

**Hazardous Materials, SOP 205**  
**DECONTAMINATION PROCEDURES**

1. Scope. This standard establishes a procedure for the decontamination of people, equipment, and apparatus that become contaminated as a result of an exposure to a hazardous material. It was promulgated to:
  - A. Prevent the spread of contaminants beyond the hazard zone at an incident involving a hazardous material.
  - B. Reduce the possibility of death or injury due to exposure to a hazardous material.
  - C. Establish a procedure to decontaminate equipment and apparatus exposed to a hazardous material so that the equipment and apparatus might promptly be returned to service.
  
2. General.
  - A. Contamination is the transfer of a hazardous material to persons, equipment, and the environment due to an exposure or contact with a hazardous material. The magnitude of the exposure depends on the duration of the exposure and the concentration of the hazardous material.
  - B. Decontaminating (decon) is the process of removing contaminants from people and equipment. Decon should occur in the warm zone to minimize the possibility of secondary contamination.
  - C. There are four basic methods of decontamination available to response personnel:
    - (1) Dilution: The use of water to flush the contaminant from the victim or piece of equipment. Be sure to impound or collect the contaminated water from this process.
    - (2) Absorption: The use of an absorbent for picking up a liquid contaminant. This works well on a spill.
    - (3) Chemical degradation: The use of another material (e.g., household bleach or baking soda) to change the chemical structure of the hazardous material so as to neutralize the material.

- (4) Isolation and disposal: The isolation of a hazardous material by collecting it and then disposing of it in accordance with state and federal regulations. While this may be a more costly alternative, it is often the easiest technique to employ.

3. Procedure.

- A. If contamination has occurred at a hazardous materials incident, the incident commander shall appoint a decon officer. The decon officer shall establish a decontamination sector in the warm zone. The site of the decon sector should be selected on the basis of :
  - (1) Accessibility and location. (Special note: Due consideration must be given to the privacy of potential victims and rescue workers.)
  - (2) Surface material.
  - (3) Lighting.
  - (4) Drains and waterways.
  - (5) Water supply.
  - (6) Weather.
- B. All personnel, victims, and equipment must be decontaminated before being allowed entry into the cold zone. The specific decontamination measures employed in the decon sector will depend on the circumstances surrounding the incident and the level of contamination.
- C. Members assigned to the decon sector will instruct contaminated members to adhere to the following procedure:
  - (1) Gross decontamination: A decontamination worker will remove the majority of the contamination from the victim and his tools by hosing down the victim or by providing a portable shower. A catch basin shall be used to confine the water used in this process.
  - (2) Tools and equipment: Any tools and equipment used by the victim should then be discarded at a designated location for further decontamination, if necessary.

- (3) Scrubdown: The victim should then step into the rinse area, where a decontamination worker will scrub him with detergent and water. The water shall be kept for analysis prior to being released.
  - (4) Final step: After being washed down, the victim should then proceed to the final area, where articles of clothing and other equipment will be removed. These items shall be left in the decontamination area for further treatment or disposal.
- D. If a contaminated victim must be transported prior to being properly decontaminated, Medical Control and the destination emergency room shall be notified.
- E. If an ambulance becomes contaminated, the ambulance will be quarantined until the unit can be properly decontaminated.
- F. Members who are exposed to a hazardous material shall complete a Hazardous Materials Exposure Form (see Attachment 4) and a copy will be placed in their medical file.