



# The Beacon



## By and for emergency responders

### EPA CHEMICAL SAFETY ALERT

#### **FIRST RESPONDERS' ENVIRONMENTAL LIABILITY DUE TO MASS DECONTAMINATION RUNOFF**

*The Environmental Protection Agency (EPA) is issuing this alert as part of its ongoing effort to provide information on environmental issues related to biological, chemical, and nuclear terrorist incidents. EPA publishes Alerts to increase awareness of possible hazards and environmental concerns. It is important that State Emergency Response Commissions (SERCs), Local Emergency Planning Committees (LEPCs), emergency responders and others review this information and take appropriate steps to minimize risk.*

#### **PROBLEM**

On April 19, 1999, the Team Leader of the Chemical Weapons Improved Response Program (CWIRP), US Army Soldier and Biological Chemical Command sent a letter to EPA raising issues concerning first responders' liability during a weapons of mass destruction (WMD) terrorist incident. Specifically, the CWIRP asked about the first responders' liability for spreading contamination while attempting to save lives.

Environmental liability resulting from critical lifesaving actions may seem unlikely, but could be a serious concern for many first responders. The question is: Can emergency responders undertake necessary emergency actions in order to save lives in dire situations without fear of environmental liability even when such emergency

actions have unavoidable adverse environmental impacts? This concern is not limited to WMD terrorist incidents; it has broad implications for our National Response System (NRS) and frequently is discussed in the hazardous materials response community.

#### **THE NERVE AGENT DRILL**

The federal government recently sponsored a multi-agency drill based on a simulated nerve-agent attack. The release of the nerve agent resulted in hundreds of simulated casualties who survived the initial terrorist attack. The hazmat team had to rescue and decontaminate these "survivors" before they could receive medical attention. The hazmat team identified the need to collect the water used to decontaminate the victims (deconwater) to avoid a release to the environment. During the drill, these very capable, well-equipped, well-intentioned, professional hazmat teams delayed their initial entry for more than one hour, awaiting the arrival and set-up of pools to collect the deconwater. While the actor-survivors were dying a slow, painful, convulsive death, state and federal officials were debating and insisting that deconwater had to be collected for proper disposal. By the time the rescuers set up the holding pools and entered the site, nearly 90 minutes later, the "survivors" had expired. The contaminated water was collected but the "victims" died.

#### **GOOD SAMARITAN PROVISIONS**

The Comprehensive Environmental Response Compensation, and Liability Act (CERCLA), Section 107 (d) Rendering Care or Advice, addresses this issue. Section 107 (d)(1), often known as the "Good Samaritan" provision states: "No person shall be liable under this sub chapter for costs or damages as a result of actions

taken or omitted in the course of rendering care, assistance, or advice in accordance with the National Contingency Plan (NCP) or at the direction of an on-scene coordinator appointed under such plan, with respect to an incident creating a danger to public health or welfare or the environment as a result of any releases of a hazardous substance or the threat thereof.” This provision does not preclude liability for costs or damages as a result of negligence. Releases of chemical and biological warfare agents due to a terrorist incident are considered hazardous materials incidents and therefore CERCLA 107 (d)(1) could apply, to the extent that there is a release or threatened release of a hazardous substance.

In addition, 107 (d)(2) provides that state and local governments are not liable under CERCLA “as a result of actions taken in response to an emergency created by the release or threatened release of a hazardous substance generated by or from a facility owned by another person.” Section 107 (d)(2) would insulate state and local governments from potential CERCLA liability arising from first responder actions. **However, the provision does not apply to costs for damages caused by “gross negligence or intentional misconduct by the state or local government.”**

During a hazardous materials incident (including a chemical/biological agent terrorist event), first responders should undertake any necessary emergency actions to save lives and protect the public and themselves. **Once any imminent threats to human health and lives are addressed, first responders should immediately take all reasonable efforts to contain the contamination and avoid or mitigate environmental consequences.** EPA will not pursue enforcement actions against state and local responders for the environmental consequences of necessary and appropriate emergency response actions. First responders would not be protected under CERCLA from intentional contamination such as washing hazardous materials down the storm-sewer during a response action as an alternative to costly and problematic disposal or in order to avoid extra-effort.

#### **OTHER LIABILITY ISSUES AND STATE TORT LAWS**

EPA cannot prevent a private person from filing suit under CERCLA. However, first responders can use CERCLA’s Good Samaritan provision as defenses to such an action. First

responders could also be subject to actions under other laws, including state tort laws. A state’s tort law allows individuals and businesses to seek compensation for losses or harm caused by another. The extent of tort liability of a state or local governmental jurisdiction, as well as individual employees or representatives of that jurisdiction, is established by the tort law of each state. The liability of governmental jurisdictions and their employees may be shaped by factors such as negligence, statutory and discretionary immunity, etc. First responders should consult legal counsel in their state to discuss authority, status as an agent of the state, immunities, and indemnification.

#### **FEDERAL SUPPORT DURING A WMD INCIDENT**

Contaminated runoff should be avoided whenever possible but should not impede necessary and appropriate actions to protect human life and health. **Once the victims are removed and safe from further harm and the site is secured and stable, the first responders *should be doing everything reasonable to prevent further migration of contamination into the environment.***

First responders should involve state and federal officials as soon as possible to reduce potential liability concerns. Under CERCLA, the Federal On-Scene Coordinator (FOSC) can determine which environmental regulations are applicable (or relevant and appropriate) to any removal response and may further determine that any such environmental regulation is impracticable to achieve depending on the exigencies of the situation. If the FOSC determines that it is impracticable to comply with any particular environmental regulation, then the responders (local, state, federal, or responsible party) do not have to comply with that particular environmental regulation. By involving FOSC, first responders can substantially reduce their potential liability.

In addition, FOSCs have an expanse of resources under the NRS to support state and local responders in determining a solution which best address protectiveness of human health and the environment. Under the NRC, the FOSC can provide invaluable assistance in determining clean up and decontamination needs, health criteria and appropriate clean-up protocols as needed. FOSC support is even more critical in the aftermath of a WMD terrorist attack when critical post-emergency

actions such as agent identification, crime scene sampling, crime scene preservation, and long-term risk evaluation are also being conducted.

### **PRE-PLANNING IS KEY!**

It may not be technically feasible to contain all the runoff resulting from a WMD incident, but emergency responders may be able to reduce its impact to the environment by pre-planning. Responders can maximize local resources by using existing response mechanisms as much as possible. LEPCs are a good starting point. LEPCs are established under the Emergency Planning and Community Right-To-Know Act to develop local governments' emergency response and preparedness capabilities through better coordination and planning, especially within the local community. LEPCs include elected officials, police, fire, civil defense, public health professionals, environmental, hospital and transportation officials, who can work together creatively using available resources to minimize the environment impact of WMD incidents.

**For more information contact the Emergency Planning and Community Right-to-Know Hotline at: (800)424-9346 or (703) 412-9810  
TDD (800) 553-7672  
Monday through Friday 9 AM to 6 PM ET**

Visit the CEPPPO Homepage on the Internet at <http://www.epa.gov.ceppo/>.

*Helping the Civilian Community . . .*

## **THE BIOLOGICAL WEAPONS IMPROVED RESPONSE PROGRAM**

By Dr. Mohamed Athher Mughal

### **Introduction**

In March 1995, members of the Japanese cult Aum Shinrikyo attacked the Tokyo, Japan, subway system with sarin nerve agent. The incident captured international attention and sensitized world leaders to the threat of terrorist use of weapons of mass destruction. In response to this threat, the 104th Congress of the United States passed Public Law 104-201, the National Defense Authorization Act for

Fiscal Year 1997. This Act contained Title XIV--*Defense Against Weapons of Mass Destruction*, which provided for preparedness training against weapons of mass destruction for our nation's first responders. Additionally, Section 1415 of Title XIV stated, "The Secretary of Defense shall develop and carry out a program for testing and improving the responses of federal, state and local agencies to emergencies involving biological weapons and related materials and emergencies involving chemical weapons and related materials." As a result of this legislation and in support of DoD, the U.S. Army Soldier and Biological Chemical Command (SBCCOM) developed a Biological Weapons (BW) Improved Response Program (IRP).

The BW IRP is a multiyear analytical program designed to identify and demonstrate the best practical approaches to improve the overall preparedness of the United States to respond to domestic acts of terrorism involving BW or BW-related materials. This article describes program design, major products, and future plans of the BW IRP.

### **Characteristics of Domestic Bioterrorism**

The overriding consequence of a large-scale unannounced bio-terrorist attack will be the rapid occurrence of a large number of medical casualties. Response systems must provide appropriate medical treatments and services. However, the full spectrum of potential consequences is much broader than medical casualties.

A well-conducted bioterrorist attack will strain our nation's public health surveillance systems. It will also require responders to make quick, accurate medical diagnoses and disease identifications. By definition, a bioterrorist event is a criminal act that will require a complex criminal investigation. Depending on the agent used in an attack, such an incident could also result in residual environmental hazards that would require mitigation. Considering the potential magnitude of casualties, a significant portion of a metropolitan area's population may have to be medically managed and controlled. The aforementioned medical treatment, criminal investigation, environmental hazard mitigation, and population control activities will require a coordinated and integrated command and control effort extending across federal, state, and local jurisdictions. In short, the full spectrum of consequences that must be managed encompasses

multiple professional disciplines and functional areas of responsibility spanning three levels of government.

### **Designing the BW IRP**

The above considerations influenced the makeup of the BW IRP Team in fundamental ways. Because the problems inherent in a terrorist attack are multifaceted, we needed a multidisciplinary team that included participants from federal, state, and local emergency response organizations. Recognizing the technical complexities surrounding biological weapons and terrorism, we also included experts in the offensive and defensive aspects of biological weapons. The final team consisted of more than 60 federal, state, and local responders as well as technical experts from 9 states. The BW IRP Team included participants from federal, state, and local agencies. In fact, 8 federal agencies, 6 Department of Energy (DOE) national laboratories, and 11 DoD organizations were represented.

Having assembled a strong team, SBCCOM began to define broad parameters of the overall process for the BW IRP. The process first had to provide a forum to educate and inform the entire interdisciplinary and multiagency team on the offensive and defensive aspects of biological weapons and bioterrorism. Second, the process had to yield an initial set of integrated response activities designed to manage and mitigate the full spectrum of consequences that would emerge from a large-scale domestic bioterrorist event.

### **The BW IRP Process**

The BW IRP process was designed around five 3-day technical workshops. Each day of each of the five workshops was similar in structure, but different in content.

Day one of each workshop consisted of a series of 1-hour tutorials on preselected topics such as the physics of aerosol dispersion, pathogenic microbiology of BW agents, biodetection, medical prevention and intervention, and decontamination of and physical protection against BW agents. Although the topics remained the same, the depth and complexity of the tutorials increased as the team progressed through each of the five workshops.

Day two of each workshop began with the presentation of a selected BW terrorist attack scenario. From workshop 1 through workshop 5, the respective terrorist attack scenarios increased in scale from an attack on a single building to an attack on an entire

metropolitan area. After reviewing each scenario, workshop participants identified a series of specific response activities designed to mitigate the emerging consequences of the given bioterrorist attack scenario.

On Day 3 of each workshop, the team reviewed and integrated the complete set of response activities. The team also analyzed the integrated activities to identify response shortfalls and possible response improvements. Throughout the reviews, the team took a “bottom up” approach and *let the problem drive the solution*.

### **BW IRP Products**

The BW IRP Team identified a myriad of response activities spanning multiple functional areas. To be useful and understandable, these activities needed to be organized into a logical and integrated response system. Thus, the team formulated a generic bioresponse template (see accompanying chart) that embodied the concepts and work breakdown structure a city needed to respond effectively to a bioterrorist event. This template serves as a useful starting point for cities and states in preparing their own local plans to respond to a bioterrorist attack.

### **Future Plans**

SBCCOM plans to validate and improve selected components of the response template through tests and exercises. In addition, SBCCOM is partnering with the Centers for Disease Control and Prevention in developing and testing an appropriate public health surveillance system. The First Army’s Joint Regional Medical Planning Office is assisting SBCCOM’s team in planning and executing a functional test of the template’s casualty care function. SBCCOM will conduct a follow-on workshop with the FBI and local law enforcement representatives to identify and define the nuances of criminal investigation for a bioterrorist incident.

Additionally, the response template as a whole will be evaluated in three different cities. The cities will be geographically dispersed and of varying populations. These evaluations will provide feedback on the general applicability of the template and will indicate how it can be adapted to specific cities in different localities and with different populations.

Finally, we continue to assess response improvement concepts. Specifically, we are working to

develop chemical and biological building protection measures, biodecontamination techniques and protocols, subway biosurveillance technologies, emergency response management software, and biocasualty projection methods to assist civilian emergency managers in assessing the consequences of a bioterrorist attack.

### **Conclusions**

In a relatively short period of time, the BW IRP has begun to provide civilian emergency managers and first responders a logical conceptual framework that can be used as a starting point to improve their overall preparedness for responding to a domestic bioterrorist incident. Through follow-on activities of the BW IRP, these initial response concepts will be both validated and improved. The concepts will also be extrapolated and applied to the requirements of military installation responders and response units.

In addition to providing these tangible benefits to our Nation's civilian communities, the BW IRP highlights another important fact: the Army's research and development centers are a valuable national resource that can provide broad-based benefits beyond the military community. The successes of the BW IRP specifically underscore how Army scientists and engineers can effectively partner with federal agencies as diverse as the Federal Bureau of Investigation, the Federal Emergency Management Agency, the Department of Health and Human Services, and the US Department of Agriculture. Indeed, through the BW IRP, SBCCOM engineers and scientists have worked side by side with state and local representatives in functional specialties spanning law enforcement, hazardous spill management, firefighting, and emergency medical services. Considering the organizational and practical benefits of such partnerships, the SBCCOM feels privileged to continue working on this critical national effort.

*DR. MOHAMED ATHER MUGHAL has held a variety of technical and programmatic positions in the US Army Soldier and Biological Chemical Command. Currently, he is Co-leader of SBCCOM's Biological Weapons Improved Response Program. He holds a B.S. in chemical engineering, an M.S. in engineering management, and a Ph.D. in public policy. Dr. Mughal is also a branch-qualified Army Chemical Officer and an honor graduate of the U.S. Army Chemical School's Officers' Basic Course.*

## **NDPO CHAT WITH WILLIAM PATRICK SCHEDULED FOR THIS MONTH**

The next NDPO chat session on Law Enforcement Online (LEO) will be on Friday, **September 29<sup>th</sup>, at 2 p.m., EST**. The focus of the chat will be biological terrorism with Mr. William Patrick.

Mr. Patrick has served for over twenty years with the US Army Medical Research Institute of Infectious Diseases and the Agent Development and Engineering Directorate in Fort Detrick, Maryland. Mr. Patrick has participated in the planning, directing, coordinating, evaluating and reporting on a broad, complex program of medical defense against potential biological warfare agents. Mr. Patrick has also assisted the US Government in many cases, including the probe of an Oregon cult that infected more than 750 people with salmonella; the US investigation into Iraq's suspected production of microbes; and the probe into the Aum Shinrikyo cult attack in Tokyo.

### **Chat Instructions**

To participate in the chat session, you must be a registered LEO user and have Microsoft Chat or Netscape Chat loaded on your computer. While in the chat program, type "chat.leo.gov" in the box labeled Server and click the circle next to "Go to Chat Room," then type #ndpo. Please note that you must be dialed into LEO to use Microsoft Chat with LEO. Please enter the chat room as close to 2 p.m. as possible.

You may wish to test the chat software prior to the session. If you have technical problems, you should contact LEO Tech Support at 1-888-334-4536.

## **WMD MEDICAL SATELLITE TELECONFERENCE**

**Title:** "Alabama's Response to Terrorism – What is Your Role?"

**Date/Time:** Tuesday, September 19<sup>th</sup>, 1400 – 1600 ET

**Sponsors:** Alabama Dept. of Public Health and The Army National Guard  
C/KU Analog and CDV/Warrior Digital

**TARGET AUDIENCE:** This program is targeting doctors, nurses and other personnel working in a clinical setting. Secondary audiences include public health officials, social workers, police, fire and other early responders to WMD incidents, WMD managers and coordinators, and civil preparedness officials.

**PROGRAM DESCRIPTION:** No community is immune to the threat of terrorism. Terrorism transcends all demographic and geographic boundaries, urban, suburban, and rural. Terrorist groups/individuals have proven they have the knowledge and capabilities to strike anywhere in the world. Therefore, it is crucial to prepare for the terrorist event by taking a proactive rather than reactive role. This broadcast will introduce the viewer to the state and federal players who are responsible for handling a terrorist event.

**AVAILABILITY:** This FREE non-scrambled, public domain program will be available on C/KU analog satellite bands and will also be available on the Military/Federal GETN/Warrior satellite networks whose downlinks are found at USA and USAF installations and at over 200+ ANG locations at STARC HQs and ANG bases. Other federal networks may also carry this program. The teleconference may also be available to a limited number of non-satellite capable sites via video terrestrial relay (Contact the ARNG NSACC at 703-791-1922).

**REGISTRATION:** All military sites must register to receive satellite coordinates or Warrior Illumination authentication. You may register online at [www.dlnets.com/cdvregistration.htm](http://www.dlnets.com/cdvregistration.htm)

For more information, please visit the conference website at [www.dlnets.com/alwmd\\_19sep00.htm](http://www.dlnets.com/alwmd_19sep00.htm)

## **THE BEACON STAFF WELCOMES YOUR CONTRIBUTIONS**

Do you have an idea for an article on domestic preparedness? Is your community working on a new WMD preparedness project? Why don't you share your thoughts and experiences with the rest of the emergency response community? *The Beacon* staff is dedicated to publishing useful and relevant

information for the public safety sector. We welcome articles relating to all facets of WMD preparedness, including training, planning, exercises, equipment, health and medical, and information sharing. We also welcome suggestions on improving the newsletter.

If you wish to contribute to *The Beacon*, please contact a member of the staff at the address listed below.

**Editor's Note:** Items published in *The Beacon* are for informational purposes for the emergency response community. The material submitted does not necessarily imply concurrence from the interagency community represented at the NDPO.

*The Beacon* is published monthly for members of the emergency response community. Please send articles, comments, feedback, and letters to the Information Sharing Team at the address listed below.

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### **NDPO ONLINE RESOURCES FOR EMERGENCY RESPONDERS:**

- Helpline – [ndpo@leo.gov](mailto:ndpo@leo.gov)
- Law Enforcement Online Newsgroups
- Common Communication Link
- List Serve for users to receive electronic versions of our publications

For more information about these resources, e-mail us at [ndpo@leo.gov](mailto:ndpo@leo.gov).