



## EPA's Federal Facilities Restoration and Reuse Office



### Emerging Issues – Munitions Response National Site Assessment Symposium 30 June 2004



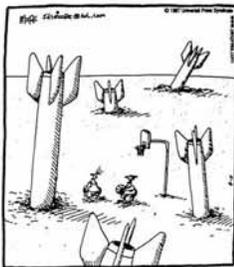
## The Problem

- DoD Munitions Response Program
  - more than 2300 sites
  - in excess of 15 million acres
  - \$8 - \$35 billion to clean up
  - >75 years to complete
- We have a lot of work to do.....



## The issue?

### IN THE BLEACHERS



"Maybe we shouldn't play here."



## Updates

- Terminology
- Munitions Response Inventory
- Munitions Response Site Prioritization Protocol
- Technology
- EPA Initiatives



## New Munitions Terminology

- Munitions and Explosives of Concern (MEC)
- Munitions Constituents (MC)
- Unexploded Ordnance (UXO)
- Discarded Military Munitions (DMM)
- Munitions Response Area/Site (MRA/MRS)
- Material Potentially Presenting an Explosive Hazard (MPPEH)

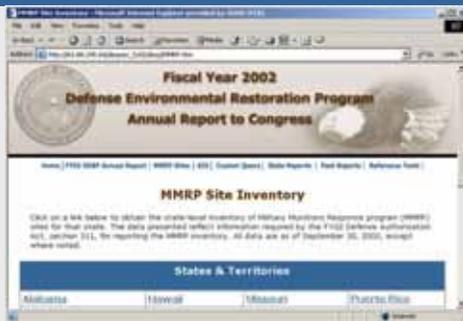


## Munitions Response Site Prioritization Protocol

- Proposed in FR August 2003 – final rule soon
- National ranking for munitions response sites
- DoD will use to prioritize cleanups at munitions response sites



## Munitions Response Inventory



## Technology

- How do you find it?
- All highly-successful munitions detectors currently use one of the two following sensor types:
  - Electromagnetic Induction
  - Magnetometry



## Examples of EM



## Technology (con't)

- **Detection** – finding discrete metal objects
- **Discrimination** – is it UXO or not?
- Current research - SERDP/ESTCP



## Examples of Magnetometry



## Technology (con't)





## EPA Initiatives

- Draft EPA Guidelines for Munitions Response Actions
  - Direction to EPA Regions overseeing response actions
  - Focus unique aspects of response at sites where explosion is additional or principal threat



## EPA Initiatives

- EPA Munitions Handbook
  - Technical reference manual for EPA personnel & others at munitions response sites
  - Currently under revision



## EPA Initiatives

- EPA Munitions Training
  - Provide training for EPA personnel & project team members at munitions response sites
  - EPA continuing to offer as long as there is interest



## Contact Information

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