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## **Administrative Procedure**

# **PRC-PRO-SH-40464**

## **Safety Showers and Eyewashes**

Revision 0, Change 1

Published: 11/03/2014

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Program: Occupational Safety and Industrial Hygiene

Topic: Occupational Safety and Industrial Health

Technical Authority: Knutson, Garrett

Functional Manager: Robinson, Roby

## **Use Type: Administrative**



- Solid Waste Operations Complex :  
Excluded from USQ  
**Exclusion Reason:**  
Exempt from USQ Process per PRC-PRO-NS-062, Table B-1
- Canister Storage Building/Interim Storage Area :  
Excluded from USQ  
**Exclusion Reason:**  
Exempt from USQ Process per PRC-PRO-NS-062, Table B-1
- Central Plateau Surveillance and Maintenance :  
Excluded from USQ  
**Exclusion Reason:**  
Exempt from USQ Process per PRC-PRO-NS-062, Table B-1
- Waste Encapsulation Storage Facility :  
Excluded from USQ  
**Exclusion Reason:**  
Exempt from USQ Process per PRC-PRO-NS-062, Table B-1
- 100 K Facility :  
Excluded from USQ  
**Exclusion Reason:**  
Exempt from USQ Process per PRC-PRO-NS-062, Table B-1
- Less Than HazCat 3 :  
Excluded from USQ  
**Exclusion Reason:**  
Exempt from USQ Process per PRC-PRO-NS-062, Table B-1
- Plutonium Finishing Plant :  
Excluded from USQ  
**Exclusion Reason:**  
Exempt from USQ Process per PRC-PRO-NS-062, Table B-1
- Transportation :  
Excluded from USQ  
**Exclusion Reason:**  
Exempt from USQ Process per PRC-PRO-NS-062, Table B-1

**JHA:** Administrative

**Periodic Review Due Date:**01/10/2022

**Publication Correction:**04/08/2020

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## Change Summary

### Description of Change

Edited to reflect new ANSI standard and a reference that was misattributed.

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**1.0 INTRODUCTION****1.1 Purpose**

Occupational Safety and Health Administration (OSHA) standards 29 CFR 1910.151 (c), and 29 CFR 1926.50 (g) [*MEDICAL SERVICES AND FIRST AID*] require provision of suitable facilities for quick drenching or flushing of the eyes and body when employees may be exposed to injurious corrosive materials. Through the General Duty Clause of OSHA (Public Law 91-596), the CH2M HILL Plateau Remediation Company (CHPRC) applies consensus standard ANSI Z358.1 (*EMERGENCY EYEWASH AND SHOWER EQUIPMENT*) for planning, design, construction, alteration, and acquisition specifications. The project/facility Occupational Safety and Industrial Hygiene organization may be consulted with for issues relating to this subject area that are not directly addressed by this document.

**1.2 Scope**

This procedure includes the following types of equipment:

- Plumbed and self-contained showers.
- Plumbed and self-contained eyewash equipment.
- Eye/Face wash equipment.
- Hand-held drench hoses.
- Combination units.

Personal eyewash devices (e.g., squeeze bottles) which are used solely as supplementary support to plumbed and/or self-contained units, and decontamination showers/units, are excluded from the scope of these requirements.

**1.3 Applicability**

This procedure is applicable to CHPRC Team employees and subcontractor personnel involved with the application, maintenance and use of chemicals.

**1.4 Implementation**

This procedure is effective upon publication.

**2.0 RESPONSIBILITIES**

All responsibilities associated with this procedure are identified in the process steps.

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### 3.0 PROCESS

<i>Actionee</i>	<i>Step</i>	<i>Action</i>
All Personnel	1.	MAINTAIN a clear path of travel to equipment stations.
	2.	MAINTAIN the area around equipment stations to be free of obstructions.
Line Management	3.	INSPECT <u>AND</u> ACTIVATE plumbed units weekly for a period long enough to VERIFY proper operation <u>AND</u> ENSURE design performance is maintained.
	4.	INSPECT all eyewash and shower units annually to ASSURE conformance with ANSI Z358.1.
	5.	PROTECT equipment that may be exposed to cold weather temperatures from freezing.
	6.	PROTECT where accumulation of airborne contaminants may deter proper fluid flow or operation, nozzles of plumbed and self-contained eyewash equipment, and eye/face wash equipment.
	7.	FOLLOW the design specifications of ANSI Z358.1 for installations of plumbed emergency eyewash and shower equipment, or in the provision of portable units.
	8.	AVOID confusion in operating technique during an emergency by uniformity in equipment type and style selection for multiple installations.
	9.	ASSEMBLE <u>AND</u> INSTALL equipment in accordance with manufacturer instructions.
	10.	PROVIDE suitable facilities in the work area for immediate emergency use for quick drenching or flushing of the eyes and body where any person may be exposed to injurious corrosive materials.
	11.	INSTALL <u>OR</u> PLACE equipment in well-lit, easily reachable locations to PROVIDE accessibility within a 10 second time frame, on the same level as the hazard and the path of travel shall be free of obstructions that may inhibit the immediate use of the equipment.
	12.	IDENTIFY emergency eyewash and shower stations using a highly visible sign. Lights are an acceptable means for identification of installations completed prior to April 6, 1989, but are not recommended as the sole means for identification.

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Actionee	Step	Action
Line Management	13.	TEST repaired/modified installations to ENSURE proper operability prior to placing out-of-service units back in service.
	14.	INSTRUCT affected employees in the location and proper use of the emergency eyewash and shower equipment located in their work areas.
Employees	15.	INSPECT <u>AND</u> MAINTAIN emergency shower and eyewash equipment <u>AND</u> POSSESS an adequate knowledge of manufacturer performance instructions.
Line Management	16.	PROVIDE a water supply that is tepid/lukewarm in temperature for plumbed units installed after April 16, 1998.

**NOTE:** *Delivered water temperature for existing installations should not be at extremes that would reasonably be expected to prevent an employee from fully flushing the affected area(s) as a result of undue discomfort. The 2009 date reflects the publication of the revised ANSI Z358.1 Standard. ANSI has defined "tepid/lukewarm" to mean not higher than 38° C (100° F) and not lower than 15.5° C (60° F).*

17. TEST new installations to ENSURE proper operability.

18. USE manufacturer instructions, where applicable, in developing specific maintenance, inspection, and testing criteria.

19. MAINTAIN shutoff valves installed between the sanitary water supply and the plumbed equipment in an "open" position during the performance of those work activities which require availability of emergency eyewash or shower equipment.

- NOTE:**
- *Plumbed and self-contained eyewash equipment should be capable of delivering flushing fluid to the eyes not less than 1.5 liters per minute (0.4 gpm) for at least 15 minutes.*
  - *Plumbed and self-contained emergency showers should be capable of delivering flushing fluid not less than 75.7 l/m or 20 gpm for at least 15 minutes.*

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**4.0 FORMS**

None

**5.0 RECORD IDENTIFICATION**

All records are required to be managed in accordance with PRC-PRO-IRM-10588, *Records Management Processes*. OCRWM records are also managed in accordance with PRC-PRO-QA-19579, *OCRWM Records Management*.

**6.0 SOURCES****6.1 Requirements**

29 CFR 1910.22, *Walking-Working Surfaces (General Requirements)*

29 CFR 1910.151, *Medical Services and First Aid*

29 CFR 1910.1200, *Hazard Communications*

29 CFR 1926.50, *Medical Services and First Aid*

American National Standards Institute (ANSI) Z358.1 - 2009, *Emergency Eyewash and Shower Equipment*

DOE O 433.1B, *Maintenance Management Program for DOE Nuclear Facilities*, Contractor Requirements Document (CRD)

Occupational Safety and Health Act of 1970, *General Duty Clause*, Public Law 91-596

**6.2 References**

PRC-PRO-IRM-10588, *Records Management Processes*

PRC-PRO-QA-19579, *OCRWM Records Management*

DOE G 420.1-1, *Non Reactor Nuclear Safety Design Criteria and Explosives Safety Criteria Guide For Use with DOE O 420.1, Facility Safety*