:

Asbestos Containing Equipment:

- Autoclaves
- Ovens
- Gloves
- Hot Pads

Mercury Containing Equipment:

- Manometers
- Thermometers
- Barometers
- Mercury Switches

PCB Containing Equipment:

- Diffusion Pumps
- Transformers

Freon Containing Equipment:

- Refrigerators
- Freezers
- Low Temperature Chambers

Degreasing Tanks / Vats

Acid Etching Tanks / Equipment

Equipment containing Internal Compressed Gas Cylinders

Fragile components, or components which may spill if inverted, must be carefully secured or chained (for instance, a glass manometer containing mercury).