

NATIONAL CANCER INSTITUTE AT FREDERICK
RADIATION PROGRAM APPLICATION

The required information for the establishment of any new radiation program can be supplied in the following document. This document has been created to simplify and to expedite the radiation application process by ensuring that all pertinent information as outlined in the *Radiation Safety Manual* is supplied.

In addition, a Training and Experience form for each individual requesting authorization to use radioactive isotope usage must accompany the Radiation Program Application.

PROGRAM SUMMARY

Principal Investigator:
Organization:
Project Name:
Degrees:
Primary Radiation Training:

Radiation Area Supervisor:
Degrees:
Primary Radiation Training:

FOR RADIATION SAFETY OFFICE AND COMMITTEE USE

Organization Director: _____ Date: _____

Radiation Protection Officer: _____ Date: _____

Radiation Safety Committee Chairman: _____ Date: _____

Approved Radiation Program Number: _____ Program Expiration Date: _____

Areas for the Use and/or Storage of Radioactive Materials

Building	Room

Waste Storage and Handling Methods

Solid radioactive waste will be stored in an appropriate dry radioactive waste container and appropriately shielded in room _____.

Liquid waste will be stored in an appropriate liquid radioactive waste container and appropriately shielded in room _____.

High activity, low volume waste will be disposed of according to Radiation Safety instructions. Waste will be disposed in accordance with NCI-Frederick protocols.

Protocol and Isotope Authorizations

In the following tables, list the protocols, which will be used within the requested radiation program. Requested radioisotopes and authorized limits for program inventory as well as the maximum use per experiment should be included. **In addition to listing protocols, please attach to the Radiation Program Application a copy of all radiation protocols.**

PROTOCOLS		
Name of Protocol	Isotope used	Maximum Activity per Experiment (mCi)

Inventory of Isotopes

Maximum Inventory (mCi) for Each Isotope to Be Kept in Lab at Any One Time	
Isotope	Amount

Radiation Monitoring Equipment

Beta and gamma survey meters will be available for use during isotope manipulations and for mandatory, monthly contamination surveys. All personnel will have access to a liquid scintillation counter to quantify results of surface contamination surveys.

All procedures will be carried out in a manner that will keep exposures As Low As Reasonably Achievable (**ALARA**). Shielding will be provided and used as necessary. Additionally, eye protection, remote handling devices and protective clothing will be used when appropriate.

The Radiation Safety Office is being provided with a current and accurate list of meters (e.g., Geiger Counter), liquid scintillation counters, and/or gamma counters used for monitoring within your laboratory. Include the model number, serial number and NIH number (when possible).

MONITORING EQUIPMENT		
Model	Serial #	NIH#

Training/Protocol-specific Training

In accordance with NRC/NCI-Frederick regulations, all authorized users of radioactive materials will complete the training courses provided by the Radiation Safety Office.

In addition, the Principal Investigator or Radiation Area Supervisor will oversee the training of specific laboratory procedures for laboratory personnel and completion of the required courses. **The program will appropriately maintain the Protocol Specific Training Document, prepared by the Radiation Safety Office (based upon protocols provided by the newly established radiation program).** This will be done by ensuring that all authorized isotope users within the radiation program read and sign the Protocol Specific Training Document. As new radiation protocols are developed, copies will be kept on file within the document.

Radiation Personnel

The following list indicates proposed radiation personnel. A separate [Radiation Training and Experience Form](#) must be attached for each individual.

Radiation Safety Precautions To Be Used

All radiation procedures will be conducted in accordance with the NCI-Frederick ALARA program as described in the *NCI-Frederick Radiation Safety Manual*. Isotope usage will be kept to a minimum, and appropriate safety equipment and personal protection equipment will be used.

(Principal Investigator's Signature)

(Date)