



CHEMICAL PROTECTIVE CLOTHING (CPC) UNITS

1. PURPOSE

Chemical Protective Clothing (CPC) Units have been formed to augment the Hazardous Materials Group in incidents where contaminated victims are encountered. Their purpose is to assist in performing search, rescue, and removal of victims, both civilians and emergency responders. They are trained and certified to operate in Level "A" and Level "B" CPC and can perform required decontamination. However, they are neither trained nor equipped to perform mitigation. They can be used at any incident where the Incident Commander feels their training and equipment might be beneficial.

2. DESIGNATED CPC UNITS

There are presently 10 units designated as CPC Units.

Unit	Division	Battalion	Borough
Ladder 1	1	1	Manhattan
Ladder 6	1	4	Manhattan
Ladder 10	1	1	Manhattan
Ladder 21	1	7	Manhattan
Ladder 2	3	8	Manhattan
Ladder 35	3	9	Manhattan
Rescue 1	SOC	SOC	Manhattan
Rescue 2	SOC	SOC	Brooklyn
Rescue 3	SOC	SOC	Bronx
Rescue 4	SOC	SOC	Queens

3. EQUIPMENT

These CPC Units shall carry:

Level "A" Chemical Protective Suits (6)

Stokes Stretcher / Long Board

Decontamination supplies:

Plastic Buckets (2)

Brushes (2)

Decon Solutions (Case of bleach & five gallons of liquid soap)

Garden hose, ¾" x 50' (2)

Spray nozzles (2)

2 ½" hydrant adapters (2)

Triage Tags

4. TEAM CONCEPT

CPC Unit entries require a coordinated team effort by at least five (5) CPC trained members: Entry (2), Backup (2), and Decon (1), under the proper supervision. It is not necessary that all team members be from the same CPC Unit. However, the necessary number of trained individuals must be assembled and a decontamination station must be established and staffed before entry is made. CPC Unit Officers will, in concert with the Chief in Charge of the Haz-Mat Group, provide for the proper supervision and safety of members.

- 4.1 If a CPC Unit is requested to respond, the dispatcher will assign an adequate number of CPC Units to ensure that one CPC trained Officer and five CPC trained Firefighters are responding.

5. CPC UNIT OFFICER

On arrival, the CPC Unit Officer shall report to the Incident Commander for briefing. The first arriving CPC Unit Officer will recommend to the IC the **ENTRY POINT** into the Hot Zone (based on their training, initial briefing and size-up), and then establish the CPC Unit Assembly Area adjacent to the entry point. The CPC Unit Officer will brief unit members of the objective and required tasks and must continually maintain both immediate and functional supervision over them to ensure their safety during the operation. Any critical or pertinent information received from the teams must be immediately relayed up the chain of command. The CPC Unit Officer shall not don a chemical protective suit unless the situation indicates that a suit is required in order to properly supervise unit's operation. Examples of this would be where the Entry team would not be in line of sight, a complex Entry team operation, or where the operation requires a number of Entry teams.

5.1 Supervision

5.1.1 Responsibilities:

- Ensure proper number of CPC trained personnel on scene for operation
- Designate team assignments and team radio contact members
- Ensure proper communications
- Establish and maintain written log of "On Air" times
- Determine and monitor "On Air" work and exit times
- Monitor and adjust "On Air" times as needed
- Ensure Identity Tags are used and placed on suits
- Maintain both immediate and functional supervision with teams
- Pass all critical information expeditiously up the chain of command
- Ensure Decon Station is established and Back-up team is in position prior to entry

5.2 Incident Command Briefing

5.2.1 Ascertain from Incident Commander:

- Known or suspected material(s) involved
- Physical state (solid, liquid, gas) and amount of material
- Location of material
- Time of original spill or release
- Location of known or suspected victims
- Injuries:
 - To first responders, and level of PPE worn
 - To any civilians / workers
 - Signs and symptoms
- Initial action taken, if any
- Any zones established
- Has a water supply been established

5.2.2 Inform IC of need for any additional units required:

- Haz-Mat Group Units:
 - Haz-Mat Operations Chief
 - Haz-Mat Co. #1
 - Haz-Mat Technician Unit(s)
 - Decon Unit
 - Decon-Trailer
 - Additional CPC Unit(s)
 - Haz-Tac Ambulance*
 - Emergency Response Squad (ERS)**
- Conventional Units:
 - Engine Company (Water Supply for Decon)
 - Ladder Company (Operational Support)
 - Ambulance (Transportation & Monitoring)

* An EMS Command ambulance staffed with members trained as Haz-Mat technicians.

** An EMS Command ERS assigned to supervise EMS Command units at special operations.

5.3 Duties

5.3.1 Establish or evaluate existing:

- Hot Zone
- Warm Zone
- Entry point into zones
- CPC Unit Assembly Area
- Back-Up team's location
- Decon Corridor(s) (Non-Ambulatory victims, Ambulatory victims, Emergency Responders)
- Casualty Collection Point (CCP) - a designated location where victims will be assembled for triage by members of the EMS Command.
- Communication capabilities for CPC equipped members
- Communication with IC

- Water supply (Decon for CPC members)

5.3.2 Unit Members Briefing

Inform members of:

- Material / Device involved
- Physical state of material
- Location of material / device
- Number and location of victims or reported victims
- Level of CPC
- Communication method for CPC equipped members
- Needed equipment and supplies
- Water supply for Decon (location and designated Engine Company)
- Location of:
 - Zones (Hot & Warm)
 - Entry point
 - Back-up team members
 - Decon corridor
 - Decon station
 - CCP(s), if applicable
- Assigned tasks

6. ENTRY TEAM

Must consist of two CPC trained members attired in the appropriate level of CPC. They shall perform the actual search, rescue, and removal of victim(s) from the hazardous area to a CCP. For large-scale incidents where there are multiple victims (three or more) in the Hot Zone refer to section 9. While operating in the Hot Zone, they must also stay alert for any clues, signs, or causes that could have possibly contributed to the spill or release. All such information must be reported to the CPC Unit Officer immediately. Both members must be radio equipped, and for both safety and operating efficiency, they must work in close proximity of one another at all times (buddy system). If one member must leave the operating zone the other team member must also leave. If one of the Entry team members goes down for an unknown reason, the other team member must leave the operating area to insure notification is made to the Back-up team for the need of an immediate rescue. A major concern of this Entry team member, must be whether the released material has over time permeated the CPC of the downed team member and if so, their own suit may be vulnerable. The Back-up team will be performing only one task, the removal of the downed member, and their operating time should be less than that of the Entry team's. The team will be under the functional supervision of the CPC Unit Officer at all times.

6.1 Operation

6.1.1 Responsibilities:

- Coordinate and verify "On Air Start" time with their CPC Unit Officer
- Immediately notify their CPC Unit Officer upon reaching operation point
- Verify "On Air Work and Exit" time with CPC Unit Officer
- Monitor "On Air" time
- Maintain radio contact with CPC Unit Officer
- Always operate as team in sight of one another (Buddy System)
- Determine their order of decontamination
- Re-hydrate and follow any recommended treatment

Note: In areas of limited or no line of sight with the CPC Unit Officer, the Entry team members shall give a detailed description of the areas they pass through and work in. This will provide a visual mapping of the Hot Zone for the CPC Unit Officer and the Back-up teams in cases where the Entry team requires assistance

6.1.2 Duties:

- Enter Hot Zone when directed to by their CPC Unit Officer
- Locate victim(s). Perform Noxious Stimulus Triage* (NST) at multiple victims incidents
- Remove Non Ambulatory victims to CCP if established
- Direct Ambulatory victims to appropriate Decon Corridor
- Report any obvious cause(s) of incident
- Note and immediately report any possible evidence or clues
- Immediately report any pertinent information about Material/Device discovered

* NST - A triage method used when encountering multiple unconscious victims. Member nudges victim with foot to determine level of responsiveness.

7. BACK-UP TEAM

Must consist of two CPC trained members dressed to the "standby position"* in the appropriate level of CPC. They shall be ready to enter the Hot Zone, when directed to do so by the CPC Unit Officer, to rescue and remove an Entry team member(s) should the need arise. Both members of the team must be radio equipped. They shall stand fast, in the standby position at a location determined by their CPC Unit Officer and monitor HT communications. They will constantly be under the supervision of their CPC Unit Officer. If multiple entry teams are to be utilized at an incident, the Chief in Charge of the Haz-Mat Group, shall maintain an adequate level of trained CPC personnel in a back-up standby position, based on the conditions encountered.

* CPC Standby position – Both legs in suit, outer boots and surgical gloves on, SCBA donned, cylinder opened, facepiece on, but regulator disengaged from facepiece, right arm in suit and identity tag in place.

Note: The Incident Commander shall special call a CPC Unit or Haz-Mat Technician Unit as a FAST unit to the scene if more than two entry teams are expected to be put to work.

7.1 Operation

7.1.1 Responsibilities:

- Monitor HT communication
- Coordinate and verify "On Air" start time with their CPC Unit Officer if entry is required
- Monitor "On Air" time
- Ensure that needed tools and equipment are assembled to perform immediate rescue of Entry team members if needed

7.1.2 Duties:

- Assist Entry team members with donning Suits
- Don appropriate CPC to "Standby" position
- Monitor all radio communication between Entry team and CPC Unit Officer
- Remain alert and ready to enter Hot Zone, if directed to do so by their CPC Unit Officer, to assist Entry team member(s) out to decon

8. DECONTAMINATION STATION

A Decontamination Station must be established prior to any entry of CPC equipped personnel into the Hot or Warm Zones. The primary function of this station is to provide immediate and adequate decontamination to Entry team members so they can be safely removed from CPC with minimum exposure to any material they may have had contact with. As a secondary function, it can be used to decontaminate First Responders and/or civilians until FDNY shower units arrive on the scene. The members assigned to this position will assemble the equipment listed in section 3 and wear the appropriate level of CPC for the material involved. The Decon station shall continually monitor HT communications and also ensure that a designated engine company augments the water supply. Runoff water from decontamination operations shall be addressed, in consultation with Haz-Mat Co. #1.

8.1 Operation

8.1.1 Responsibilities:

- Ascertain locations of :
 - Decon Station
 - Hot Zone
 - Warm Zone
 - Entry point
 - Decon Corridor(s)
 - CCP(s)
- Ascertain name of material involved if known

- Use appropriate Decon solution
- Use appropriate level of CPC
- Ascertain identity of Engine Company assigned to augment Decon
- Monitor HT communications

8.1.2 Duties:

- Establish Decon Station
- Assemble needed Decon equipment and supplies
- Ensure Decon Station's water supply is augmented
- Assist Entry teams in donning CPC
- Monitor HT communications
- Decon Entry team upon their exiting Hot Zone
- Possibly Emergency Decon of victims

9. INCIDENTS WITH MULTIPLE VICTIMS

An incident, involving multiple victims (three or more) in the Hot Zone, requires different tactics than for an incident that involves one or two victims. A single Entry team will be able to handle removing one or two victims from the Hot Zone to a safe area. However at an incident where there are numerous ambulatory and/or non-ambulatory victims, a single Entry team will not be able to complete this task with their limited "On Air" work time. These incidents will require additional Entry teams.

At large incidents with multiple victims, ambulatory victims should be addressed first. These victims are generally farthest from the release and have experienced the smallest exposure dose and require the least amount of time to remove. They should be directed to a predetermined CCP where they can be decontaminated and then treated in the Cold Zone by medical personnel who are not restricted by having to wear CPC.

After all the ambulatory victims have been directed to the proper CCP, the Entry teams shall then turn their attention to any non-ambulatory victims. Equipped with triage tags, Entry team members shall perform NST upon any unconscious victims. Using the triage tags, any victim with no response to NST shall be black tagged. This will prevent additional Entry teams from performing duplicate triage on the same victims while other victims may not have been triaged at all. Unconscious victims, who respond to NST, shall be removed to a second predetermined CCP staffed by Haz-Tac Technicians. The Haz-Tac Technicians, attired in appropriate CPC, can treat critical injuries and medically monitor victims as decontamination takes place. The victims will then be moved to the cold zone for further treatment by medical personnel. After all responsive non-ambulatory victims have been removed to the CCP, the Entry teams can then remove all black tagged victims to a designated CCP. As with incidents of a smaller nature, the Entry team must stay alert for any clues, signs, causes or devices that may be present. All such information shall be immediately passed along to their CPC Unit Officer.

BY ORDERS OF THE FIRE COMMISSIONER AND CHIEF OF DEPARTMENT