In Quest of the “Final Remedy:”
What’s Next for Cleanup Programs

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What Is Final Remedy?

Summit (final remedy - site-specific performance measures)

Base camp (stabilized, contained site)
Key Themes

- EPA’s national cleanup goals set high and unrealistic expectations (e.g., groundwater restoration).
- Policy must evolve to balance expectations (goals) with reality of site-specific situations and needs.
- Definition of “final remedy” needs to remain flexible and consider:
  - Resource value.
  - Cost benefit.
  - Current technological limitations.
Resource Value

- Current site use?
- Realistic future use?
- Potential for development?
Cost Benefit???

- EPA and states will oversee and spend over $32 billion on remediation in next five years. (EPA, 10/24/2000)
  - Over $10 billion will be spent over next five years at Superfund sites.
  - $5 billion will be spent over next five years on approximately 1,700 RCRA baseline facilities.
  - $8.6 billion will be spent for UST cleanup.
  - $4 billion will be spent for state voluntary cleanups.
Current National Remediation Policies

- Delineation of contamination to background levels (vs. land use based levels)
- Restoration to unrestricted use
- Remediation of all sources
- Restoration of groundwater to maximum beneficial use throughout the plume
Limitations of Current Policies

- U.S. remediation policy is over 20 years old and has not kept pace with science.
- Significant number (maybe a majority) of sites will not be “restored” due to practical considerations (e.g., technical and/or economic factors).
- Gap between policy and science (and cost benefit) leads to indefinite regulatory limbo, long-term uncertainty, and undue liability.
Key Aspects of a Final Remedy Policy

- Overriding need to protect human health and the environment
- Focused on site-specific, cost-effective solutions, recognizing:
  - Site complexity
  - Current and realistic future land and water resource use
  - Priority for activities (deal with highest risk first)
  - Effectiveness of containment and exposure control
  - Benefit of selecting source remediation when viewed against effectiveness, risk-reduction, and cost
  - Practical, risk-based performance measures/metrics
Key Aspects of a Final Remedy Policy (cont’d)

- Should evolve to recognize scientific and economic realities of cleanup and tools available to mitigate long-term risk
  - Institutional controls
  - Engineering controls
  - Financially secure responsible parties
  - Insurance instruments
  - Other
EPA’s Role in Setting Policy

- Establish a collaborative process and facilitate stakeholder input.
- Set risk-based performance measures/metrics.
- Assist in development and transfer of technology.
  - Do not force use of particular technologies.
  - Let marketplace drive technology usage.
- Monitor progress over time.
What Will This Take?

- An open and honest public policy debate...facilitated by EPA
- A collaborative process
- Stakeholder involvement and leadership
- Reconciliation of program goals vs. realities
- Risk-based performance measures as a means to track progress at sites into the future
- Site-specific solutions to account for site diversity and complexity
- Assurances for long-term site stewardship (e.g., O&M, IC, EC)