

BRAC Cleanup Team (BCT) Workshop

Expedited Site Assessment

By

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Expedited Site Assessment and BCT Workshops

- ✦ Why is ESA Important to BCTs
 - Reduce Timeframes for Decisions
 - Reduce Costs
 - Achieve Regulatory Agency Concurrence
- ✦ Ensure BCTs Aware of Latest Techniques

Traditional Approach to Site Assessment

- ✦ Regulatory Driven - EPA
 - Preliminary Assessment (PA)
 - Site Inspection (SI)
 - Hazardous Ranking System (HRS)
- ✦ Private/Commercial
 - Phase I/Phase II Assessments

Why is Traditional So Slow?

- ✦ Cost and Duration
- ✦ Timing
- ✦ Ambiguous Endpoints
- ✦ Future Land Use
- ✦ Lack of Flexibility

Expediting and Improving the Process

Potential Methods

- ✦ Phase I/Phase II Approach
- ✦ Risk-Based Corrective Action (RBCA)
- ✦ PA/SI with Soil Pre-Screening
- ✦ ASTM Expedited Site Characterization

Expediting and Improving the Process Application of Private Phase I/Phase II

✦ Benefits:

- Similar approach to site assessment creates better comparison basis for public and private sites
- Sites with no contamination are screened out early, with minimal costs and time

✦ Risks:

- Significant risk posed by contaminants may not be accurately assessed

Expediting and Improving the Process Risk Based Corrective Action (RBCA)

- ✦ RBCA principles applied to Phase I/Phase II protocols
- ✦ Analysis of migration pathways in the context of future use
- ✦ Applies data acquired from Phase I & II to determine if significant risk is posed to sensitive receptors

Expediting and Improving the Process RBCA (cont.)

✦ Benefits:

- Application of RBCA provides confidence that proposed developments and land use concur with Federal risk conclusions
- Provides EPA with mechanism to match cleanup requirements with current or future land use

✦ Risks

- Increases risk that the significance of risk posed by contaminants found at the site may not be accurately assessed

Expediting and Improving the Process Soil Pre-Screening

- ✦ Prior to conducting PA/SI an initial pre-screening of soils to determine presence or absence of contamination
- ✦ Similar to ASTM Phase I

Expediting and Improving the Process Soil Pre-Screening (cont.)

✦ Benefits:

- Allows EPA to design pre-screen protocol to match Phase I, converging public and private sector approaches
- Sites with no contamination are removed from the process before PA
- Potential reduction in costs

✦ Risks:

- Pre-screening may not detect potential contaminant threats, leaving EPA open for liability threat

Expediting and Improving the Process

Soil Pre-Screening - Example

- ✦ Oregon's Department of Environmental Quality (DEQ)
 - Used Soil Screening at 60-65 sites
 - Only 17% warranted entry in PA/SI process
 - Oregon's program allows for flexibility in professional judgment, saving time and money on pre-screening sites

Expediting and Improving the Process

Expedited Site Assessment (ESA)

- ✦ Expedited Site Assessment (ESA)
 - Generally applicable to:
 - large scale projects
 - sites with complex contaminant characteristics and heterogeneity's in the site
 - complex contaminant migration pathways
- ✦ Achieves significant cost and schedule savings compared to PA/SI

Expediting and Improving the Process ESA (cont.)

- ✦ Collection of information required to meet objectives
- ✦ On-site decision making by a multidisciplinary core technical team
- ✦ Dynamic work plan; providing flexibility and responsibility to select type and location of measurements