



Title: Acquisition Of Radioactive Material

Effective Date: 01/10/2019

Applies to: University Wide

Purpose: To establish an official WesternU policy 1) for the safe acquisition of radioactive material; 2) to ensure that WesternU complies with the restrictions imposed by the State of California in WesternU's Radioactive Material License and 3) to ensure that authorized users follow the procedures outlined in WesternU's Radiation Safety Manual (RSM) and all state and federal regulations pertaining to the acquisition of such material.

Related Information: The only persons authorized to order or receive radioactive material are those persons listed on WesternU's Radioactive Material License (RML). A person so listed is henceforth referred to as an Authorized User (AU). This does not, however, preclude an assistant from placing an order at the request of an AU. A current copy of the RML must be kept by all persons listed as authorized users on the RML.

All requests for the acquisition and use of radioactive material must be routed through Procurement Services to the Radiation Safety Officer (RSO) for review and approval <u>prior</u> to the order being placed by Procurement Services. The Alternate RSO (ARSO) shall be copied on the order and may review and approve requests in the RSO's absence. Prior to approval, the RSO or ARSO must ensure that the person requesting the material is listed as an AU on the RML and that the material and amounts requested are within the limits stated in the license. Procurement Services may not process requests to order or receive radioactive material that have not first been approved either by the RSO or ARSO.

Procurement Services' Responsibilities

Receiving personnel must perform a cursory inspection of the outside of the package to determine if the package is intact or damaged. If the package is damaged, the receiving personnel must set the package aside in an area that is separate from other storage areas in the receiving area. That area must be clearly marked with a sign containing the universal symbol for radioactive material and the words "Caution Radioactive Material." The receiving personnel must then immediately notify the AU and the RSO and await their instructions. If the package is not damaged, the receiving personnel must set the package aside as previously stated and contact the AU to pick up the item(s). Only the AU can pick up the package. **Procurement Services may not, under any circumstances, deliver radioactive material to an AU.** If the AU is unable to pick up the order, Procurement Services must secure the package(s) as described above until the AU is able to do so or contact the RSO or ARSO for instructions.

Authorized User's Responsibilities

Federal law requires that all packages containing radioactive material be surveyed for contamination upon their arrival. Only personnel who have received radiation safety training may perform this function. Upon notification from Receiving that a shipment has arrived, for radioisotopes listed below that require a Geiger-Mueller survey, the outside of the shipping container must be surveyed prior to removing it from the receiving area. The RSO and/or the ARSO must be immediately notified of any contamination and wait for further instructions. Contaminated packages must remain in the dedicated, and isolated, area of Receiving until the AU, in consultation with the RSO and/or ARSO, can arrange for the safe transport of the package to a laboratory with the proper containment equipment for the radioisotope. However, every effort must be made to remove contaminated packages from the receiving area as soon as possible. If no contamination is detected, the shipment must be taken to the AU's laboratory that has been approved for the use of radioactive material and any secondary containers and the primary container must be surveyed according to the requirements below. Contaminated secondary or primary containers must remain in an isolated area of the AU's laboratory under proper containment and the AU must immediately notify the RSO and/or the ARSO of the findings and wait for further instructions. Radioisotopes that only require a swipe test with liquid scintillation counting may be removed from the receiving area and surveyed in the AU's laboratory. The outside shipping container as well as any secondary containers and the primary container must be surveyed. Packages found to be contaminated must remain in an isolated area of the AU's laboratory under proper containment and the AU must immediately notify the RSO and/or ARSO for further instructions.

The outside of shipping containers, any secondary containers, and the primary container must be surveyed as follows:

Swipe test with liquid scintillation counting: ³H; ¹⁴C; ⁴⁵Ca; ³⁵S Geiger-Mueller counting + swipe test with liquid scintillation counting: ¹²⁵I; ³²P;

Survey results must be kept on file by the AU for inspection on demand by the RSO, ARSO, or an authorized representative of a regulatory agency.

Regulatory: Title 10 CFR § 20.1906

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Responsible Department: Institutional Animal Care and Use Committee

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