DECONTAMINATION DRESSDOWN AT A TRANSPORTATION ACCIDENT INVOLVING RADIOACTIVE MATERIAL

DISCLAIMER
Viewing this video and completing the enclosed printed study material do not by themselves provide sufficient skills to safely engage in or perform duties related to emergency response to a transportation accident involving radioactive material. Meeting that goal is beyond the scope of this video and requires either additional specific areas of competency or more hours of training than will be presented in this video. The procedures and training in this video are intended as generic guidance which may assist you in the development of standard operating procedures specific to your agency. This video is one of many available resources designed to enhance your existing emergency response program’s radiological material response capabilities. Emergency responders are advised to participate in hazardous material training as required by OSHA 1910.120 and respond in accordance with their level of training and local procedures. The techniques demonstrated in this video are generic in nature. Responders working in jurisdictions with specific procedures in place should follow their jurisdiction’s procedural requirements.

PURPOSE
This video will assist appropriately trained emergency responders in developing an understanding of the actions involved in decontaminating responders at a transportation accident involving Hazard Class 7 (radioactive) material.

VIDEO OVERVIEW
This video will demonstrate techniques used to conduct the decontamination dressdown of responders who have entered the hot zone and are contaminated with radioactive material. Starting with the initial scene size up, this video will show responders’ discussing the decontamination plan, scene entry, review victim rescue and treatment, and demonstrate decontamination dressdown techniques when working at an accident scene where responders have been contaminated with only radioactive material. The video presents one perspective on how decontamination dressdown can be accomplished. The sequence or method of decontamination your organization uses may differ from this video. Each instructor should review organizational standard operating procedures and decide which, if any, of the sections of this training video can be applied to your organization’s training.
HOW TO USE THIS GUIDE
The purpose of this User’s Guide is to provide instructors with an overview of the key points covered in the video. The Student Handout portion of this Guide is designed to assist the instructor in reviewing those points with students. The Student Handout should be distributed to students after the video is shown and the instructor should use the Guide to facilitate a discussion on how the decontamination dressdown process is implemented. During this discussion, the instructor can present various scenarios, each of which would discuss decontamination at the accident scene. The purpose of this discussion would be to cover how responders would determine the proper decontamination method, set up the decontamination corridor and conduct the decontamination of the entry team responders.

DECONTAMINATION PLAN
List the components of a decontamination plan:

- A sketch of the decontamination corridor layout.
- Establishment and identification of the control zone boundaries as recommended in the Emergency Response Guidebook.
- An explanation of the decontamination method to be used.
- The number of people needed to perform the decontamination operation.
- Level of personal protective equipment needed to perform decontamination of victims, responders or equipment.
- Containment controls to be used to control runoff.
- Selected disposal method of waste created during decontamination operations.
- Post incident medical considerations, including briefing on incident hazard chemicals and as needed follow-up health care evaluations.

DECONTAMINATION CORRIDOR SET UP
What should be used to identify the decontamination corridor and doffing positions?

- The decontamination corridor should include barricade tape, traffic cones, or pre-marked tarps used to identify the decontamination corridor and doffing positions.
- The decontamination corridor and doffing positions should be obvious to responders.
APPROACHING THE DECONTAMINATION CORRIDOR
Where should responders place tools or equipment used in the hot zone?

- As responders approach the decontamination corridor, the decontamination team will instruct responders to place equipment or tools in the designated tool drop area.

DECONTAMINATION CORRIDOR ENTRY AND DRESSDOWN
List the steps used to conduct a decontamination dressdown of responders contaminated with only radioactive material?

- The responders wipe their feet and then step into the decontamination corridor. Remember, if the step-off pads become damaged or grossly contaminated, the decontamination team should replace the damaged step-off pads as necessary. To reduce the possible spread of contamination, replacement pads should be placed on top of existing pads.
Air supply limitations will be a primary concern of the decontamination team. This limitation will have an impact on the decontamination method selected when responders approach the decontamination corridor. Because of air supply limitations, responders may have only a very short time to dressdown before running out of air. The use of an air purifying respirator cartridge can alleviate the urgency of processing the responder through the decontamination corridor, allowing decontamination workers additional time to conduct necessary decontamination or radiological surveys.

If radiological survey instrumentation is available the responder should be surveyed for radiological contamination before removing the fire fighting protective clothing. If no contamination is found on the responder’s protective clothing, the responder is released to exit the decontamination corridor.

The next step in the decontamination dressdown process begins with removal of the responder’s fire fighting gloves. To avoid the possible spread of contamination remember to gently place all removed clothing in the designated collection receptacle. If the fire fighting coat is equipped with wristlets, the decontamination worker will assist in releasing the wristlets.
Decontamination workers now assist the responder in replacing their fire fighting gloves with medical exam gloves.

With the assistance of the decontamination workers, the responder’s fire fighting helmet is removed and placed in the designated collection receptacle.

Next, the hood is removed, and slid down the air supply line. An option to sliding the hood down the air supply line is to cut the hood to facilitate removal.

The decontamination workers assist the responder with removal of the Self Contained Breathing Apparatus (SCBA) harness. It is important that the air supply for the SCBA remain “on” at this time, and the decontamination workers should ensure that the responder does not disconnect the regulator air supply or remove the SCBA face piece. Positive pressure within the face piece should be maintained.

Decontamination workers assist the responder with removal of the fire fighting coat and place it in the designated collection receptacle.

Next, the responder steps out of their fire fighting pants and boots. If available, some type of temporary footwear should be provided for responders exiting the decontamination corridor. The decontamination worker gently places the fire fighting pants and boots in the designated collection receptacle.
As the responder nears completion of the decontamination process, the SCBA face piece is removed and handed to the decontamination worker.

The decontamination worker turns “off” the responder's SCBA, and places it in the designated collection area.

In the final dressdown step, the responder removes the remaining pair of medical exam gloves and places them in the disposal receptacle.

Finally, the responder reports to the designated staging area for contamination survey monitoring by the Radiation Authority.
DECONTAMINATION TEAM DRESSDOWN

Describe how the decontamination workers complete the decontamination process?

- Decontamination workers conduct a self-decontamination by assisting one another in removing protective clothing, and placing removed clothing into the designated collection receptacle.

REMEMBER THESE POINTS

1. Establish a decontamination plan.
2. Responders or equipment that entered the hot zone will require decontamination or approval of release from the Radiation Authority.
3. During the dressdown process, be careful to avoid cross contamination.
4. Upon completion of the dressdown process, report to the designated staging area for a contamination survey.
5. Provide a report on decontamination corridor operations to the incident commander.
List the components of a decontamination plan:

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What should be used to identify the decontamination corridor and doffing positions?

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Where should responders place tools or equipment used in the hot zone?

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List the steps used to conduct a decontamination dressdown of responders contaminated with only radioactive material?

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