Purpose: The purpose of this SOG is to establish a DECON Assessment Team (DAT) / Modified Technical DECON (MTD) response plan utilizing on-duty North Kingstown Fire Department personnel.

The purpose of a DAT is to provide expertise and/or support involving potential DECON operations outside of the Town of North Kingstown.

The purpose of MTD is to rapidly deploy a DECON function while allowing the initial HAZMAT Tech team to make entry into a potentially contaminated environment.

Policy:

DAT:

Offer guidance to neighboring communities that seek support in determining whether and to what extent DECON operations are required within that jurisdiction for a particular HAZMAT incident.

- The DAT may be expanded to MTD or full Technical DECON if needed.

MTD:

Implemented on small scale suspected CBRNE [Chemical, Biological, Radiological, Nuclear, and Explosive] incidents involving toxic Industrial Chemicals and materials that require surfactant and water for removal utilizing Dahlgren Decontamination Solution and Fiber Tech Wipes.

- The MDT may be expanded to the full Technical DECON if needed.

In the event a DAT or MTD response evolves into a DECON full response the apparatus response plan shall be reduced to reflect resources already dispatched or on the incident scene.

Operations:

DAT:

Liaison with neighboring jurisdiction(s) Incident Commander to determine the most appropriate level of DECON required for the incident.

MTD:

- Establish a DECON corridor for the Entry Team to enter/exit hot zone and an appropriate location [outside of hot zone] to conduct MDT.
- Consult with HAZMAT Branch Chief and DECON field guide.
- Utilize Dahlgren Decontamination Solution when appropriate.
    - Dahlgren solution is applied via spray, therefore careful attention should be taken as to the wind direction and atmospheric conditions.
        - The DECON Tech conducting the application MUST BE UPWIND of the HAZMAT tech being decontaminated.

Response: When a DAT or MTD is requested the following apparatus will respond:

- Special Hazards (Modified technical DECON Equipment)
- Car 2 (Shift Commander/Incident Commander)
- Engine Company (District Closest to the Incident)

Special Hazards shall coordinate with the assigned engine company and respond out-of-town with a crew of four.

PPE: If the Haz-Mat entry team requires decontamination, the DECON team shall don PPE one level below that of the Entry team, however it is recommended at least a Tyvex suit be used.

Modified Technical DECON equipment:

- 4’ X 4’ Shuffle Pit (SH-1)
- 4’ X 4’ Fiber-tech pad (lining shuffle pit) (SH-1)
- E-DECON kit (SH-1)
- Electrostatic sprayer (C-2)
- Dahlgren Decontamination Solution (C-2)
- Mixing equipment for solution (C-2)
- Fiber-tech pads (SH-1)
- Electronic device for with Firstline Tech DECON Field guide (C-2)

Procedure: If the Haz-Mat entry team PPE is deemed contaminated and Dahlgren is appropriate, personnel shall utilize Fiber-tech wipes and Dahlgren DECON solution for the Decontamination process.

1. If deemed appropriate the Dahlgren Solution shall be mixed for use in the electrostatic sprayer.
2. Entry team member shall stand in Shuffle pit.
3. The DECON team member shall wipe contaminated suit with a Fiber-tech wipe then discard said wipe in corner of pit.
4. Dahlgren solution shall be evenly applied to the suit ensuring the electrostatic feature is activated and the proper spray pattern followed.
5. Wait the appropriate dwell time [as determined by DECON Field Guide].
6. Wipe clean with Fiber-tech wipe [especially on the cut-line].
7. Carefully remove [cut] the PPE from entry team member
   i) Roll the suit in a manner that results in encapsulating the exterior [contaminated] of the suit inside the roll.

8. Bag the suit for disposal.
9. Utilize the electrostatic sprayer on used Fiber-tech wipes and any other surfaces that may have become cross contaminated throughout the process.
10. Document the incident and all supplies used for replacement.
11. Clean Electrostatic sprayer per manufacturer guidelines

Caution: Dahlgren solution is not to be used on bare skin. Should skin become contaminated, use soap, water and /or RDT if available. Refer to HAZMAT Branch Chief for proper DECON of skin for threat agent involved.

Emergency DECON:

- Should emergency DECON be required due to depleted air, medical issue, injury, etc.,
  - HAZMAT Tech shall be:
    - "Washed down" with Fire Dept handline using large amounts of water
    - Removed from suit
    - "Washed down" again after removal from suit
    - Transferred to EMS sector for treatment
- Attempt to control runoff if possible

This SOG is not to take the place of Haz-mat decontamination response SOG 5100

Definition(s)

Dahlgren DECON Solution: Dahlgren Decontamination Solution (DDS) is a three-part solution that can immediately decontaminate chemical and biological warfare agents. Additionally, DDS can decontaminate personal protective equipment (PPE) and related equipment [i.e. SCBA, tools, etc.]. Dahlgren Decontamination Solution has a ten-year shelf life in storage and is effective for a minimum of six hours after being mixed with water.

Note: Live-agent testing indicates that the surfactant based decontamination formula with Dahlgren Decontamination solution is capable of 100% neutralization of Fentanyl & Carfentanyl in under 5 minutes, 100% neutralization of HD in less than 2 minutes, 100% neutralization of GD in 5 minutes, and approximately 95% neutralization of VX in 15 minutes with no toxic byproducts observed.

This product was developed at the Naval Surface Warfare Center in Dahlgren, Va., and tested at the Lawrence Liverpool National Laboratories and represents a shift in the paradigm of the DECON process. The shift is from using large volumes of water and utilizes a dry wipe in conjunction with a solution that rapidly destroys chemical warfare agents and a broad range of toxic industrial chemicals.

Surfactant: A substance which tends to reduce the surface tension of a liquid in which it is dissolved