

University of California, Berkeley
Policy Issued: March 31, 2008
Effective Date: April 1, 2008
Policy Revised: May 11, 2009 (see end for changes)
Supersedes: None, New Policy



Hazardous Materials Shipping and Transportation

Responsible Executive: Vice Chancellor-Administration
Responsible Office: Office of Environment, Health & Safety (EH&S)
Contact: EH&S Hazardous Materials Shipping Specialist
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Policy Statement

It is the policy of the University of California, Berkeley (UC Berkeley) to ship and transport hazardous materials (sometimes referred to as “dangerous goods”) safely and in compliance with the rules and regulations promulgated by the US Department of Transportation (US DOT), the International Air Transportation Association (IATA), and other regulatory agencies.

Only properly trained and certified UC Berkeley employees or students are allowed to ship or transport hazardous materials. Students are authorized to ship or transport hazardous materials only with proper training, and only with the knowledge and approval of a UC Berkeley employee supervisor (such as a Principal Investigator or office manager) who has successfully completed EH&S awareness level training or higher. Hazardous material shipments originating from the central campus must be affixed with an EH&S hazardous materials shipping label by a certified shipper and shipped only from authorized locations. See the EH&S website for authorized locations.

Who Is Affected by This Policy

- Faculty and staff initiating or authorizing the shipment of hazardous materials or otherwise having a role in the shipping of hazardous materials
- Faculty and staff who transport hazardous materials or handle hazardous materials incidental to transportation (such as storeroom personnel)

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Who Administers This Policy

- Office of Environment, Health & Safety (program coordination and oversight)
- Principal Investigators and Supervisors (program implementation)
- Deans, Directors, and Department Chairs (program implementation)

Why We Have This Policy

Some UC Berkeley employees, on occasion, have a need to ship packages of hazardous materials through the mail or self-transport hazardous materials to other locations. If these employees are not trained or do not properly follow the shipping regulations as described in this policy, their actions may result in accidents, injuries, regulatory violations, fines, loss of grant funding to the University, criminal penalties, and/or imprisonment.

Responsibilities

Office of Environment, Health & Safety (EH&S):

- Communicates the existence and core components of this policy to all campus units.
- Establishes and communicates appropriate levels of training for hazardous materials employees.
- Provides or makes available approved hazardous materials training.
- Provides technical guidance upon request to campus units in the shipment of hazardous materials.
- Maintains and updates a campus hazardous materials shipping web site and a list of persons who have completed hazardous materials shipment training provided by EH&S.
- Conducts periodic audits for hazardous materials shipping compliance.
- Investigates hazardous materials shipping discrepancies and carrier-rejected shipments.
- Notifies responsible parties of any hazardous materials shipping discrepancies or regulatory actions affecting their operations, and shares “lessons learned” with other units as applicable.
- Reports deficiencies to the appropriate regulatory agency as required.

Principal Investigators and Supervisors:

- Ensure that all “hazardous materials employees” (see glossary) obtain and maintain the appropriate level of documented training for their duties.
- Fund the costs of safe and compliant hazardous materials shipments.
- Ensure that all hazardous materials are identified, classified, packaged, and shipped safely and in accordance with applicable shipping regulations.
- Request assistance from EH&S if department personnel are not trained.

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Deans, Directors, and Department Chairs:

- Develop and enforce internal procedures to comply with this policy, including procedures to maintain training, certification, and shipping records.
- Support EH&S or regulatory agency audits and investigations, and pay associated fines and penalties for any departmental compliance deficiencies.

Procedures

Training and Certification

Supervisors (including Principal Investigators) who oversee operations involving the shipment and transportation of packages containing hazardous materials are to ensure that only properly trained individuals handle and ship hazardous materials.

UC Berkeley hazardous materials employees (see definition in glossary) must complete EH&S-approved training every two years appropriate to their level of responsibility. Training topics include, but are not limited to: general awareness, function specific, personnel safety, and security awareness. Security awareness training is required for persons shipping or transporting certain high risk hazardous materials (see glossary for examples of high risk hazardous materials).

EH&S provides a list of approved hazardous materials training vendors on the EH&S web site. Other vendors may not be used unless EH&S reviews and approves the training content.

Supervisors shall certify the completion of initial and refresher hazardous material training for their employees and maintain documentation of successful completion.

Document Retention

Departments that ship hazardous materials must establish and maintain files which include copies of all shipping papers and training records. Hazardous materials shipping papers must be retained for at least 24 months after the date of shipment.

Supervisors are required to maintain hazardous materials employees' training records for three years or for 90 days after employment ends.

Supervisors are required to maintain a list of hazardous materials employees and provide this list to EH&S or government agency personnel upon request.

Separation and Segregation

Departments involved in the shipping and transportation of regulated hazardous materials must ensure proper storage of these materials in compliance with UC Berkeley's "Safe Storage of Hazardous Chemicals" booklet and related guidance documents.

Self Transport Via Ground

The movement of hazardous materials within the contiguous UC Berkeley campus (i.e., not entering a public roadway) is not regulated per US DOT as a hazardous materials shipment,

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although training and safety precautions are still required. Refer to the EH&S fact sheet, “Transporting Chemicals Safely on Campus” available at <http://ehs.berkeley.edu/pubs/factsheets/17transportchem.pdf>. Transporting hazardous materials on public roads is prohibited unless it is in accordance with US DOT “Materials of Trade” regulations (see glossary and contact EH&S for compliance assistance).

Self Transport Via Air

EH&S must be provided with at least 10 working days’ notice prior to campus personnel taking University-related hazardous materials on board an airplane. Campus personnel are prohibited from carrying hazardous materials on a plane without written approval from EH&S.

International Shipments

Prior to arranging an international shipment, refer to UC Berkeley’s resources on export control (<http://research.chance.berkeley.edu/echome.cfm>). International shipments, whether imported or exported, may require permits and licensing authority. Shipping certain biological substances, for example, requires approval from the Centers for Disease Control and Prevention. EH&S must be provided with at least 20 working days’ notice to assist with international shipments.

Additional Requirements Regarding Specific Hazardous Materials

Contact the EH&S Biosafety Officer, the Radiation Safety Officer, or the Hazardous Materials Shipping Specialist for assistance with these hazardous materials shipments:

- Infectious Substances. Shipments containing an infectious substance are strictly regulated. Exempt biological shipments via air may require specific packaging requirements as well.
- Radioactive Materials. Per the campus Radioactive Material License, only EH&S employees may ship or transport radioactive materials.
- Hazardous/Radioactive Wastes. Only employees who have a current hazardous materials endorsement (issued in California by the Department of Motor Vehicles) may transport hazardous wastes. EH&S must approve all hazardous and radioactive waste transportation.
- Dry Ice. Shipments containing dry ice are regulated when transported by air or overwater. Only trained and certified hazardous material shippers may prepare dry ice shipments. Quantity limits apply and vented packaging is required.
- Other High Risk Hazardous Materials (see glossary): These materials can be shipped only after consultation with EH&S.

Compliance Measurements and Goals

Successful compliance with this policy is measured by periodic EH&S audits. The campus goal is 100% compliance of all audited hazardous materials shipments.

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Website Address for This Policy

<http://campuspol.chance.berkeley.edu/policies/hazshipping.pdf>

EH&S maintains information in support of this policy at:

<http://ehs.berkeley.edu/hazmat/hazshipping.html>

Glossary

Dangerous goods: Interchangeable with the term “hazardous materials” and mainly used in connection with air shipments of regulated materials.

Hazardous Materials: Substances or materials that the Secretary of Transportation has determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce. Examples of hazardous materials used at UC Berkeley include laboratory reagents, pool chemicals, lubricating oils, paint, batteries, infectious substances, dry ice, and hazardous/radioactive wastes.

Hazardous Materials Employee: A person who, in the course of full time, part time, or temporary employment, directly affects hazardous materials transportation safety. A person who loads, unloads, handles, prepares (identifies, classifies hazardous materials, packages, marks, labels, or documents) hazardous materials packages, including the preparation of shipping papers, tenders hazardous materials into commerce, or who otherwise transports hazardous materials shipments.

Hazardous Materials Employer: A person (including a state agency) who employs or uses at least one hazardous materials employee on a full time, part time, or temporary basis, who transports hazardous materials in commerce; causes hazardous materials to be transported in commerce; or designs, manufactures, fabricates, inspects, marks, maintains, reconditions, repairs, or tests a package, container, or packaging component that is represented, marked, certified, or sold by that person as qualified for use in transporting hazardous materials in commerce.

Hazardous Materials Regulations: Department of Transportation regulations governing the transportation of hazardous materials *in commerce* (within the jurisdiction of the United States, for shipments to, from, and through the United States) are found in 49 CFR parts 171 through 180. The movement of regulated materials within contiguous UC Berkeley property does not constitute a shipment in commerce.

Hazardous Materials Shipper: An individual, corporation, company association, firm, partnership, society, joint stock company, or a government, state agency, tribe, or authority of a government or tribe that offers a hazardous material for transportation in commerce or transporting a hazardous material to support a commercial enterprise, other than the U.S. Postal

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Service. Hazardous material shippers identify, classify, package, mark, label, document, and/or tender a hazardous material into transportation.

International Air Transportation Association (IATA): This organization works closely with governments in the development of regulations governing air shipment of hazardous materials.

Materials of Trade: Hazardous materials, other than hazardous waste, that are carried on a motor vehicle to directly support a principal business. Examples include landscaping, pest control, painting, plumbing, and welding. Employees handling materials of trade must have general knowledge of relevant regulations, quantity limitations, and packaging and labeling requirements.

Other High Risk Hazardous Materials:

- Explosives;
- Materials poisonous by inhalation;
- Bulk hazardous materials shipments;
- Select agents or toxins regulated by the Centers for Disease Control and Prevention, or select agents or toxins regulated by the United States Department of Agriculture; or
- A quantity of hazardous material that requires placarding.

Regulated Materials: Hazardous materials that pose an unreasonable risk when transported in commerce. Also known as materials “Regulated for Transportation.”

Shipping: The process whereby a hazardous materials employee identifies, classifies, packages, marks, labels, documents, and tenders the hazardous materials shipment to a transport carrier.

Transportation: The movement of property, including the loading, unloading, or storage incidental to that movement.

Related Documents

- Code of Federal Regulations – (CFR) Title 49, Transportation
- Code of Federal Regulations – (CFR) Title 40, Protection of the Environment
- Code of Federal Regulations – (CFR) Title 10, NRC Regulations
- California Code of Regulations (CCR) Title 22
- International Civil Aviation Organization (ICAO) Technical Instructions/
- International Air Transport Association (IATA), Dangerous Goods Regulations (DGR)
- DOT Emergency Response Guidebook

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Revision of May 11, 2009

The following sentences were added to the Policy Statement on Page 1: *Hazardous material shipments originating from the central campus must be affixed with an EH&S hazardous materials shipping label by a certified shipper and shipped only from authorized locations. See the EH&S website for authorized locations.*

Parenthetical information was added to the Who Administers This Policy section on Page 2.

The following sentence was added to the procedure for Dry Ice Shipments on Page 4: *Only trained and certified hazardous material shippers may prepare dry ice shipments.*

The following section was added to the list of procedures on Page 4: *Other High Risk Hazardous Materials (see glossary): These materials can be shipped only after consultation with EH&S.*

The following word (in green) was added to the section on Compliance Measurements and Goals on Page 4: *The campus goal is 100% compliance of all audited hazardous materials shipments.*

The bullet for “Radioactive Material” was removed from the heading “Other High Risk Hazardous Materials” on Page 6.

“Environment, Health & Safety” was changed to “*Office of Environment, Health & Safety*” throughout the policy.