ENGINEERING DIRECTORATE

ECBC ENGINEERING
Design→Build→Test→Support

ECBC HaMMER ATD

Hazard Mitigation, Materiel and Equipment Restoration Advanced Technology Demonstration

HaMMER ATD

The current DoD policy objective is to eliminate hazards associated with chemical and biological (CB) contaminants from all surfaces in all environmental conditions, while not creating additional surface damage. This "universal" approach has resulted in decontamination doctrine and equipment that requires substantial Warfighter labor, logistics burden, and waste stream management.

HaMMER – will demonstrate many new hazard mitigation and decontamination technologies that could potentially provide Warfighters with new procedures and tools that will increase their response time, reduce labor, and increase survivability when faced with chemical or biological threats.

HaMMER STAKEHOLDERS

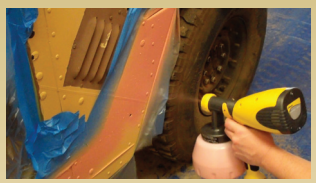
- Program Manager (PM) – Defense Threat Reduction Agency, Joint Science and Technology Office
- Technical Manager (TM) – Edgewood Chemical Biological Center, Engineering Directorate, Advanced Technology Demonstration Branch
- Operational Sponsor – United States Pacific Command (USPACOM)
- Operational Manager (OM) – United States Army, Pacific (USARPAC)
- Transition Manager (XM) – Joint Project Manager, Protection
- System Integrator (SI) – Battelle Memorial Institute
- Operational Test Unit – 71st Chem Co, 23rd Chem BN
- Operational Test Support – ATEC, MARFORPAC Experimentation Center

HaMMER FAMILY OF SYSTEMS FOR ATD DEMONSTRATION

1 Preparatory Suite

Technologies:
- Akzo Nobel Strippable Coating

Level of Employment:
- Pre-Applied in support of Mobile and Stationary



2a Mobile on the Move Suite

Technologies:
- M8 Paper and FLIR CAD kit
- FLIR Disclosure Spray Nerve
- FLIR Disclosure Spray Blister
- Sorbent Wipes
- Dahlgren Decon

Platform: "Go Bag" Implementation

Level of Employment: Vehicle Crews

2b Mobile Support Suite

Technologies:
- Single Decon is subset of Stationary, "Dial-a-Decon" options for water, decon, soap
- M8 Paper and FLIR CAD kit
- FLIR Disclosure Spray Nerve
- FLIR Disclosure Spray Blister
- Sorbent Wipes

Platform: HMMWV and trailer

Level of Employment: Battalion

3 Stationary Suite

Technologies:
- FLIR Disclosure Spray Nerve
- FLIR Disclosure Spray Blister
- Sorbent Wipes
- Dahlgren Decon
- Genencor Defenz VX/G
- Steris Extreme Weather Decon
- SuperSoap
- Rinse

Platform: LMTV

Level of Employment: Chemical Company

For more information, please call **410.436.5600** or e-mail
usarmy.APG.ecbc.mbx.engineering-directorate@mail.mil

U.S. ARMY RDECOM

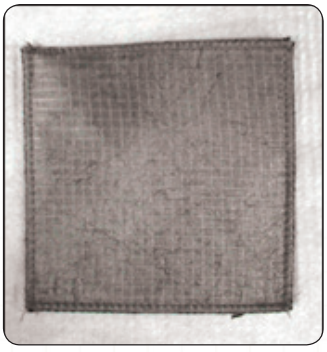
EDGEWOOD CHEMICAL BIOLOGICAL CENTER
Since 1917–A Tradition of Solutions

TECHNOLOGY AREAS

- **Agent Disclosure/Decon Assurance**
  - Solutions or pens that change color/react in contact with contaminants
  - Solutions sensitive enough to show absence of contamination through no-reactions
- **Indicator Sprays**

- **Chemical Agent Detection (CAD) Pens**

- **Coatings/Strippables**
  - Strippable Coatings applied prior to contamination
  - Easily peeled when contaminated
- **Decontaminants**
  - Multiple decontaminant options
  - Applicators that allow flexibility between different decontaminant options
  - Sorbent Wipes



TECHNOLOGY APPLICATIONS

- HaMMER Technologies will be provided as equipment suites that support both mobile and stationary applications
- Technology application will be demonstrated hand-in-hand with new hazard mitigation procedures to maximize benefit to Warfighter
- Pre-Employed
  - Strippable coatings will be applied prior to mission deployment in relevant colors
  - Coatings applied by Depot or CLS, not a Warfighter task
- Mobile applications will focus on two areas
  - "Go-Bag" – on board, small scale kit
  - Mobile Support - HMMWV based deployable asset to support a small number of vehicles
  - Emphasis on disclosure, strippable coatings, and spot decon ("Go-Bag"), full decon (Mobile support)
- Stationary applications
  - Triage capability, Warfighters can focus efforts where needed, reducing unnecessary labor
  - Provide decontamination options, so Warfighters can use resources to best effect
  - More solid waste (stripped coatings), less liquid run-off

Intentionally not using terms "immediate, operational, thorough, clearance" in order to keep focus on military utility and allow for introduction of new Tactics, Techniques and Procedures.

MAJOR GOALS/MILESTONES BY FISCAL YEAR

- FY09: Identify Technologies, Establish Parameters
- FY10: Technology Selection, Early Integration/Optimization
- FY11: Integration, Tech Demo 1
- FY12: Tech Demo 2, Op Demo and JMUA