



Subject: Shipping of Dangerous Goods/Hazardous Materials	Date: 7/3/19
EH&S Program: Occupational Safety	Next Review: 7/3/22
Scope: University / Hospital Wide	Original: 1997

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Policy:

All SBU faculty, research staff, students, visiting scholars, and administrative staff who receive, ship and transport hazardous materials (sometimes referred to as "dangerous goods") must comply with the rules and regulations of the US Department of Transportation (US DOT), the International Air Transportation Association (IATA), other approved carriers and regulatory agencies. Only properly trained University employees are allowed to ship or transport hazardous materials.

Definitions:

Dangerous Goods (DG) - hazardous chemicals or infectious substances that are capable of posing a risk to health, safety, property, or the environment when transported typically via air or internationally. Additional information can be found at the USDOT website: <https://www.phmsa.dot.gov/standards-rulemaking/hazmat/hazardous-materials-information-center> and International Air Transport Association (IATA), <https://www.iata.org/whatwedo/cargo/dgr/Pages/index.aspx>

Hazardous Material (HM)- substance or material that pose an unreasonable risk to health, safety, property or the environment when transported in commerce. Also known as materials "Regulated for Transportation." For the purposes of this policy, DG and HM can be used interchangeably.

Infectious Substances - substances known to contain, or reasonably expected to contain pathogens, such as Infectious Substances (Category A) and Biological Substances (Category B).

HM/DG Shipper: Any staff, faculty, student or agent of the University that offers a hazardous material for shipment via carrier such as, but not limited to, United States Postal Service (USPS), Fed Ex, United Parcel Service, trucking company or transportation by staff, faculty, student, or agents of the University in University or personal vehicles. The regulation applies to both domestic and international shipments regardless of mode of transportation, be it by land, air or sea.

Materials of Trade (MOT)- 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.

Operator/Carrier - are individuals, courier companies (e.g., UPS, FedEx) or airlines that transport packages from point of origin to point of destination.

Pathogens - are microorganisms (including bacteria, viruses, rickettsia, parasites, fungi) or recombinant microorganisms (hybrid or mutant) that are known to cause infectious disease in humans and animals.

Proper shipping name – a universally recognized designation used to describe a particular article or substance in all shipping documents and notifications and, where appropriate, on packaging.

Receiver (Consignee) - employee who receives, unloads or unpacks and signs for the regulated material packages.

Shipper's Declaration - are legal documents signed by the shipper which creates a contract between the shipper and the carrier.

Shipper (Consignor) - employee who prepared the DG for shipment and offers the shipment to the Operator or carrier (e.g., UPS, FedEx).

Procedures:

A. Responsibilities

1. Environmental Health and Safety (EH&S)
 - a. Coordinates training for employees who are involved in shipping of hazardous materials and enters training information into Peoplesoft.
 - b. Provides appropriate training for HM/DG shipping.
 - c. Provides technical guidance upon request to departments in the shipment of regulated materials.
 - d. Maintains and updates a campus hazardous materials shipping web site <https://ehs.stonybrook.edu//programs/shipping-dangerous-goods>
 - e. Conducts periodic audits for hazardous materials shipping compliance.
 - f. Investigates hazardous materials shipping discrepancies and carrier-rejected shipments.
 - g. Notifies responsible parties of any hazardous materials shipping discrepancies or regulatory actions affecting their operations, and shares "lessons learned" with other departments as applicable.
 - h. Reports deficiencies to the appropriate regulatory agency as required.

2. Principal Investigators (PI), Facility Directors and Supervisors or any individual who has direct oversight over personnel involved in shipping of hazardous materials)
 - a. Ensure that all employees who work with hazardous materials obtain and maintain the appropriate level of training for their job responsibilities.
 - b. Responsible for any expense incurred in safe and compliant shipping of hazardous materials.
 - c. The PI, Facility Director or Supervisor may wish to designate an individual within the lab/facility to ensure compliance with this policy.
 - d. Ensure that all hazardous materials are identified, classified, packaged, and shipped safely and in accordance with applicable shipping regulations.
 - e. Pay associated fines and penalties for any compliance deficiencies.
3. Deans, Directors, and Department Chairs
 - a. Comply with and assist EH&S in implementing this policy.
 - b. Support EH&S and/or regulatory agencies during audits and investigations.
 - c. Assure this policy is being implemented within their area of responsibility.

B. Training

1. All personnel who ship, receive or transport HM/DG must complete EOS Shipping of Dangerous Goods Training. EH&S coordinates this training.
2. Packaging and Shipping Division 6.2 Materials (infectious materials) training can also be completed online, at no cost, through the Centers for Disease Control (CDC) Train website. Course certificate are forwarded to EH&S.
<https://www.train.org/cdctrain/course/1075969/>
3. This training must be renewed every two (2) years in accordance with IATA regulatory standards.

C. Recordkeeping

1. Any staff, faculty, student or agent of the university that ship hazardous materials or dangerous goods maintains files which include copies of all shipping papers and training records.
2. Documentation (manifests) related to shipping of hazardous materials are retained for at least 24 months after the date of shipment.
3. Supervisors are required to maintain a list of employees that ship hazardous materials or dangerous goods and provide this list upon request to EH&S or the visiting regulatory agency.

D. Separation and Segregation - Any staff, faculty, student or agent of the University involved in the shipping and transportation of regulated hazardous materials ensures proper segregation and storage of these materials during storage and transport.

E. Self Transport via Ground

1. The movement of regulated hazardous materials within the University's campus is not regulated by US DOT as a hazardous materials shipment, although training and safety precautions are still required. Resources for additional lab safety policies and training can be found at <https://ehs.stonybrook.edu>
2. Transporting hazardous materials on public roads is prohibited, unless conducted in accordance with US DOT "Materials of Trade" (MOT) regulations.
 - a. Employees using the MOT regulation must be familiar with standard and should attend the EOS 016 Shipping of Dangerous Goods training.

F. Self Transport Via Air - Transporting regulated materials or non-regulated materials via air is prohibited and should never be attempted. Items may be classified unknowingly and/or fall under export control regulations and additional restrictions apply. Contact EH&S at 2-6410 for assistance.

G. International Shipments / Export Controls

1. International shipments, whether imported or exported, may require permits and/or licensing authority.
2. All outgoing shipments must comply with U.S. export control laws.
 - a. International Shipment and Transfer Guidance
 - b. Shipper Self Assessment Review Procedure
 - c. Classification of Item/Information Procedure
 - d. P212: Stony Brook University Export Control Policy
3. Questions regarding international shipments and U.S. export control laws should be directed to:

Export Compliance Officer
631-632-1954

H. Packaging and Shipment

1. PIs, Supervisors and Employees are responsible to ensure that regulated materials are packaged, shipped, and received in compliance with the regulations.
2. Employees involved in shipping any material with assistance from EH&S must determine if the material they are shipping is a hazardous material outlined in the training. Once a determination is made, the employee must package the material in conformance with DOT and IATA regulations, complete the appropriate shipping documents and request a pickup of the material by the appropriate hazardous material shipping company.
3. EH&S serves as a resource for all employees involved in shipping of goods, to assist in determining if the material is hazardous and provide advice on proper packaging. Contact 2-6410 for assistance.

4. PIs, Supervisors and Employees are responsible for obtaining the proper materials necessary to ship regulated materials in compliance with the regulations. This may include but not limited to:
 - a. Diagnostic packaging
 - b. Diagnostic ambient packaging
 - c. Infectious packaging
 - d. Infectious ambient packaging
 - e. Infectious refrigerated packaging
 - f. Single/Double hazard packaging
 - g. Manifests/Shipper's Declaration for Dangerous Goods
 - h. Radioactive hazard packaging
 - i. Crates/Pallets
 - j. Boxes/Overpacks
 - k. Drums/Pallets
 - l. Containers
 - m. Barrels
 - n. Labels
5. PIs, Supervisors and Employees involved in the shipment or receiving of regulated materials, must have a copy of the most recent editions of IATA (International Air Transport Association) Dangerous Goods Regulations and U.S. DOT 49 CFR Parts 100 to 185 Transportation on site for reference.

I. Specific Hazardous Materials

1. Infectious Substances
 - a. Shipments containing an infectious substance are strictly regulated.
 - b. Exempt biological shipments via air may require specific packaging requirements as well.
 - c. Specific training requirements are identified in the EH&S training.
2. Dry Ice
 - a. Shipments containing dry ice are regulated when transported by air or overwater.
 - b. Quantity limits apply and vented packaging is required.
 - c. Visit the EH&S website for additional information on shipping dry ice.
<https://ehs.stonybrook.edu/programs/occupational-safety/shipping-dry-ice>

Forms:

NA

Policy Cross Reference:

P212 Export Control Policy

Relevant Standards/Codes/Rules/Regulations/Statutes:

Code of Federal Regulations – (CFR) Title 49, Parts 100-185, Transportation

Code of Federal Regulations – (CFR) Title 40, Protection of the Environment

Code of Federal Regulations – (CFR) Title 10, NRC Regulations

References and Resources:

USDOT Hazardous Materials Information Center,
<https://www.phmsa.dot.gov/standards-rulemaking/hazmat/hazardous-materials-information-center>

International Air Transport Association (IATA), Dangerous Goods
<https://www.iata.org/whatwedo/cargo/dgr/Pages/index.aspx>

International Air Transport Association (IATA), Infectious Substances
<https://www.iata.org/whatwedo/cargo/dgr/Documents/infectious-substance-classification-DGR56-en.pdf>

DOT Emergency Response Guidebook,
<https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/ERG2016.pdf>

NIOSH Pocket Guide to Chemical Hazards,
<https://www.cdc.gov/niosh/docs/2005-149/pdfs/2005-149.pdf>