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# **GUIDELINES FOR RELOCATION OF CHEMICALS (LAB MOVES)**

The movement/relocation of chemicals has the potential to create hazardous conditions. University faculty, staff, and students must be cautious when handling and packaging chemicals prior to relocation. It is important to consider chemical segregation and to ensure that incompatible chemicals are packed separately. The following guidelines have been established to minimize the hazards associated with the movement and relocation of chemicals. Please consult with the Department of Environmental Health and Safety (EH&S) prior to moving chemicals.

#### 1. Internal Relocation

Section 1 of the guidelines applies only to chemicals being moved/relocated within a building or within connected buildings at the University. Over-the-road transportation of chemicals is governed by federal regulations and must be performed by a licensed hazardous materials transporter (see Section 2, Transport of Chemicals via Public Road).

## 1.1 Segregation

Chemicals should be properly segregated based on chemical compatibility prior to packaging. Segregate incompatible chemicals by placing them in separate containers (e.g. acids from bases, oxidizers from organics, etc.). For chemical compatibility guidance, refer to Section 10 of a specific chemical's Safety Data Sheet (SDS) or to the University's Compatible Chemical Storage Groups guidelines (EH&S Guideline 04-025).

# 1.2 Packaging

- 1.2.1 Compatible chemicals may be packed together in sturdy containers/cardboard boxes.
- 1.2.2 Packaging medium such as newspaper, paper towels, Styrofoam, bubble wrap, or vermiculite should be used to cushion the chemical containers prior to movement.
- 1.2.3 Containers/boxes should be closed and secured using packing tape.
- 1.2.4 Containers/boxes must be labeled or have a chemical inventory attached.

#### 1.3 Movement/Relocation

- 1.3.1 Ensure that the containers/boxes of chemicals are secure prior to movement.
- 1.3.2 Use caution when moving the chemicals through the building.

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- 1.3.3 Use a secondary container or a utility cart with ledges to contain product and spills.
- 1.3.4 Use freight elevators (where available) for the transport of chemicals. If freight elevators are not present or not in service, passenger elevators may be utilized with caution. When possible, isolate the elevator from public use while transporting chemicals.
- 1.3.5 Glove use is not necessary to transport properly packaged chemicals. Gloves should not be worn outside of the laboratory.

## 2. Transport of Chemicals via Public Road

On-campus movements of hazardous materials that utilize or cross a public road or street are subject to federal regulations from the U.S. Department of Transportation (DOT). The regulations require proper chemical segregation, packaging, marking, labeling, and documentation of each hazardous chemical.

A licensed hazardous materials transporter must be used for the transport of DOT-regulated chemicals over public roads. DOT-regulated chemicals include (but are not limited to):

- Compressed gases (e.g. hydrogen, methane, nitrogen, carbon dioxide, oxygen, etc.)
- Flammable liquids (e.g. ethanol, methanol, acetone, xylene, etc.)
- Flammable and water-reactive solids (e.g. sodium dodecyl sulfate powder, paraformaldehyde powder, sodium borohydride, magnesium metal, etc.)
- Oxidizers (e.g. ammonium persulfate, sodium nitrate, hydrogen peroxide, etc.)
- Organic peroxides (e.g. benzoyl peroxide, chloroperoxybenzoic acid, etc.)
- Toxic materials (e.g. sodium azide, chloroform, phenol, ethidium bromide, etc.)
- Radioactive materials (e.g. uranyl nitrate, thorium nitrate, uranyl acetate, etc.)
- Corrosive materials (e.g. hydrochloric acid, nitric acid, ammonium hydroxide, sodium hydroxide, etc.)

Procuring a licensed hazardous materials transporter for the relocation of chemicals over public road is the responsibility of the School, Department, and/or laboratory group. The School, Department, and/or laboratory group are responsible for costs related to the transport/relocation of DOT-regulated chemicals.

Contact EH&S at 412-624-9505 or <u>safety@ehs.pitt.edu</u> for assistance with determining which hazardous materials must be transported by a licensed hazardous materials transporter. EH&S can also provide a list of vendors that provide hazardous materials transportation services.