BULLETIN

NO.:   16-126

DATE: June 16, 2016

TO: All Personnel

FROM: Colin Stowell, Assistant Fire Chief, Emergency Operations

SUBJECT: Post Fire Incident Decontamination

In recent years, a correlation has been established between the staggering numbers of active and retired firefighters diagnosed with various types of cancer and the exposure to the toxic substances contained within smoke and soot. The International Agency for Research on Cancer (IARC) has categorized "soot" as a Group 1 carcinogen, meaning that it is recognized as one of the worst carcinogens. According to the Firefighter Cancer Support Network, *"Cancer has become the most dangerous threat to the health and safety of America's firefighters."*

Absorption of toxins through the skin is a primary concern, as the skin's ability to act as a barrier is compromised when body temperature increases. Published research reveals that for every 5 degree increase in skin temperature, permeability of skin is compromised and absorption increases 400%. While exposure to toxins is inevitable in firefighting, we should strive to reduce or eliminate exposure when possible.

To that end, effective July 1, 2016, San Diego Fire-Rescue will implement a system of gross field decontamination of PPE and personnel to remove soot and particulates. Best practice will be for firefighters while still on scene, to wash down with a hose line, their turn-out coat, pants and boots, decontaminate areas of exposed skin with the use of skin wipes and replace contaminated hoods.

The Occupational Safety & Health Committee (OSHC) has undertaken a comprehensive test of available wipes on the market and have selected "Action Wipes" for use by our personnel. Action Wipes were selected because they are made from all organic ingredients and their superior performance for durability, moisture content and cleaning potential.

After a fire incident, personnel should decontaminate by briskly scrubbing their skin with Action Wipes in the most vulnerable exposure routes: the face, jawline, throat, underarms, forearms and hands as a temporary measure until they can shower and lather off remaining contaminants.

Personnel will then replace their Nomex hood with a clean hood and soiled hoods will not be worn until properly laundered. To facilitate this, all personnel are directed to carry both their hoods with them as part of their usual PPE complement.

San Diego Fire-Rescue recognizes that firefighters may experience periods of high activity where both hoods may become soiled prior to laundering. To ensure that clean hoods are available, each front line apparatus will be issued a green zippered bag with four additional hoods and 25 individually packaged Action Wipes. The green hood bag is to be kept inside the cab of the apparatus and the hood side will be sealed with a break-away zip-tie. If hoods

from the green bag are used, personnel will launder their two personally issued hoods and the hoods from the green bag will be returned to their respective battalion chief, who will deliver to the Logistics Division for professional cleaning and restocking.

All personally issued hoods will be laundered at fire stations. Each fire station will be issued a laminated sheet with instructions and a green 3-gallon plastic bucket for the sole purpose of laundering hoods. A mix of 3 ounces of CitroSqueez cleaner in 2.5 gallons of cold water will be used to soak soiled hoods for at least one hour. After soaking, the bucket will be emptied into a deep sink and the bucket and hoods will be rinsed with fresh cold water. The hood(s) will then be placed into the station washing machine with an additional 3 ounces of CitroSqueez in normal-cold cycle. Once washed, the hoods will be air-dried and placed back into service.

Action Wipes can be resupplied from Store 42 or any SDFD Battalion Chief apparatus. Questions related to the use of Action Wipes or the Nomex hood replacement can be directed to Battalion Chief Alfredo Duron at aduron@sandiego.gov.

This direction will be incorporated into the Operations Manual with a future update.