

# Munitions and Explosives of Concern: Hazard Assessment

April 2005

## What is the Purpose of this Fact Sheet?

To introduce stakeholders to the Munitions and Explosives of Concern Hazard Assessment (MEC HA) Initiative.

## How did this Initiative Start?

In March 2004, the U.S. EPA Federal Facilities Restoration and Reuse Office requested Federal agencies and State and Tribal organizations to form a technical working group to develop a consensus methodology and guidance document for site-specific assessment of explosive hazards associated with MEC at munitions response sites. The participants include representatives from the Department of Defense, Department of Interior, Association of State and Territorial Solid Waste Management Officials, and Tribal Association for Solid Waste and Emergency Response, along with EPA. An executive committee composed of senior-level officials from each of the participating organizations was established to guide policy choices.

The organizations were invited to provide personnel to help develop a technical framework to help evaluate explosive hazards. A technical working group has met several times since May of 2004 in support of this initiative.

## Why is the MEC HA Necessary?

Currently project teams do not have a standard methodology for assessing explosive hazards at munitions response sites. Project teams are faced with the choice of using existing methods to assess and manage hazards, some of which have limitations, or developing their own site-specific methodology. By working with an accepted, consistent framework, project teams would be able to streamline their project activities, make more consistent decisions, and have the necessary documentation to support those decisions. The organizations that are collaborating on the development of this guidance believe that the time is ripe to attempt to develop such a tool.

## What is the Purpose of the MEC HA?

It will help project teams focus on the hazard management choices that must be made during site evaluation and cleanup of MEC under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Project teams can use a site-specific hazard assessment to evaluate the impact of different cleanup approaches, as well as different uses and activities to help ensure protectiveness for current and future land uses. In addition, it will fulfill the National Contingency Plan requirement for site-specific risk assessments under CERCLA. It will also do the following:

- **Provide a consistent framework for organizing information to be used in the decision processes.** Project teams will make similar hazard management decisions for similar site situations.
- **Assist project teams in managing uncertainty.** Use of a MEC HA process will help identify when the team has collected a sufficient quantity and quality of information to make management decisions supporting no-action, removal, or remedial decisions.
- **Ensure continuity of hazard management evaluations and decisions.** When a consistent, accepted framework is in use, decisions for a munitions response site are more likely to continue to be supported when the project team changes, such as when new staff, contractors, or stakeholders become involved.

## What is the Progress to Date?

The technical working group has examined a wide variety of technical aspects for MEC sites and information that is relied upon to make evaluations and decisions in the CERCLA process. Several issue papers have been developed that discuss these aspects. A list of some of the key issue papers and topics is described below.

- The relationship of the MEC HA to the DoD Munitions Response Site Prioritization Protocol (MRSP)
- Evaluation of existing risk/hazard assessment methodologies for strengths and limitations.
- Identify the purposes and roles of a MEC HA in the CERCLA decision process.
- Criteria that the MEC HA should address to be successful in meeting project team needs for hazard management decisions.
- Resolve specific issues related to the structure and the function of the MEC HA, such as input factors and expression of output categories for different levels of hazards.

The working group currently is identifying the input factors that will go into a draft technical framework, evaluating the scoring for those input factors, and assessing how the output should be expressed and explained. The working group is also testing the way the different input factors relate to each other to create a hazard score. The output of this effort will be a framework that describes in detail the proposed MEC HA process. The issue papers and related information can be found at the following EPA website:

<http://www.epa.gov/fedfac/documents/munitions.htm>

The draft MEC HA framework will undergo pilot tests at a variety of MEC sites starting in May 2005 to get feedback on its ease of use and on how well it meets the stated goals and criteria. A draft guidance document that describes the complete application and use of the MEC HA is expected to be released for public comment in the late summer of 2005. Please check the website for the exact dates. The final MEC HA guidance document is expected to be completed by December 2005.