

UNIVERSITY OF CINCINNATI
RADIATION SAFETY COMMITTEE
POLICY STATEMENT 98-4

Policy Concern: This policy provides guidance for transport of radioactive material.

Policy Implementation: The Radiation Safety Officer is directed to implement this policy upon approval by the Radiation Safety Committee. Implementation includes, informing authorized users of the policy and implementing corrective action if the policy is not followed. All necessary procedure changes to implement this policy must be approved by the Radiation Safety Officer.

Discussion: In March 1998, the Radiation Safety Officer was informed that the Vontz Center for Molecular Sciences was scheduled to open in 1999. It is expected that many of the occupants at the Vontz Center will be users of radioactive material and thus individuals would be crossing public roads in the process of transporting material to and from the Radiation Safety Laboratory. This conflicts with current policy. Current policy limits transportation across public roads to individuals who adhere to DOT regulations, which includes DOT training. Currently the only individuals who have received DOT training are personnel in Radiation Safety and Nuclear Medicine. Current policies also require individuals from laboratories to pickup radioactive material from the Radiation Safety Laboratory and transport it to their laboratories. On March 10, 1998, the Radiation Safety Officer issued a memorandum to the Radiation Safety Committee. The memorandum outlined the problem and provided four possible solutions. One of the options was to write the NRC and determine if radioactive material hand-carried across public roads required adherence to DOT regulations. A letter, dated March 30, 1998, was sent to the NRC. The NRC responded in a letter dated May 1, 1998. In the response the NRC stated DOT regulations do not apply to hand-carried materials across public roads, or to non-motorized vehicle transport across public roads. In the response, the NRC indicated even though DOT regulations did not apply they expected licensees to "maintain controls adequate to prevent inadvertent exposures to members of the public as a result of reasonably anticipated events such as incapacitation of the material handler, traffic accidents, or loss or damage of the package."

Policy Statement:

1. Transport of radioactive materials outside the confines of a designated radioactive material use area shall be made in containers that reasonably secure the material from accidents such as spills and are labeled as to the radioactive material contents. "Reasonably secure" means using a strong tight container or, if liquid, secondary containment appropriate to prevent leakage of liquid. (Exception: this policy does not apply to very small quantities of radioactive material, e.g., counting vials, microscope slides, autoradiography film systems.)
2. Hand-transport of radioactive materials outside the confines of a building requires:
 - a. Packaging equivalent to that required by the Department of Transportation for the shipment of radioactive materials. This includes:
 - i. Transporting radioactive material in the original packaging and labeling the material had when received from a vendor.

- ii. Transporting small quantities of radioactive material, i.e., millicurie quantities, in strong tight containers. If the radioactive material is in liquid form, secondary containment is required.
 - ii. The labeling of the transported radioactive material must include the radionuclide, activity, and a contact person and phone number in case of accident.
 - b. Adherence by the transporter to pedestrian traffic rules. This includes, but is not limited to:
 - i. Crossing only at cross-walks
 - ii. Crossing only with the light, if applicable.
 - iii. Crossing after looking both ways.
- 3. Non-motorized vehicle (e.g., cart, dolly) outside the confines of a building requires:
 - a. Packaging equivalent to that required by the Department of Transportation for the shipment of radioactive materials as described in 2.a. above.
 - b. Adherence by the transporter to pedestrian traffic rules as described in 2.b. above.
- 4. Transport by motorized vehicle must be in accordance with DOT regulations. This includes:
 - a. Transport in DOT approved containers and labeled in accordance with DOT regulations.
 - b. Transport by individuals who are trained in accordance with DOT requirements.
 - c. Securing package during transport.
 - d. If the package is a radioactive material labeled package, having shipping paper on the front seat of the vehicle.
- 5. All incidents involving radioactive material in transport, i.e., outside the confines of an area specifically approved for radioactive material shall immediately be reported to the Radiation Safety Office. If there is any indication of a radioactive material spill or damage to the package that could result in a spill, the transporter shall take steps to secure potentially contaminated areas until Radiation Safety arrives.

Policy Approval: 11/17/98