



At-Sea/Field Use of Radioactive Material Authorization Checklist
4/5/2018, Rev.1

Authorized User:

This checklist is designed to assist with the authorization process. For WHOI research personnel, prior approval by the Radiation Safety Committee is required for all work involving radioactive materials on board research vessels or at field locations outside of WHOI's properties in Woods Hole, MA. For non-WHOI research personnel who wish to conduct research under WHOI's radioactive materials license, prior approval by the Radiation Safety Committee is required for all work involving licensable radioactive materials on board WHOI research vessels. A "Radioactive Material Use Authorization Request" must be completed and submitted well in advance (a minimum of 60 days is requested) of the intended field use to allow adequate time for evaluation. Minor authorizations, such as adding a radiation worker, will only require WHOI Radiation Safety Officer (RSO) review/approval. Authorization steps:

- 1) Submit Radioactive Material Use Authorization Request (available on EH&S web site). For changes to an existing Authorization, submit an Authorization Amendment Request.
- 2) Submit training records and protocol that describes use, control, and management of radioactive material.
- 3) For sealed sources, submit required source information and approved leak test records.
- 4) If required, submit dosimetry request.
- 5) Obtain signed authorization from the WHOI RSO **before** loading/using licensable radioactive materials on/in WHOI research vessels or facilities.

Required Information for Authorization Request/Amendment (check all that apply):

- Name of the ship and/or field location where materials will be used
- Expected dates of use are provided
- List of all authorized users and radiation workers
- Qualification and experience of authorized user and radiation workers.
- Documentation of completed radiation safety trainings (if not trained at WHOI)
- Names and maximum activity of radionuclides proposed for use
- If a sealed source, provide: name, activity, description, model/serial number, and approved leak test records
- Sealed sources need not be leak tested if they contain only H-3; or they contain a radioactive gas; or the half-life of the isotope is 30 days or less; or they contain not more than 100 microcuries of beta/gamma-emitting material or not more than 10 microcuries of alpha-emitting material
- Contamination survey instrument that will be used/needed

Required Information for Protocol (check all that apply):

- Describe the research protocol that involves the radioactive materials
- Describe the engineering controls that will be used, including ventilation hoods, containment, shielding, etc
- Description of personal protective equipment (PPE)
- Description of contamination controls
- Management and minimization procedures for radioactive wastes
- How the materials will be secured while in use and storage
- Description of the proposed use and storage areas
- Procedures for handling volatile substances (if applicable)
- Emergency procedures
- Reviewed and understand applicable sections of WHOI Radiation Safety Manual

External Radiation Dosimetry:

Yes (if working with gamma emitters and higher energy beta emitters, max energy >250 keV)

No (only working with H-3, S-35, C-14 or pure alpha emitters - dosimetry is not required)

Type of Dosimeter (check all that apply): ___ Body dosimeter ___ Finger ring dosimeter