New ASTM Guide on Sustainable Remediation

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Significant Code Issues / Updates & Recent Developments
Advanced Environmental Workshop – NYC Transit
2 Broadway, Manhattan
Origin of Guide

Conceived by USEPA in an ASTM meeting in Vancouver in 2008
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Now there are two guides, the one I’m talking about – Integrating Sustainable Objectives into Cleanup – and the other on green remediation

2013 looks to be the year both are published
# Using This Guide

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Organization of the Guide

Eight sections and three appendices
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Sections 6, 7, 8 describe the selection of BMPs, quantifying results (optional), and documenting use of guide
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Sections 6, 7, 8 describe the selection of BMPs, quantifying results (optional), and documenting use of guide

Appendix 1 is a suggested list of BMPs
Step 1: Identify potentially applicable BMPs (Section 6.3)

Step 2: Evaluate BMPs (Section 6.4)

Step 3: Select a practicable set of BMPs (Section 6.5)

Step 4: Implement selected BMPs (Section 6.6)

Step 5: Quantify BMP results (Section 7)

Step 6: Documentation (Section 8)

User chooses to Quantify BMP results?

- No
  - Return to Step 4
- Yes
  - Proceed to Step 6
Process Flow

Identify BMPs that might be applicable
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Evaluate the practicability of the BMPs
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Select appropriate set of BMPs
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Implement that set of BMPs
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Evaluate the practicability of the BMPs

Select appropriate set of BMPs

Implement that set of BMPs

With or without quantification, document how the guide was used and the results obtained
Local Community Vitality

- Community Involvement
- Economic Impacts to the Local Community
- Economic Impacts to the Local Government
- Efficiencies in Cleanup & Cost Savings
- Land & Ecosystems

Enhancement of Individual Human Environments

- Materials & Waste
- Air Emissions
- Water Impacts
- Energy

Minimize Impacts to Community

- Communicate with Stakeholders
- Preserve Site Aesthetics During Cleanup
- Use Local Services
- Gravity Flow to Add Amendments
- Capture Waste Heat
- Control Erosion
- Cost Analysis
Expected Benefits

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Professional peer pressure anticipated to raise the bar on which BMPs are implemented
Differences with Green Remediation Guide

The sustainable remediation guide includes core elements that reflect social and economic aspects of sustainability.
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The green remediation guide only includes core elements that reflect the environmental aspect of sustainability.
What About Sustainability-Washing?

As with “green-washing,” there was concern that Users will do a bare minimum to appear to be “sustainable” without a sincere effort toward social and economic (i.e., public economy) aspects.
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The question to ask at the end of the project is:

*Is this cleanup more sustainable than a result that would have occurred had this guide NOT been available?*
Sample BMPs

*Very Important*
- Hire local labor/contractors and professional
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- Scale level of community involvement to level of interest, complexity of cleanup, and population density near site
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- Encourage collaboration with stakeholders on all activities
- Take steps to resolve conflicts among stakeholders or between stakeholders and remediation team
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Anticipate upgrades after guide is used for awhile
Questions?