



DOT SECURITY PLAN FAQ'S

What is a DOT hazardous material?

DOT defines a hazardous material as... "any substance or material that had been determined to pose an unreasonable risk to health, safety and property when transported in trade, traffic or ground transportation within the United States." This includes hazardous wastes, specific chemicals and substances/mixtures that exhibit various chemical characteristics (i.e. flammable, corrosive, toxic, etc.) DOT lists its hazardous material in the DOT Hazardous Material Table available at <http://www.phmsa.dot.gov/>

What agencies are responsible for oversight and regulating hazardous materials in transport?

The *U.S. Department of Transportation (DOT) Hazardous Materials Regulations* and the *International Transport Association (IATA)* are the regulatory agencies responsible to provide oversight safe shipping of chemicals when shipped by ground or air. Both agencies require specific procedures to be followed when shipping hazardous materials. Since 9/11, these agencies have really stepped up their enforcement of these rules and they conduct unannounced inspections.

Who is responsible for the proper shipment of hazardous materials?

Anyone who offers a hazardous material for shipment is responsible for identifying, classifying, packaging, marking and labeling hazardous materials or dangerous goods according to all national and international governmental regulations. At Harvard, personnel that ship chemicals to other schools, facilities or ship hazardous wastes, are examples of hazardous materials shipments. Even though many 3rd party carriers ultimately transport hazardous materials, it is Harvard's responsibility to ensure the material is properly packaged, labeled, etc.

Why does Harvard need to implement a security plan?

This new rule is applicable to Harvard University since Harvard is considered a shipper of hazardous material and is required to register with DOT under 49CFR 172.

(a) The registration requirements applies to any person who offers for transportation, or transports, in foreign, interstate or intrastate commerce -

(1) More than one L (1.06 quarts) per package of a material extremely toxic by inhalation (i.e., "material poisonous by inhalation," as defined in § 171.8 , that meets the criteria for "hazard zone A," as specified in §§ 173.116(a) or 173.133(a)



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(2) A shipment in other than a bulk packaging of 2,268 kg (5,000 pounds) gross weight or more of one class of hazardous materials for which placarding of a vehicle, rail car, or freight container is required for that class.

What are the specific standards of a DOT security plan?

The DOT has not set forth specific requirements for achieving regulatory compliance. Instead, the security plan requirement emphasizes *performance standards* for hazardous materials transportation security plans.

Are there any other new Hazardous Material security regulations that affect Harvard University?

Hazardous materials shippers and carriers should be aware that this final rule is the first step in what may be a series of rulemakings to address the security of hazardous materials shipments. TSA is developing regulations that are likely to impose additional requirements beyond those established in the security plan.

Are all shippers and shipping centers at Harvard required to have a security plan?

The security plans apply only to those materials that present significant security threats. The rule permits a shipper or carrier to develop a security plan that assesses the specific security risks of the materials to be transported and put into place measures that are commensurate with the assessed risks. If a shipper or carrier determines that the security risks of the materials it handles are relatively small, then its security plan may well be limited in scope and complexity.

When does the something I intend to ship become subject to the security plan?

Materials are subject to the security plan requirements from -storage incidental to movement through transportation and delivery.

What is the definition of materials that are stored incidental to movement?

"Storage incidental to movement" is storage of a package containing a hazardous material between the time that a carrier takes physical possession of the hazardous material for the purpose of transporting it until the package containing the hazardous material is delivered to the destination indicated on a shipping document, package marking, or other medium.

What are the required components of a security plan?

1. Risk Assessment- Perform an assessment of the transportation security risks associated with the materials they handle:



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- a. Type of materials transported
 - b. Quantities of materials transported
 - c. Areas to or from which the material is shipped
2. HAZMAT employee checks- Institute methods for confirming information provided by HAZMAT employee applicants (Employers should make an effort to check information related to an applicant's recent employment history, references, and citizenship status.)

Note: "In short, we expect companies to take reasonable and prudent measures to address personnel security issues, efforts to confirm information provided by job applicants must be consistent with applicable Federal and State laws concerning employment practices and individual privacy." (DOT)

3. Include methods to address the possibility that unauthorized persons may attempt to gain access to hazardous materials or transport vehicles being prepared for transportation.
 - a. The term "unauthorized persons" includes persons who are not employed by the company or members of the general public, unless such persons are specifically authorized by the company to have access to hazardous materials or transport vehicles being prepared for transportation. An unauthorized person is any person who is not authorized by the shipper or carrier to have access to hazardous materials or transport conveyances being prepared for transportation.
4. Methods to address en route security risks. At minimum the shipper should satisfy itself that the carrier that will be transporting its material has a secure plan in place that adequately addresses the assessed security risks of the material to be transported, including risks related to storage of the material during transportation.

What types of hazardous materials are subject to placarding?

There are 9 hazardous material classes identified as requiring placards during transportation.

Class 1 - Explosives

- 1.1 - Mass Explosion
- 1.2 - Projection Hazard
- 1.3 - Fire-minor balst or projection
- 1.4 - Minor explosion
- 1.5 - Insensitive, remote mass explosion
- 1.6 - Insensitive, no mass explosion

Class 2 - Gases



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- 2.1 - Flammable gas
- 2.2 - Compressed Gas > 280 kPa (not flammable or toxic)
- 2.3 - Toxic Gas (LC50 < 5000 mL/m³)

Class 3 - Flammable Liquids (Flashpoint <141 F)

Class 4 - Flammable Solids

- 4.1 - Fire by friction, self reactive
- 4.2 - Spontaneously combustible (ignites upon contact with air)
- 4.3 - Dangerous when wet (in contact with water gives off flammable gas)

Class 5 - Oxidizers

- 5.1 - Oxidizers (produce oxygen, increases combustion)
- 5.2 - Organic Peroxide (thermally unstable, burns rapidly)

Class 6 - Toxic

- 6.1 - Poisonous (LD50 or LC50 –mg/kg)
- 6.2 - Infectious substances (causes disease in animals or humans)

Class 7 - Radioactive (exposure or contamination causes illness)

Class 8 - Corrosive (destroys living tissue <4hrs. OR corrodes steel/aluminum >6.25 mm/year)

Class 9 - Miscellaneous (hazardous substance, hazardous waste. Elevated temperature material, magnetic, anesthetic, noxious)

What purpose does placarding serve?

Placarding is used to communicate the hazard(s) contained within vessels, containers, and trucks to industry personnel, emergency responders and the general public.

What quantities, types of hazardous material classes in transportation require placards?

The placarding requirement for hazardous materials in transport based on thresholds established for specific hazardous material classes and quantities.

Contact EH&S for more information on the DOT Security Plan Requirements or for Shipping Hazardous Materials.