**TITLE: PERSONNEL PROTECTIVE EQUIPMENT**

**POLICY:**

As specified in University Policy 3-300: *Occupational and Environmental Health and*

*Safety Policy,* it is the responsibility of the University to provide appropriate personal protective equipment (PPE) to all employees at University expense when engineering controls are not adequate to minimize exposure.

**PURPOSE:**

The purpose of this Standard Operating Procedure (SOP) is to specify expectations and responsibilities regarding the use of PPE by personnel associated with the Radiation Safety Office (RSO).

**SCOPE:**

This SOP applies to all RSO personnel during the conduct of their assigned work responsibilities. In addition, it applies to individuals working under RSO authority or supervision, such as representatives of regulatory authorities, auditors, vendors, and visitors.

This SOP addresses the use of standard PPE, such as gloves, lab coats, hearing protection, and eye protection. It does not address respiratory protection (e.g., the use of respirators).

**DEFINITIONS:**

1. **Hazard Assessment:** an evaluation of potential physical or health-related hazards associated with a role, task, or job. Examples of physical hazards include moving objects, fluctuating temperatures, high intensity lighting, rolling or pinching objects, electrical connections, high voltages, and sharp edges. Examples of health hazards include overexposure to harmful dusts, chemicals or radiation. A hazard assessment is used to determine the proper type of PPE required.
2. **Personal Protective Equipment (PPE):** equipment worn to minimize exposure to a variety of hazards. Examples of PPE include such items as gloves, foot and eye protection, protective hearing devices (earplugs, muffs), and hard hats.

**WORK INSTRUCTIONS:**

1. **PPE for Routine Work in Radiological Areas or Laboratories**

Routine work in radiological areas includes activities such as instrument calibrations, laboratory audits and walk-throughs, sample counting, leak tests and inventories, and simple waste processing.

In general, “routine” work has the potential to encounter removable radioactive contamination, but the presence of contamination is not known or expected. In addition, other laboratory hazards, such chemicals or biological material, may be present in the work environment.

To address the anticipated hazards during routine work, the following minimum PPE is required:

* Long pants
* Closed toed shoes
* Lab coat (fully buttoned)
* Gloves (vinyl, nitrile, etc.)
* Eye protection (safety glasses)

1. **PPE for Work in Areas of Known or Suspected Radioactive Contamination**

For work in areas of known or suspected radioactive contamination, the following PPE is required in addition to that specified for routine work:

* Two pairs of gloves (change outer gloves frequently)
* Shoe covers

1. **PPE for Work with Bulk Liquids**

When working with bulk liquids, the following PPE is required in addition to that specified for routine work:

* Goggles and face shield
* Two pairs of gloves (change outer gloves frequently)

1. **Non-Routine Work or Special Projects: PPE Evaluation and Requirements**

For non-routine work or special projects, a hazard assessment shall be conducted and documented during the planning of the work to identify PPE appropriate for the anticipated hazards.

In addition to or in lieu of the PPE required for routine work, the following are examples of PPE that might be specified:

* Leather or cut-resistant gloves
* Tyvek coveralls
* Aprons
* Protective footwear
* Head protection (e.g., hard hats)
* Respiratory and/or hearing protection

**Note:** If the hazards which you encounter require use of respiratory and/or hearing protection, you will need to be enrolled in a written program developed with the assistance of Occupational Environmental Health and Safety (OEHS)

1. **Employee Responsibilities**

Employees are expected to:

* Properly wear required PPE
* Attend training sessions on PPE, as appropriate
* Care for, clean and maintain PPE
* Frequently survey PPE to ensure it is free of contamination
* Inform a supervisor of the need to repair or replace PPE
* Inform a supervisor of new, emerging, or previously unidentified hazards

1. **Additional Considerations**

The primary purpose of PPE is to minimize potential exposure to hazardous substances and provide a safe work environment. Consistent with this goal, the following additional considerations apply:

* No eating or drinking in laboratory space, per the University Laboratory Hygiene Rule
* No working with hazardous or potentially contaminated items or materials in office space
* Do not use PPE that is not supplied by the university (e.g., PPE from home)
* Do not use university-supplied PPE outside of your work responsibilities at the university
* Potentially contaminated gloves should be frequently changed and gloves should not be worn in non-laboratory areas
* Disposable gloves should never be reused, once they have been removed
* Pull back and secure long hair
* Ensure that loose lanyards, clothing, and jewelry are secured during work
* Do not use headphones, earbuds, etc. (wired or not wired)
* Limit cell phone use during routine radiological work, to limit distractions and the potential for contamination

**SUPPORT DOCUMENTS:**

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| **Job Aids** | |
| **Job Aid Number** | **Job Aid Title** |
| N/A | There are no job aids pertinent to this document. |
| **Forms** | |
| **Form Number** | **Form Title** |
| N/A | There are no forms pertinent to this document. |

**REFERENCES:**

University of Utah Policy 3-300: *Occupational and Environmental Health and Safety Policy*

29 CFR 1910.1450: *Occupational Exposure to Hazardous Chemicals in Laboratories*

**REVISION HISTORY:**

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| --- | --- | --- |
| **Rev. #** | **Revision Date** | **Changes from previous revision** |
| 0 | 5/12/2017 | Original procedure. |
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| Mary J. Handy |  | 5/15/2017 |
| QA Manager Name | QA Manager Signature | Date |

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| Frederick Monette |  | 5/15/2017 |
| RSO Name | RSO Approval Signature | Date |