

FACT SHEET: Transport/Shipment of Radioactive Materials (RAM)



NEED TO KNOW:

- All RAM shipments are processed by OEHS and shipment costs are paid by the Principal Investigator or his/her department.
- Email oehs@tulane.edu for information on transport/shipment requirements as well as limited quantities.
- Do not use public transportation to move RAM between campuses or to external licenses.



MORE INFO:



Domestic and international transport/shipment of radioactive materials (RAM) follow strict safety rules to protect the public from radiation exposure. DOT regulations/IATA standards require shipping papers, specific markings, hazard labels, vehicle placards, and emergency response information to accompany RAM packages. Tulane personnel that have initial and continued refresher training in DOT regulations/IATA standards may:

- Transport RAM between any Tulane campus by motor vehicle or boat with the approval of OEHS.
- Prepare/package RAM for domestic/international shipment to external licenses. NOTE: RAM packages are processed by OEHS for shipment.

INITIATION OF TRANSPORT/SHIPMENT PROCESS:

To initiate the transport/shipment process:

- Review instructions on the [Transfer/Shipment of Radioactive Materials Form](#).
- Complete the first two sections on Page 2 of the form.
- Email completed form to oehs@tulane.edu.

WHAT IS NEEDED FOR PROPER TRANSPORT/SHIPMENT?

Collect chemically contaminated sharps/broken glass (e.g., Pasteur pipettes with silica, heavy metals, acutely toxic hazardous materials, or other particularly hazardous chemicals) in a rigid, leak-proof, and puncture-resistant container. Request containers via OEHS.

- **SHIPPING PAPERS.** Important information must include: contents, name of shipper, and emergency response telephone number.
- **MARKING.** Certain package types (e.g., Type A) must be marked accordingly. Packages containing liquid hazardous materials must have orientation markings on two opposite vertical sides of the package.
- **LABELS.** A label that identifies the hazard of the material is applied to the package (see illustrations next column). A material with multiple hazards will have multiple labels. For example, if RAM is shipped in dry ice, then apply a Dangerous Goods label.
- **EMERGENCY RESPONSE INFORMATION.** Include the following information in case of a transportation accident: contact information; clean-up procedures; and SDSs for each material.

Manifests and other transportation requirements may be waived if limited quantities are transported within locations specified on the Tulane RAM license with OEHS approval.

WHAT ARE THE PACKAGING REQUIREMENTS?

Regulations require that hazardous materials packaging be of sufficient strength and quality to withstand “normal conditions of transport” (10 CFR Part 71.71) and high-probability accidents.

Most radioactive material packages received at or transported from Tulane are of two types: (1) UN-designated strong and tight packages for transporting limited quantities of radioactive materials and (2) Type A packages for transporting material in amounts exceeding limited quantities.

! RADIATION FACTS:

- All shipments of radioactive material must be packaged and transported according to strict federal regulations.
- Markings on containers and vehicles explain the contents of each package using standard terms, codes and internationally recognized symbols.

ADDITIONAL RESOURCES:

- Code of Federal Regulations: [49 CFR Part 172 – 180](#)
- IATA: [Dangerous Goods Regulations](#)
- USNRC: [Standards for Protection Against Radiation](#)
- EPA: [Transportation of Radioactive Material](#)