

**Idaho National Laboratory**

<b>PERSONAL PROTECTIVE EQUIPMENT</b>	Identifier: RD-2001	
	Revision: 2	
	Effective Date: 12/19/2012	Page: 1 of 5

Subcontractors	Program Requirements Document	eCR Number: 608956
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Manual: INL Subcontractor Requirements

Entire Document Changed

**1. PURPOSE**

This document provides requirements for the proper selection and use of personal protective equipment (PPE), which minimizes hazards to workers. This document highlights requirements referenced in the "Source Documents" section, as well as Contractor requirements. Any applicable regulatory or Contractor requirements must be followed, with the most stringent requirement being met.

**2. APPLICABILITY**

This document applies to all subcontractors working at the INL as specified in their contract with Contractor. Stricter requirements may be imposed by subcontractors upon their employees or subtier contractors. The requirements of this document must be followed by subcontractors; however, the means of implementation may vary as determined by the subcontractor.

**3. REQUIREMENTS****3.1 General Requirements**

All PPE shall meet the requirements set forth in 29 CFR 1926.95, .96, .100, .101, .102 and ANSI Z49.1 - 1999. Additional requirements specific to PPE are specified below.

- 3.1.1 All employees or visitors on the job site shall be provided and shall properly use suitable eye, face, head, hand, and foot protection, or other assigned PPE, as directed by work control documents or work area signs.
- 3.1.2 Only PPE that has been manufactured in accordance with applicable nationally accepted design criteria shall be used at the INL.
- 3.1.3 Employees required to wear PPE shall be trained in the proper use, storing, inspection, and cleaning of said equipment.
- 3.1.4 Damaged or defective PPE shall be taken out of service and shall not be used.
- 3.1.5 PPE shall not be modified without written approval of the manufacturer.

**3.2 Eye and Face Protection**

- 3.2.1 Eye protection shall be worn at all times while within the construction or service work site.

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- 3.2.2 Safety glasses with attached rigid side shields shall be the minimum level of eye protection.
- 3.2.3 The appropriate eye and face protection for the work to be performed shall be worn.
- 3.2.3.1 Helmets or hand shields that protect the face, neck, forehead, and ears shall be used during all arc welding or arc cutting operations, except for submerged arc welding.
- 3.2.3.2 Welding helpers/attendants shall wear the same level of eye and face protection as the welder.
- NOTE: *When it has been determined that a welder's helper is needed to complete a task, special attention must be given to the type of welding being performed, the length of time the welder's helper will be exposed to the flash, and the distance the welder's helper will be from the flash when determining the level of protection required. In most cases, shaded safety glasses (ANSI Z87.1), along with proper skin protection will be sufficient when used in combination with an aversion of the head to prevent direct observation of the welding arch. It is recognized that in some situations an increased or equivalent level of Personal Protective Equipment to that being used by the welder may be required due to the type of welding, exposure duration of the arch flash, or need to directly observe the welding arch. This determination should be made through consultation with the welder, welder helper and the job Safety Representative.*
- 3.2.3.3 Dust, burning, or chemical goggles (whichever is appropriate) shall be worn when performing the following work:
- A. Using a portaband saw or drill directly overhead
  - B. Handling open corrosive containers (either powder or dust)
  - C. Using a chisel on brittle material.
- 3.2.3.4 Face shields shall be worn during the following kinds of work:
- A. using an impact wrench, pneumatic or electric jack hammer, pneumatic or electric rotary hammer, portable or stationary grinders, a sawsall, or a chop saw

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- B. during chipping operations
  - C. any tasks where there is a potential exposure to splashing of corrosive, toxic, carcinogenic, mutagenic, teratogenic, cryogenic, or sensitizing liquids
  - D. any tasks where there is a potential exposure to high heat such as furnace operations; steam cleaning; or pouring, casting, or dipping of hot liquids.
- 3.2.3.5 Face shields and welding helmets shall be worn only over primary eye protection (safety glasses or goggles).
- 3.2.3.6 A face shield and chemical goggles shall be worn when transferring or handling corrosive liquids where there is high probability of liquid spraying (for example, when breaking lines or disconnecting transfer hoses).
- 3.2.3.7 Contact lenses shall not be worn under the following conditions:
- A. when hazardous chemical exposure is possible
  - B. when energized high-voltage electrical work is involved
- NOTE:** *Contacts may be worn beneath full face respirators, provided that a radiation control technician or industrial hygienist has concurred.*
- 3.2.3.8 For workers or visitors who must wear prescription glasses, the following two options are acceptable:
- A. prescription safety glasses with attached rigid side shields
  - B. safety glasses over regular prescription glasses (only allowed on an interim basis until prescription safety glasses can be acquired).

### 3.3 Head Protection

- 3.3.1 Hardhats are required in posted construction areas unless prior written permission is obtained from the Contractor POC. When identified this requirement will be enforced on service type subcontracts.

### 3.4 Hand Protection

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- 3.4.1 Appropriate hand protection shall be worn when there is a possibility of an employee's hands being exposed to hazards such as skin absorption of harmful substances, severe cuts, lacerations, abrasions, punctures, chemical burns, thermal burns, or harmful temperature extremes.

### **3.5 Foot Protection**

- 3.5.1 Approved protective footwear shall be worn for work in areas where there is a danger of foot injuries.
- 3.5.2 The standard level of foot protection shall be sturdy leather boots that cover the worker's ankle. Other kinds of foot protection may be allowed, depending on the nature of the hazard involved.

- 3.6 Personnel shall be adequately dressed to perform all work activities in a safe manner. Full length trousers, sturdy work shoes/boots, and a shirt that covers the shoulders with at least a three (3) inch sleeve are minimum requirements.

**NOTE:** *Tank tops, shirts cut off at the midriff, cutoffs, sandals, etc., are NOT considered appropriate work clothing.*

## **4. DEFINITIONS**

For definitions of terms used throughout the INL Subcontractor Requirements Manual, refer to LST-359.

## **5. REFERENCES**

### **5.1 Source Documents**

- 29 CFR 1926.95, Criteria for Personal Protective Equipment
- 29 CFR 1910.132, Personal Protective Equipment
- 29 CFR 1910.136, Foot Protection
- 29 CFR 1910.138, Hand Protection
- 29 CFR 1926.96, Occupational Foot Protection
- 29 CFR 1926.100, Head Protection
- 29 CFR 1926.102, Eye and Face Protection
- ANSI Z41-1991, American National Standard for Personal Protection - Protective Footwear
- ANSI Z41.1-1967, USA Standard for Men's Safety-Toe Footwear
- ANSI Z87.1-1968, American National Standard for Occupational and Educational Eye and Face Protection

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ANSI Z89.1-1969/1986, American National Standard for Personal Protection   
Protective Headwear for Industrial Workers Requirements

ANSI Z89.2-1971, Safety Requirements for Industrial Protection Helmets for  
Electrical Workers, Class B

ANSI Z49.1-1999, Safety in Welding, Cutting, and Allied Processes

## **5.2 Related Requirements**

The following documents may also contain requirements that apply to this activity:

RD-2108, Hearing Conservation

RD-2116, Laser Safety

RD-2109, Respiratory Protection

RD-2011, Electrical Safety

Contractor Radiological Controls Manual