





NORTHERN WAKE FIRE DEPARTMENT

STANDARD OPERATING PROCEDURES

TITLE: Preliminary Exposure Reduction	SECTION/TOPIC: Operations
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I. PURPOSE

- A. The purpose of this Standard Operating Procedure is to enhance the protection of our firefighters by reducing and preventing their exposure to toxicants and chemicals found at a fire scene.

II. SCOPE

- A. This Standard Operating Guideline applies to all Northern Wake Fire Department personnel.

III. PROCEDURE

A. "Hot Zone"

1. The Incident Commander (IC) will establish a "Hot Zone" around all active fire scenes and will exclude all civilian and non-essential personnel from that area.
 - a) The "Hot Zone" will extend to at least 50-feet beyond the structure, fire area, or smoke plume, whichever is greater.
 - b) The IC must consider the placement of the Incident Command Post (ICP), Rehab Group and the Rapid Intervention Crew (RIC) so that the assigned personnel are not located within the "Hot Zone".
 - c) All on-scene personnel should avoid being in direct contact with vehicle exhaust.

B. Respiratory Protection and Personal Protective Equipment

1. When working within the established "Hot Zone" at any active structure, vehicle or trash fire, all personnel will utilize their Self-Contained Breathing Apparatus (SCBA) and wear their full Personal Protective Equipment (PPE) ensemble.

2. Once the fire has been properly extinguished and marked under control, the IC will ensure that all affected areas in the “Hot Zone” have been sufficiently ventilated before overhaul operations begin, preferably utilizing electric positive pressure fans.
3. During all overhaul operations, all personnel operating within the “Hot Zone” will be required to continue utilizing their SCBA while wearing their full PPE ensemble.
4. During overhaul, assigned personnel will locate and extinguish all hot spots, while continuing to cool the areas that were involved in the fire.
5. Once overhaul has been completed, only the IC may deem the “Hot Zone” safe for personnel to enter without the use of SCBA, however full PPE will continue to be worn.

C. On-Scene Gross PPE Decontamination

1. Personnel who perform work inside the “Hot Zone” will have some level of PPE contamination due to contact with burned objects, soot, and/or exposure to smoke.
2. In order to reduce the level of PPE contamination that leaves the “Hot Zone”, the IC will determine whether PPE Gross Decontamination of personnel will be performed on-scene.
3. If the IC determines that PPE Gross Decontamination is to be performed on-scene, it will be completed at the edge of the “Hot Zone” by the assigned Decon Group, wearing the same level or higher PPE as the personnel that are being decontaminated.
4. PPE Gross Decontamination Process
 - a) The Decon Group will utilize a dry, soft bristle brush to remove any visible debris from the SCBA and PPE of personnel leaving the “Hot Zone”.
 - b) Once the debris is removed, the Decon Group will use a low-pressure, low-volume hose line (Booster Line at 13 GPMS) to gently rinse the PPE.
 - c) Once rinsed and cleared by the Decon Group, personnel will leave the “Hot Zone” and will report the Rehab Group.
 - d) Before entering the Rehab Area, personnel will remove their SCBA, helmet, gloves, hood, SCBA facepiece and coat.
 - e) Once personnel enter the Rehab Area, they will clean their face, neck, arms and hands, utilizing approved cleaning wipes.
 - f) The cleaning process must be completed before personnel drink, eat or touch any uncontaminated items, with special care given to minimize cross-contamination that could occur from personnel’s pants and boots.

- g) Once personnel have been decontaminated by the Decon Group and released by the Rehab Group, the IC will determine whether these personnel will be allowed to reenter the “Hot Zone” utilizing their assigned PPE.

5. Transporting Contaminated PPE

- a) Station 1 will be the designated PPE Cleaning site, with Station 2 as a backup PPE Cleaning site.
- b) No PPE that is worn in a “Hot Zone” may be transported back to the Station 1 in the cab of the apparatus.
- c) PPE that was worn in the “Hot Zone” will be placed in an apparatus body compartment or bagged and transported back to Station 1 utilizing a Utility Vehicle.

6. At-Station PPE Decontamination

- a) Before personnel return to their assigned station and place their apparatus back in-service, they will report to Station 1, where they will be issued spare PPE by the on-duty Station 1 Captain.
- b) On-duty personnel will be given priority for spare PPE.
- c) The inventory numbers of the spare PPE being issued and name of the person receiving the spare PPE, will be recorded in the RMS Station logbook by the on-duty Station 1 Captain.
- d) All contaminated PPE will be bagged and labeled with each person’s name.
- e) The on-duty Station 1 Captain will be responsible for the advanced cleaning of the contaminated PPE, with priority given to those personnel that are on-duty.
- f) Once the PPE is properly cleaned and dried, on-duty Station Captain will notify the appropriate person, so that the PPE can be picked up and swapped back out.
- g) Once the PPE is picked up by its assigned person, the spare PPE will be collected by the on-duty Station1 Captain, stored and will be documented in the RMS Station logbook.
- h) PPE to be swapped in/out and recorded include:
 - Turn-Out Coats
 - Turn-Out Pants
 - Gloves

7. Helmets and Boots

- a) Helmets and Boots will be reused by personnel following a secondary cleaning with an approved detergent and a thorough rinsing of water.

8. Particulate Blocking Hoods

- a) Spare clean particulate blocking hoods will be kept on all Chief Officer vehicles.
- b) Contaminated particulate blocking hoods will be swapped out with a clean particulate blocking hood.
- e) On-duty personnel will be given priority for clean backup particulate blocking hoods.
- f) The inventory numbers of the backup particulate blocking hood being issued and name of the person receiving the backup particulate blocking hood, will be recorded in the RMS Station logbook by the on-duty Station 1 Captain.
- g) All contaminated particulate blocking hoods will be bagged and labeled with each person's name.
- i) The on-duty Station 1 Captain will be responsible for the advanced cleaning of the particulate blocking hoods, with priority given to those personnel that are on-duty.
- j) Once the particulate blocking hood is properly cleaned and dried, on-duty Station Captain will notify the appropriate person, so that the clean particulate blocking hood can be picked up and swapped back out.
- k) Once the clean particulate blocking hood is picked up by its assigned person, the spare particulate blocking hood will be collected by the on-duty Station 1 Captain, placed back in its backup location and documented in the RMS Station logbook.

D. Equipment Decontamination

1. All contaminated equipment will be sprayed off and wiped down on-scene prior to being placed back on the apparatus.
2. Once the contaminated equipment arrives back at its assigned station, it should receive a secondary cleaning with an approved detergent, a thorough rinsing of water and thoroughly dried before being placed back on the assigned apparatus.
3. Contaminated fire hose should be sprayed off with water, rolled and secured for transport back to the assigned Station.

4. After being sprayed off with a hose line, LDH hose lines may be repacked on the assigned apparatus.
5. Once contaminated fire hose is back to its assigned station, it should be thoroughly washed and dried before being returned to spare hose storage or being placed back on the assigned apparatus.
6. Gloves should always be worn while handling dirty equipment and hose.

E. Showering and Clothing

1. All personnel that worked within the "Hot Zone" should shower and change clothing as soon as possible upon returning to their assigned station.
2. All clothing should be considered contaminated and should be washed and dried before carrying this clothing home.