

Decon Double Check

Hazardous materials that are not removed from Personal Protective Equipment (PPE) can be transferred to other surfaces. Of particular concern is footwear. Contaminated shoes and boots can leave a trail of contamination where you walk at work, in your vehicle, or be transferred to your home. If transferred to your vehicle or home, family members could be exposed.

Objectives

Using various types of footwear, you will demonstrate an ability to:

- Identify if contamination remains after decon

Pre-Planning for Decontamination

Management must develop a decontamination plan as described in 29CFR1910.120(k). The plan must be operational before any personnel or equipment enters areas where there is the potential for exposure to hazardous substances. The decontamination plan should include the following points:

- A description of the location and layout of potential decontamination stations for the facility.
- A list of the decontamination equipment needed for the possible hazards (for example, water for removal and brushes for scrubbing).
- The appropriate PPE for persons assisting with decontamination.
- Appropriate procedures for specific materials that may be encountered in the plant.
- Methods and procedures for preventing contamination of clean areas.
- Methods and procedures for minimizing worker contact with contaminants during removal of PPE.
- Safe disposal methods for clothing and equipment that are not completely decontaminated.
- Revisions whenever the type of personal protective clothing or equipment changes, the site conditions change, or the facility hazards are reassessed based on the new information.

The safety and health supervisor must assess the effectiveness of the decon procedures and take any appropriate actions (29CFR1910.120(k)(2)(iv)).

Decontamination Procedures

All personnel, clothing, equipment, and sample containers leaving contaminated areas must be decontaminated to remove any hazardous materials that may have adhered to them. Decontamination can be accomplished by:

- Physically removing contaminants
- Chemically removing contaminants
- Rinsing off contaminants
- Disinfecting and sterilizing (infectious materials)
- A combination of the above methods

Physical Removal of Contaminants - Some contaminants stick to the surface of PPE and equipment. These contaminants can be removed by scraping, brushing, washing, and wiping.

Dust and vapors that cling to PPE and equipment may become trapped in small openings, such as the weave of the fabric, and can be removed with water or a liquid rinse.

Volatile liquid contaminants can be removed from protective clothing or equipment by evaporation followed by a water rinse. Care must be taken to prevent inhalation of the vaporized chemicals.

Chemical Removal of Contaminants - Removing contaminants with a chemical requires special planning and training. The solution must be chemically compatible with the clothing and equipment being cleaned.

Rinsing off Contaminants - A soap and water solution is most frequently used to help remove contaminants. Such solutions are called surfactants.

Rinsing is an important method. Multiple rinses with clean solutions will remove more contaminants than a single rinse with the same volume of solution. Commercial off-the-shelf decontamination materials are also available. Assure these are nontoxic and safe to use with the PPE.

Disinfecting and Sterilizing - Chemical disinfectants provide a means of deactivating infectious agents. Disposable PPE is recommended for use with infectious agents.

All equipment and solvents used for decontamination must be decontaminated or neutralized and disposed of properly.

Exercise– Decon Double Check

The facilitator will provide footwear or other PPE for decon. Review the Standard Operating Procedure (SOP) from your company or a training-only SOG for decon and then implement it.

Working in groups, identify if contamination remains after your decon procedure. Complete the Worksheet provided by the facilitator.

Be prepared to discuss your results during a report back.

Closing

For the PPE, did you:

- Identify if contamination remains after decon

Based on this exercise, what takeaways do you have as you go back to work?

Please ask any remaining questions.