

**Hazardous Materials/Dangerous Goods Shipping and Transportation**

It is the policy of the University of Arkansas that any and all dangerous goods shipped from its campus shall be packaged, labeled, and shipped in accordance with the United States Department of Transportation (DOT) and International Air Transport Association (IATA) Dangerous Goods Regulations. Personnel performing duties associated with the shipping of such materials must hold a currently valid certification of successful completion of the training requirements specified in 49 CFR 172.700 and IATA Dangerous Goods Regulations.

In addition to the external shipping requirements set forth in this policy, the University also requires appropriate packaging of all hazardous material transported on campus.

**Definitions**

The terms “*dangerous goods*” and “*hazardous materials*” may be used interchangeably and are similarly defined as any item or agent (biological, chemical, or physical) that has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors. DOT defines hazardous materials as any substance that appears in the 49CFR Hazardous Materials Table 172.101. This table may be accessed at <http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&SID=b55b6e5900cd1bfc4ff88374354b2c4e&ty=HTML&h=L&n=49y2.1.1.3.8&r=PART>

Hazardous material regulations may apply to commercial products, chemical mixtures, and newly synthesized compounds. Various types of batteries, fuel containers and cleaning products are examples of materials that are regulated for shipment.

There are nine classes of hazardous materials:

- Explosives
- Compressed gases
- Flammable liquids
- Flammable solids
- Oxidizing substances and organic peroxides
- Toxic and infectious materials
- Radioactive materials
- Corrosives
- Miscellaneous Dangerous Goods

**Scope**

This policy is understood to cover materials that pose a biological or chemical hazard. It includes *all* biological agents and all hazardous materials as defined above. It does *not* cover the shipment of radioactive materials, which is governed by Arkansas Department of Health regulations and the conditions set forth in the University’s Broad Scope License for the possession and use of radioactive materials. **NO ONE EXCEPT THE UNIVERSITY RADIATION SAFETY**

**OFFICER SHALL SHIP ANY RADIOACTIVE MATERIAL.** For assistance with radiological materials contact the Radiation Safety Officer at 479-575-5448.

The University of Arkansas expects all faculty, staff, and students working with hazardous materials to be aware of applicable requirements for proper shipping of such materials and to comply fully with those requirements. Hazardous materials regulations are complex, and a minimum of 24 hours of professional training, repeated every three years, is required in order to be certified to ship hazardous materials. Personnel in the University's Office of Environmental Health & Safety (EH&S) have received training, and the University has charged EH&S with disseminating information regarding hazardous materials shipping and assisting University units in meeting their shipping needs.

Shipping of hazardous materials is closely regulated by several federal government agencies, including the U.S. Department of Transportation (DOT) and the Federal Aviation Administration (FAA) as well as non-governmental organizations such as the International Air Transport Association (IATA). Applicable regulations are designed to protect public health and safety by ensuring that hazardous materials are properly packaged and labeled, and that other appropriate precautions are taken to prevent contamination or harmful exposure to the hazardous substances, or other hazards.

Shipments of hazardous material must comply with DOT/IATA regulations any time such material is transported by air. Shipments by ground are regulated by DOT when shipments are considered to be "in commerce." Material carried by any commercial transport company such as FedEx or through the U.S. Mail is considered to be "in commerce." Accordingly, any hazardous material shipped by air or "in commerce" is required to meet DOT packaging and labeling requirements. Some shippers, such as the US Postal Service (USPS), Federal Express (FedEx) and United Parcel Service (UPS) have developed specific rules that are stricter than DOT and or IATA regulations.

### **Sanctions and Penalties**

Failure to comply fully with this policy may lead to disciplinary action by the University, including, but not limited to, suspension or termination of research studies or funding, reduction in pay, or suspension or termination of employment. Failure to comply may also lead to civil or criminal liability under applicable law. Persons convicted of violating federal hazardous material shipping requirements may receive jail sentences of up to 5 years (10 years if the violation involves the release of a hazardous material which results in the death or bodily injury to any person), and fines may be assessed of up to \$500,000 per day per violation.

### **Procedures**

#### Mandatory Shipping Procedures for Dangerous Goods

- Any University unit wishing to transport biological agents or hazardous materials must first fill out and submit to EH&S a *Request for Shipment of Hazardous Materials* form (available at <http://ehs.uark.edu/FormsPage.aspx>) together with any required additional documentation. The request form (see APPENDIX) shall be submitted electronically to EH&S, indicating the type of material to be shipped (biological agents or chemical materials).

- EH&S will promptly review the Intent to Ship Form and determine the regulatory status of the material and any applicable requirements.
- EH&S will provide guidance and directly coordinate shipment by commercial carrier.
- Due to the complicated nature of hazardous material shipments, in order to ensure timely shipment, University units must submit the Intent to Ship Form for hazardous material at least two weeks prior to the expected shipping date. If for any reason this deadline cannot be met, the unit must immediately contact EH&S at 479-575-5448 and speak to the Chemical Hygiene Officer regarding the type of material to be shipped (chemical or biological) and for guidance on how to proceed.
- The shipping unit will be responsible for the cost of all packaging materials and associated costs required for each shipment covered under this policy. A cost center number is required to be submitted with the Intent to Ship Form.

Revised August 30, 2013

February 25, 2013

APPENDIX

REQUEST FOR SHIPMENT OF HAZARDOUS MATERIALS

This form **must** be submitted to EH&S if a unit plans to ship a substance that may be classified as a hazardous material. EH&S will determine if the shipment is regulated and will assist the unit in properly preparing the material for shipment.

MATERIALS:

Hazardous Material \_\_\_\_\_

Form of Material (liquid, solid, etc.) \_\_\_\_\_

Quantity of Material \_\_\_\_\_

CAS number (if any) \_\_\_\_\_

Manufacturer (if any) \_\_\_\_\_

Product Number (if any) \_\_\_\_\_

Biological Agent \_\_\_\_\_

Genus/Species/Strain \_\_\_\_\_

Biological Safety Level \_\_\_\_\_

Source of isolate \_\_\_\_\_

Amount \_\_\_\_\_

Containment (culture slant/plate/slide; frozen, etc.) \_\_\_\_\_

Shipping Destination \_\_\_\_\_

Special Shipping

Requirements \_\_\_\_\_

Do you plan to transport this material in a university vehicle? \_\_\_\_\_

Payment:

Cost Center Number \_\_\_\_\_

CONTACT INFORMATION

Print name \_\_\_\_\_ Date \_\_\_\_\_

Title \_\_\_\_\_

Signature \_\_\_\_\_

Phone Number \_\_\_\_\_ Cell Phone Number \_\_\_\_\_

Department \_\_\_\_\_ Campus Address \_\_\_\_\_

Building \_\_\_\_\_ Room Number \_\_\_\_\_

SIGNATURE PAGE

**Signatures required for shipping:**

Department Head / Chair or Director  
(Print name)

\_\_\_\_\_Signature\_\_\_\_\_

EH&S Director name (Print)

\_\_\_\_\_Signature\_\_\_\_\_

Shipper name (Print)

\_\_\_\_\_Signature\_\_\_\_\_

Provide this completed and signed form to appropriate EH&S Safety Officer (Chemical Hygiene Officer or Biological Safety Officer).

Attachments:

\_\_\_\_\_MSDS

\_\_\_\_\_Supplemental Information (e.g., special handling requirements)

\_\_\_\_\_Hazard Profile