

Lead Battery Manufacturing

Safety and Health
Topics Page

OSHA Lead Requirements for PPE, Housekeeping, and Hygiene Facilities

The OSHA Lead Standard addresses specific requirements for the following:

- [Protective Clothing and Equipment](#)
- [Housekeeping](#)
- [Hygiene Facilities](#)



Locker room

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[Source Identification Protocol](#)

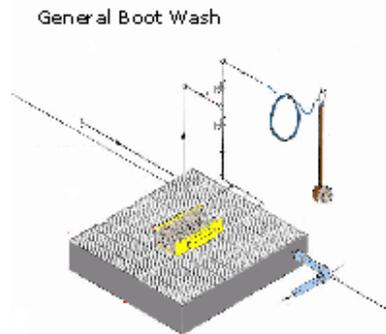
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OSHA Lead Requirements for PPE, Housekeeping, and Hygiene Facilities > Protective Work Clothing and Equipment

Appropriate personal protective equipment and clothing limits lead exposure. This section outlines OSHA's requirements for [clothing and equipment](#).



[View larger image of boot wash station diagram](#)

Clothing and Equipment

- The following protective clothing and equipment must always be used when lead levels are above the PEL: [1910.1025(g)(1)] (Figure 1)
 - Coveralls or similar full-body work clothing; [1910.1025(g)(1)(i)]
 - Gloves, hats, and shoes or disposable shoe coverlets; and [1910.1025(g)(1)(ii)]
 - Face shields, vented goggles, and other appropriate protective equipment. [1910.1025(g)(1)(iii)]
- Clean and dry protective work clothing must be provided daily or weekly depending on exposure levels. [1910.1025(g)(2)(i)]
 - Cleaning, laundering, or disposal of protective clothing and equipment must be provided. [1910.1025(g)(2)(ii)]
 - Protective clothing and equipment must be repaired or replaced as needed to maintain its safety and effectiveness. [1910.1025(g)(2)(iii)]



Figure 1
Appropriate PPE



Figure 2
Vacuum to remove lead from protective clothing

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- All protective clothing must be removed at the end of a work shift in change rooms provided for that purpose. [[1910.1025\(g\)\(2\)\(iv\)](#)]

- Contaminated protective clothing, which is to be cleaned, laundered, or disposed of, must be placed in a closed, labeled container in the changing area. [[1910.1025\(g\)\(2\)\(v\)](#)]

- Persons who clean or launder protective clothing or equipment must be informed in writing of the potentially harmful effects of exposure to lead. [[1910.1025\(g\)\(2\)\(vi\)](#)]

- Containers of contaminated protective clothing and equipment must be appropriately labeled. [[1910.1025\(g\)\(2\)\(vii\)](#)]

- Removal of lead from protective clothing or equipment by blowing, shaking, or any other means which disperses lead into the air is prohibited. [[1910.1025\(g\)\(2\)\(viii\)](#)] (Figure 2)

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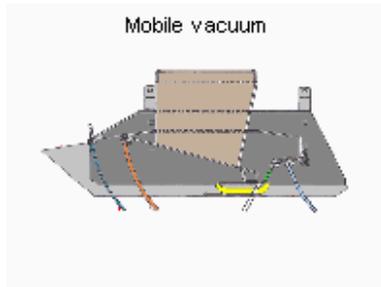
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OSHA Lead Requirements for PPE, Housekeeping, and Hygiene Facilities > Housekeeping

A rigorous housekeeping program is necessary to keep airborne lead levels as low as feasibly possible.



View larger image of mobile vacuum diagram

OSHA Housekeeping Requirements

- All surfaces must be maintained as free as practicable of accumulations of lead. [1910.1025(h)(1)]
- Floors and other surfaces where lead accumulates may not be cleaned by the use of compressed air. [1910.1025(h)(2)(i)]
- Shoveling, dry or wet sweeping and brushing may be used only where vacuuming or other equally effective methods have been tried and found not to be effective. [1910.1025(h)(2)(ii)] (Figure 1)
- Where vacuuming methods are selected, the vacuums shall be used and emptied in a manner which minimizes the reentry of lead into the workplace. [1910.1025(h)(3)]

▶ [Central Vacuum Diagram](#)

▶ [Mobile Vacuum Diagram](#)



Figure 1
Vacuum instead of sweep



Figure 2
Vacuuming lead oxide on the floor

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[1910.1025(i)(4)(ii)]

- Employees must wash their hands and face before eating, drinking, smoking or applying cosmetics. [1910.1025(i)(4)(iii)]
(Figure 3)
- Employees must not enter lunchroom facilities with protective work clothing or equipment unless surface lead dust has been removed by vacuuming, down draft booth, or other cleaning method.

[1910.1025(i)(4)(iv)]

- ▶ [Clothes Cleaning Air Shower Diagram](#)
- ▶ [Boot Wash Station Diagram](#)
- ▶ [Shoe Cleaning Machine](#)



Figure 3
Hand wash station

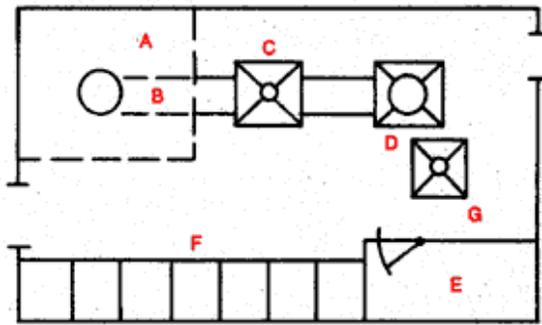


Figure 4
Air shower

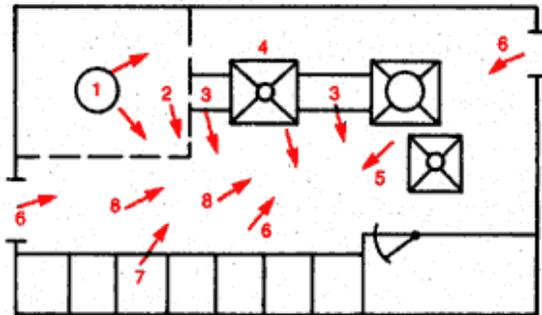
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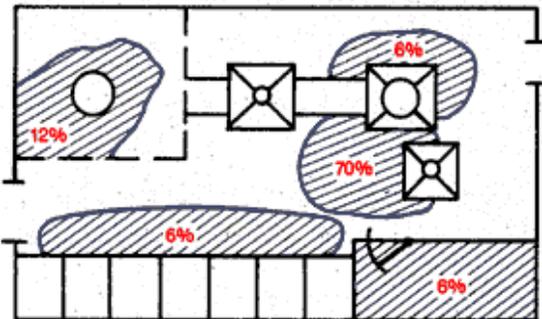
Figure 1: Source Characterization



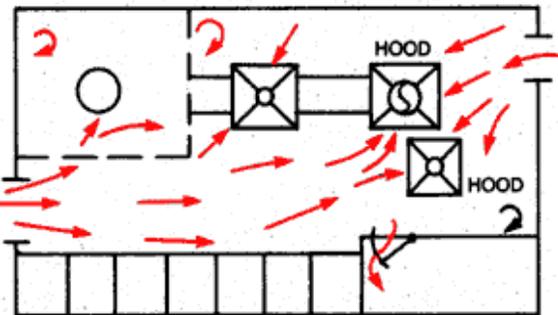
VIEW 1



VIEW 2



VIEW 3



VIEW 4

PLAN VIEW

- A. OXIDE MIXING AREA
- B. PASTING
- C. CURING OVEN
- D. STACKING AREA
- E. OFFICE
- F. STORAGE
- G. VENTILATED RACK

EMISSION SOURCES

- 1. OXIDE OPERATION
- 2. PASTING
- 3. CONVEYOR
- 4. OVEN
- 5. FUGITIVES
- 6. RE-ENTRAINMENT/WIND
- 7. STORAGE AREA
- 8. MOBILE EQUIPMENT

EMPLOYEE WORK AREAS

% OF TIME IN AREA
FOR OFFBEARER

AIR FLOW PATTERNS