RADIATION PROCEDURES MANUAL

Procedure Cover Sheet

Procedure Title: Sealed Source Safety
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Revision History

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1. **INTRODUCTION**

Idaho State University radiological user facilities commonly handle sealed sources. This procedure outlines the steps for the safe handling of sealed sources.

2. **PURPOSE**

This procedure provides instructions for keeping radiation exposure As Low As Reasonably Achievable (ALARA) to operational personnel handling sealed sources at Idaho State University radiological facilities.

3. **SCOPE**

This procedure applies to all authorized users and radiation workers handling sealed sources. Sealed sources that may create a Radiation Area are handled under specific user procedures for the source.

4. **ROLES AND RESPONSIBILITIES**

Authorized users ensure that all Radiation Workers with access to sealed sources have read, understand, and follow this procedure. In addition, authorized users inform radiation workers regarding the specific hazards from the sources.

Radiation workers handle sources safely in accordance with this procedure.

The Radiation Safety Officer has the responsibility to oversee the radiation safety program and maintain this procedure.

5. **REQUIRED MATERIAL(S)**

- Whole-body dosimeter (as required by the Radiation Safety Department)
- Extremity dosimeter (as required by the Radiation Safety Department)
- Gloves (as required by Radiation Safety Manual (RSM) Section 13.2)

6. **REQUIRED TRAINING(S)**

- Annual Radiation Safety Training
7. PROCEDURE

7.1. ALARA Practices

7.1.1. Prior to obtaining and handling a sealed source, the Radiation Worker must:

- Understand the source properties. At a minimum, the user should know the radiation emitted, the activity, and the unshielded radiation fields the source creates.

- Have a specific use for the source and be prepared to perform the task with the source then return it to its proper storage location.

7.1.2. Sealed sources are to be handled using the following ALARA practices:

- If safety instructions are available from the source manufacturer, follow those instructions to safely handle the source.

- Minimize the time holding/using the sealed source while maximizing the distance between yourself and the source.

- Use shielding whenever possible and practical.

- Never loiter near sealed sources of any activity.

- Store sources in an appropriate container or cabinet when not in use. Shielding should be used for higher activity sources.

- Use long reach tools (tweezers, tongs, etc.) when possible and practical to maximize the distance between yourself and the sealed sources. Long reach tools are required for sources that exhibit a contact dose rate greater than 1000 mrem/hr considering all radiation types (RSM 13.8).

- Do not touch the active area of a plated source.

- Frisking hands and washing hands should be performed after handling sealed sources.

8. LIST OF FORMS

None.

9. REFERENCES

None.
10. CHANGE HISTORY

None.

11. APPENDICES

None.