Technical Decontamination

Operations Level Hazardous Materials and Weapons of Mass Destruction Psychomotor Skills Certification Testing

Connecticut Commission on Fire Prevention and Control Certification Division

January 2009
Program Goal

Designed for candidates preparing for the Firefighter I (Haz-Mat competencies) or Awareness and Operations Hazardous Materials Level certification examination process to demonstrate the concepts for Technical Decontamination.
Program’s Intent

• Prepare candidate for certification testing in technical decontamination
• Assist instructors in demonstrating technical decontamination
• Offer ONE representative option for technical decontamination
• NOT intended as the ONLY configuration for technical decontamination
• NOT intended to challenge or change the methodology or configuration of protocol or CONN-OSHA regulations for technical decontamination in the State of Connecticut
Technical Decontamination Corridor for Hazardous Materials and Weapons of Mass Destruction Certification Psychomotor Skills Testing

- Entry Team to Hot Zone
  - Dirty Side
    - Gross Wash
    - Wash Rinse
    - Final Rinse
  - Clean Side
    - Hand wash

- Cold Zone
  - Tool Drop
  - Cones
  - Emergency Decon Area
  - Trash can
  - Absorption Pad
  - Trash can liner
  - SCBA drop
  - Long board and 5 gal. buckets or bench

- Hot Zone
  - 5 gal. bucket
  - Garden hose
  - Brush
  - Balance stick
  - Wand
  - Garden hose
  - Absorption Pad
  - Cones

- Water supply from apparatus or hydrant

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Clean Side vs. Dirty Side

- There is a distinction between Hot and Cold Zones and Clean and Dirty Sides
- Clean Side is the side of the decon corridor where the Decon Team will work
- Dirty side is the opposite side caused by contaminants being ‘moved’ as the Entry Team is being decontaminated

Reference Source:
IAFF Haz-Mat Technician Training Program
Module 8, page 8-16
Equipment

• Tarp
• Pools
• Brushes
• Wands
• Solution
• Buckets
• Barrels

• Trash bag liners
• Garden hoses
• Reducer
• Manifold
• PPE
• SCBA
• Etc., etc.
Many Variations

- Corridor set up dependence:
  - Chemical
  - State of matter
  - Concentration
- Haz-Mat Technician or IC oversight
- Candidate is responsible to set up equipment
Technical Decontamination

Level “B”
Chemical Protective Suits
Personal Protective Equipment

- Decon Team dressed to same level of protection or ONE lower than Entry Team
- Reminder: If Entry Team is in Level “B” the lowest protection allowed the Decon Team is Structural Firefighting Gear with SCBA
- Level “C” Respirator Protection is not utilized by fire service in CT
- Structural Firefighting Gear w/o SCBA is NOT acceptable under this circumstance
Equipment and Tool Drop Area

• Tools used in multiple entry operations
• No need to decon after every entry
• Tools may need specific decon
• Tools may be identified for disposal not decontamination
• Consider an additional drop for specialized or electronic equipment
Communication

• “Are you okay?”
• “How is your air supply?”
• “What is contaminated?”
• “How do you think you got dirty?”
• “Raise arms up and rotate.”
• Decon Team performs quick visual survey; advises of any suit damage
Balance

- Many methods
  - Brushes
  - Walker
  - Broom Stick
- Avoid trip hazards
- Decon Team avoids direct contact when possible
Pool #1 - Gross Rinse

- Remove large contaminants
- Start at head; work down
- Entry Team member may need to squat
- Alternative: Decon Shower (not part of certification testing)
Rotate

- Carefully rotate
- Use balancing stick
- Thoroughly rinse
Extreme Care

• Ensure that all suit crevices and wrinkles are clear
• Ensure that all exposures are clear
Reduced-Profile SCBA Maneuver to Decon Back

- Loosen straps and belt
- Maintain contact with regulator
- Reduce profile further by removing one harness strap
- Slide harness to left side behind arm
- Return SCBA to back for safe movement from pool to pool
Boot Rinse and Move

1. Use wand to signal; tap on boot
2. Raise leg to wash bottom of boot
3. Place lower leg outside pool
4. Complete process on other leg
5. Lower second leg outside pool
Pool #2 – Wash with Brush and Solution

- Rinse before and after washing
- Use head-to-toe approach
- Pay attention to areas that received greater contamination
Lower-Profile and Washing

- Loosen straps and belt
- Maintain contact with regulator
- Reduce profile further by removing one harness strap
- Slide harness to left side behind arm
- Return SCBA to back for safe movement from pool to pool
Pool #3 – Final Rinse

- Similar to Pool #1
- Include Low-Profile SCBA Maneuver for final rinse (not shown)
Doffing

• Refer to PPT on Donning and Doffing Level “B” Suits and SCBA
Hand Wash Station

- Optional Station
- Wash hands with soap and water or waterless lotions and paper towels
- After Doffing PPE
- Before going to EMS (could be completed at EMS station)
Technical Decontamination

Structural Firefighting Gear
Equipment and Tool Drop Area

- Tools used in multiple entry operations
- No need to decon after every entry
- Tools may need specific decon
- Tools may be identified for disposal not decontamination
- Consider an additional drop for specialized or electronic equipment
Communicate

- “Are you okay?”
- “How is your air supply?”
- “What is contaminated?”
- “How do you think you got dirty?”
- “Raise arms up and rotate.”
- Decon team performs quick visual: advises of any suit damage
Balance

• Many methods
  – Brushes
  – Walker
  – Broom Stick
• Avoid trip hazards
• Decon Team avoid direct contact when possible
Pool # 1 – Gross Rinse

- Remove large contaminants
- Start at head; work down
- Entry Team member may need to squat
- Alternative: Decon Shower (not part of certification testing)
Thorough Rinse

- Carefully rotate
- Use balancing stick
- Reduce contamination
Reduced-Profile SCBA Maneuver to Decon Back

- Loosen straps and belt
- Maintain contact with regulator
- Reduce profile further by removing one harness strap
- Slide harness to left side behind arm
- Return SCBA to back for safe movement from pool to pool
Pool #2 – Wash with Solution

- Rinse before and after washing
- Use a head-to-toe approach
- Pay attention to areas that received greater contamination
Washing and Reduced Profile

- Loosen straps and belt
- Maintain contact with regulator
- Reduce profile further by removing one harness strap
- Slide harness to left side behind arm
- Return SCBA to back for safe movement from pool to pool
Pool #3 – Final Rinse

- Similar to Pool #1
- Include Lower Profile SCBA Maneuver for final rinse (not shown)
Prepare for Doffing

- Refer to PPT on Doffing of Structural Firefighting Gear
Hand Wash Station

- Optional Station
- Before going to EMS
- Wash Hands with soap and water or waterless lotions and paper towels
- After Doffing PPE
- Before going to EMS (could be completed at EMS station)