

Penn State University Radiation Dosimeter Request Form
Environmental Health and Safety, 228 Academic Projects Building
814 – 865 – 6391; fax: 814 – 865 - 7225

Please read the following explanation and conditions for dosimeter use at Penn State University. Fill in all the requested information on the second page, have your supervisor sign the request, and send the completed form to the Environmental Health and Safety Office (EHS) at the address listed above.

State and federal regulations require that dosimeters be supplied to persons who are likely to receive more than 10% of the annual dose limit from external sources of radiation. The adult annual limits are 5,000 mrem for penetrating whole body dose, 15,000 mrem to the lens of eye; and, 50,000 mrem to the skin or extremity. For occupational workers under the age of 18, the annual limits are 10% of the adult values. A woman who declares her pregnancy in writing to EHS will be issued dosimetry if her fetus is likely to receive a dose in excess of 500 mrem during the pregnancy.

At Penn State it is rare that anyone ever exceeds 10% of the annual dose limits, so dosimetry is usually not required by regulations. However, in order to monitor individuals who might receive a significant dose, or whose work requires dosimetry based on other regulatory requirements, EHS uses the following guidelines in issuing personnel dosimetry:

Dosimetry need for users of radioactive material is based on the number of millicurie-hours (mCi-hr) of exposure. The term mCi-hr refers to being in close proximity to or handling 1 mCi source for 1 hour or 0.5 mCi for 2 hr, etc., at 30 cm from the body, 4 cm for the hands.

WHOLE BODY dosimeters will be issued to all personnel who use radiographic or fluoroscopic x-ray machines, and radioactive material users with potential exposures exceeding:

- a. An average of 0.1 mCi-hr per week for gamma-ray emitters with energies exceeding 0.1 MeV,
- b. An average of 1 mCi-hr per week for gamma-ray emitter with energies less than 0.1 MeV, including Cr-51,
- c. An average of 1 mCi-hr per week for P-32 or other high energy beta emitters.
- d. Any exposure to X-Rays.

WRIST dosimeters will be issued to all persons using analytical x-ray equipment.

FINGER dosimeters may be issued to personnel with exposures exceeding 1 mCi-hr per week for P-32 or other high energy beta or gamma emitters. A whole body dosimeter is also issued when a ring dosimeter is used.

OTHER REQUIREMENTS FOR RADIATION DOSIMETER USE:

1. NO dosimeter is ever to be intentionally placed near a source of radiation when not worn. Notify EHS immediately if you know of any unusual exposure to the dosimeter.
2. Dosimeters will only be issued to personnel who have completed the PSU required radiation safety training.
3. The dosimeters that you are issued are only to be used at Penn State facilities.
4. Dosimeters should be stored in your office when not in use. Please avoid taking them home.
5. All dosimeters, including those that were not used, must be returned to the EHS Office.
6. Do not use or tamper with dosimeters issued to other persons.
7. Immediately report any lost or damaged dosimeter.
8. Immediately report any suspected overexposures.
9. Promptly notify EHS when the dosimeter is no longer needed.
10. Do not let anyone else use your dosimeter.
11. You must wear all dosimeters issued to you when working with radioactive material or x-ray machines.
12. Intentionally exposing your dosimeter to any radioactive source could lead to prosecution and penalties.

OTHER INFORMATION

1. You will be notified of any dosimeter readings in exceeding 10% of the regulatory dose limits. You may also make a written request for your dosimetry results from the EHS Office at any time.
2. When you receive a new dosimeter, promptly return all previous quarters dosimeters. There are two main methods of exchange:
 - a. A yellow envelope is mailed directly to you with your new dosimeter for exchange, or
 - b. Your new dosimeter will be exchanged with the aid of someone in your area.
3. There will be a charge for dosimeters that are not returned promptly (10 days) after new dosimeters are issued.

Penn State University Radiation Dosimeter Request Form
Environmental Health and Safety, 228 Academic Projects Building
(814) 865 – 6391; FAX: (814) 865 – 7225 www.ehs.psu.edu

Applicant Information

Last Name (Print Legibly)
First Name & Middle Initial
PSU ID (nine digit number) 9 _ _ _ _ _
Date of Birth mm/dd/yy ___/___/19___
CAC ID / email (xyz123@psu.edu)

Have you ever had training at Penn State for
X-Ray work? Y N
Radioisotope work? Y N

Have you had a dosimeter at Penn State University? Y N

If you have received radiation exposure at any institution this year, please provide the exposure location, approximate dates, and your total exposure. _____

Identify each location or source you will be using that requires dosimetry (check all that apply):

Radionuclides: _____ **Estimated mCi-hr/week:** _____

Radiation Science & Engineering Center: _____

Neutron Beam Lab: _____ **Yes / No (circle one)**

X-ray machines: Check all that apply:

Analytical: _____ **P5 Located at:** _____

Radiographic: _____ **P1 Located at:** _____

Veterinary: _____ **P1 Located at:** _____

Medical: _____ **P1 Located at:** _____

Campus address to where your dosimeter should be mailed:

Penn State may be required to provide you an annual report of your radiation exposure. This report is normally mailed to the campus address listed above. In the event that you leave Penn State, please provide an alternate home mailing address where our office should mail this required report. Please avoid listing local or temporary addresses:

I have read both pages of this form and understand the conditions for issuing and using radiation dosimetry:

Signature and date: _____

Applicant's Supervisor Information

For radioactive material users, the "SUPERVISOR" is the person who has been approved by the University Isotopes Committee and has a current "Authorization to Use Radioactive Material".

For X-ray generating devices, the "SUPERVISOR" is the student's faculty advisor or course instructor.

In either case, the supervisor is responsible to the EHS Office for any dosimetry charges, such as late or lost dosimeters, and for not notifying the EHS Office when service is no longer required. Please fill in the requested information and sign your name below.

(Please Print Legibly)

First Name & Middle Initial
Last Name
College:
Department:
Address:
CAC ID / email (xyz123@psu.edu)
Budget and Fund number
Supervisor's Signature date

For EHS use only

Type: _____	Date distributed by
Series _____	Yellow: _____
Participant # _____	Coordinator: _____