

# THE UNIVERSITY OF ADELAIDE

## Radiation Safety Office

### Personal Monitoring Services

#### University Policy

The University of Adelaide has an exemption from the requirements of the Radiation Protection and Control Act requiring the provision of personal radiation monitors for radiation workers. The exemption is based on the recommendations of the International Committee on Radiological Protection (ICRP). A personal dosimeter need not be worn when there is negligible risk of the worker receiving a dose greater than 4 mSv, which is one-fifth the recommended annual dose limit for radiation workers.

The University of Adelaide has good data on the radiation doses received by radiation workers in the University. Over 20 years no one has recorded an annual dose greater than about 1/40th the recommended limit for radiation workers. The extra risk to health through exposure to ionising radiation during their work at the University is less than one-tenth of the extra risk brought about by being employed at all.

The exemption covers such commonly used nuclides as C-14, Na-24, P-32, in quantities less than 40 MBq, and H-3 less than 400 MBq. The quantities referred to in the exemption are those in continuous daily use. Larger amounts may be held as "stock" and handled on an occasional basis for short periods. The main hazard in Class C laboratories is the ingestion of radioactive materials through the mouth or broken skin or by breathing dust, aerosols and gases. Good laboratory practices set out in the Laboratory Rules are the primary factor in eliminating the risk of ingesting radioactive materials.

For workers using X-ray analysis apparatus (both diffraction and fluorescence) film badges provide little information. The X-rays are totally enclosed or emitted in narrow pencil beams and are unlikely to be intercepted by a personal dosimeter. Regular monitoring of the external radiation field and careful attention to the working rules are needed to reduce the possibility of exposure.

Personal dosimeters are normally only issued to people working in Class B laboratories and to those handling larger amounts of radioactive materials. Dosimeters are issued to users of neutron sources (chiefly neutron moisture meters) and sealed sources which can deliver appreciable doses in a short time.

While not required to do so, the University will issue you with a personal dosimeter if you request one. In general few workers require a dosimeter.

It is **important that you have read this policy**. Please complete the **attached form and** return it to University Radiation Safety Officer, Occupational Health and Safety Unit through your Departmental Radiation Safety Officer. Direct any queries to your Departmental Radiation Safety Officer - if they cannot be answered at that level contact me. If you feel the need for independent advice the officers of the Radiation Protection Branch of the S.A. Department of Human Services are extremely helpful and are always prepared to answer questions on radiation safety matters.

G.S. Laurence  
University Radiation Safety Officer

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**Acknowledgement of University Policy**

**Family Name** \_\_\_\_\_

**Given Name** \_\_\_\_\_

**Department** \_\_\_\_\_

**I have read the circular on Personal Monitoring Services issued by the University Radiation Safety Office and understand that the issue of a personal monitoring device may not be appropriate for my work.**

**Signature** \_\_\_\_\_

**Date** \_\_\_\_\_

**Please return this acknowledgement sheet to the**

**Radiation Safety Unit**

**Occupational Health & Safety Unit**

**University of Adelaide**

**Thank you.**