

# CHICAGO SPECS RIG FOR MASS DECON



Chicago Fire Department recently took delivery of a new decontamination vehicle built by Advanced Containment Systems Inc. of Houston. The unit's design was a joint effort between members of the Chicago Fire Department's hazmat, special operations and fleet maintenance divisions and the manufacturer.

"One of the reasons this rig was built was to better equip our firefighters in the event of a hazardous-materials incident and being able to decontaminate our people in a somewhat controlled atmosphere," says Special Operations/Hazmat Chief Daniel O'Connell. "Another reason was Presidential Directive 39, which instructs government agencies

to take measures that will protect them from attacks from weapons of mass destruction."

As approximately 80% of a contaminate will be on victims' clothing, removing garments is a priority. At the entrance to the unit, ambulatory victims enter a portable shelter and receive a decon kit that contains a disposable robe, footwear, shampoo and soap. CFD provides Johnson Baby Shampoo for this purpose. "[It] is approved by the FDA and won't cause tears if it gets in eyes," O'Connell says. "We don't need to add more problems to the situation."

Victims remove their clothing and put them in a large box that is lined with a heavy-duty plastic bag that can be sealed and disposed

of properly. Victims don the robes before entering the vehicle and remove them before entering the shower area.

The unit can be divided easily into female and male areas by drawing a privacy curtain down the middle of the interior. Magnetic signage can be affixed outside to indicate the divide. Each side is divided into a soaping section, rinse area and a dressing area.

The apparatus has diesel fuel-fired water tanks to heat shower water to approximately 87°F. During a large-scale incident, the unit is capable of decontaminating approximately 500 people per hour.

Non-ambulatory victims are decontaminated outside the vehicle

under a canopy and behind a privacy curtain. That method uses a roller belt and a sprinkler system.

Currently, the decon unit responds citywide to all Level 2 alarms and at the discretion of the incident commander. When the unit is deployed, a hazmat unit also is sent, carrying a supply of white "victim" bags. These bags are vinyl with strategically placed Velcro openings for paramedics — while wearing protective gloves — to monitor a patient's condition while they are transported for additional medical attention.

The unit also doubles as a rehabilitation apparatus for firefighters and paramedics at emergency incidents.

— Janet Wilmoth

