

HAZARDOUS MATERIALS LAB MOVE GUIDE

A Step-by-Step Checklist for Lab Users

IMPORTANT: The NDSU Safety Office must review and coordinate the movement of chemicals, biological materials, and radioactive materials. Laboratory personnel must not move these materials without Safety Office review and approval.

This guide is intended to help laboratory users prepare hazardous materials for safe transport during a laboratory move. Contact the Safety Office as early as possible in the move process to allow time for inventory review, packaging guidance, scheduling, and safe transport.

1. LAB USERS RESPONSIBILITIES (WHAT TO DO & WHEN)

BEFORE YOU PACK (Inventory & Cleanup)

- ☐ **Dispose Hazardous Waste:** Dispose of all hazardous waste before the move. Do not pack old, expired, degraded, unstable, unknown, or unlabeled chemicals for transport. The Safety Office will not relocate hazardous waste to a new lab. Only usable chemicals will be moved.
- ☐ **Update Chimera:** Verify that all chemicals being moved are listed in the Chimera Chemical Inventory System. Chemicals that are not listed in Chimera may not be approved for transport.
- ☐ **Export Inventory/Manifest:** Log into Chimera, run the 'Chemical Move/Disposal Manifest' report, and export it to Excel. Review the spreadsheet to confirm that it includes all chemicals proposed for the move.
- ☐ **Email Safety Office:** Email the Excel inventory sheet to ndsu.wastehandlingprogram@ndsu.edu. Do not begin packing chemical boxes until the Safety Office has reviewed the inventory and provided direction.

DURING PACKING (Preparing Boxes)

- ☐ **Request Move Supplies:** Email ndsu.wastehandlingprogram@ndsu.edu with the building, room number, destination, approximate number of boxes needed, and any special materials that may require coordination. The Safety Office will provide boxes and labels.
- ☐ **Tape the Bottom of Each Box:** Use strong packing tape on the bottom of each box. Do NOT tape the top closed. Leave the top open or folded so the Safety Office can inspect your containers before moving.
- ☐ **Separate Chemicals by Hazard Class:** Pack chemicals according to the primary hazard class identified by the Safety Office during inventory review. Do not combine chemicals of different hazard classes in the same box.
- ☐ **Pack Single Layer Upright:** Ensure all containers are tightly closed, intact, upright, and placed in a single layer. Do not stack chemical containers on top of each other.
- ☐ **Prevent Glass Contact:** Use appropriate cushioning or absorbent material, such as cardboard dividers, pads, or vermiculite, to separate containers. Glass containers should never touch each other directly.
- ☐ **Complete Chemical Move Box Labels:** Place a Chemical Move Box Label on each box. Include the primary hazard class, unique box number, pickup room, destination room, and contact information.
- ☐ **Attach Two Box Inventories:** Create a Box Chemical Inventory sheet for each chemical box. This should include all of the chemicals inside the box. Attach two copies of this inventory sheet to the outside of each box prior to transport.
- ☐ **Request Pickup:** When all boxes are ready, fill out the online Hazardous Material Move Request on the NDSU Safety webpage. Safety Office staff will coordinate pickup and transport.

AFTER THE MOVE (Unpacking & Setup)

- ☐ **Unpack Immediately:** Laboratory users must unpack and store delivered chemicals as soon as possible after delivery. Do not leave chemical boxes in hallways, corridors, or unsecured areas. You may reuse chemical boxes if you have more chemicals to move.
- ☐ **Store Materials Appropriately:** Place chemicals into appropriate storage cabinets, refrigerators, freezers, or other designated storage locations based on hazard class and compatibility.
- ☐ **Update Chimera Locations:** Update the room and building location for each chemical in Chimera as chemicals are unpacked and stored. Updating locations box-by-box is recommended.
- ☐ **Update Emergency Information:** Update Emergency Information Posters and laboratory hazard signage to reflect the hazards present in the new location.
- ☐ **Complete Lab Closeout:** Submit the online Laboratory Closeout Form for the old laboratory space once hazardous materials have been removed and the space is ready for closeout review.

2. CHEMICAL PACKAGING GUIDELINES BY HAZARD CLASS

Chemicals must be packed by the primary hazard class identified by the Safety Office during inventory review. Do not mix different hazard classes in one box. Use the guidance below to select appropriate cushioning and absorbent materials.

Hazard Class	Cushioning & Absorbents to Use	Can You Mix with Other Classes?
Flammable	Vermiculite or cushioning pads	NO - Only pack flammables in this box
Acid	Acid-neutralizing pads or vermiculite	NO - Only pack acids in this box
Caustic	Caustic-neutralizing pads or cushioning	NO - Only pack caustics in this box
Toxic	Absorbent pads or vermiculite	NO - Only pack toxics in this box
Oxidizer	Non-reactive cushioning material	NO - Only pack oxidizers in this box
Water Reactive	Dry cushioning / moisture barriers	NO - Only pack water reactives in this box
Non-Hazardous	Standard cardboard dividers or paper packing	NO - Only pack non-hazardous in this box

3. PROTOCOLS FOR SPECIAL & TIME-SENSITIVE MATERIALS

BIOLOGICAL SAMPLES & MATERIALS

- ☐ **Sealed Primary:** Pack biological materials in a securely closed, leak-proof primary container.
- ☐ **Use Secondary Containment:** Put primary containers inside a second leak-proof container (like a sealed bag or rigid container).
- ☐ **Add Absorbent:** Add enough absorbent material inside the second container to absorb all liquid in case of leakage.
- ☐ **Labels:** Label the outer container with a description of the material and appropriate biohazard identification when applicable.
- ☐ **Coordinate Before Transport:** Researchers may move biological samples only with Safety Office review and approval.

REFRIGERATED, FROZEN & COLD ITEMS

- ☐ **Provide Cooling Materials:** Laboratory users are responsible for providing coolers, ice, or dry ice needed during the move.
- ☐ **Label Coolers:** Any cooler used to move chemicals must have a Box Label and Box Inventory (2 copies) attached.
- ☐ **Use Dry Ice Warning Labels:** If using dry ice, attach dry ice warning labels to the outside of the cooler or box.
- ☐ **Coordinate Timing:** Coordinate cold-item moves with the Safety Office in advance. Provide at least 24 hours notice before the move.
- ☐ **Verify Storage Equipment:** Confirm that new storage equipment (e.g., fridge/freezer) is ready before materials are delivered.

COMPRESSED GAS CYLINDERS

- ☐ **Lecture Bottles ONLY:** The Safety Office will only move small lecture bottles. Disconnect and cap them securely.
- ☐ **Large Cylinders:** The Safety Office will NOT move large cylinders. Contact your gas vendor to move them.
- ☐ **Do NOT put Chemical Move Box Labels on compressed gas cylinders.**

RADIOACTIVE MATERIALS

- ☐ **Do Not Move Radioactive Materials Yourself:** Laboratory personnel must not pack, transport, or relocate radioactive materials without Radiation Safety Officer review and approval.
- ☐ **Contact the Radiation Safety Officer early:** Contact the RSO through the Safety Office at 701-231-7759 as early as possible in the move process.

INFRASTRUCTURE WARNING: Before scheduling a hazardous materials move, confirm that the new laboratory space is ready to receive the materials. Required storage equipment, including refrigerators, freezers, flammable storage cabinets, corrosive cabinets, and other specialized storage systems, must be installed, functioning, and available before delivery.

Delivered hazardous materials must be unpacked and stored immediately.