

Phase I and Phase II Site Assessments



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June 2013



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Identifying Brownfields

- Area-wide Inventory
 - Revitalizing area of a community
 - e.g. Cuba, Neosho
- Targeted Site



Phase I Assessments – The Need

- Comprehensive Environmental Response, Compensation, and Liability Act (aka Superfund)
- All Appropriate Inquiry vs. “But I got a good deal.”



The Standard and the Assessment

- ASTM E 1527-05 (soon to be 1527-13)
- AKA Phase I Site Assessment
 - ✓ Records Review
 - ✓ Site Reconnaissance
 - ✓ Interviews
 - ✓ Report
- Goal: Identify Recognized Environmental Conditions (RECs)
- Conducted by an Environmental Professional

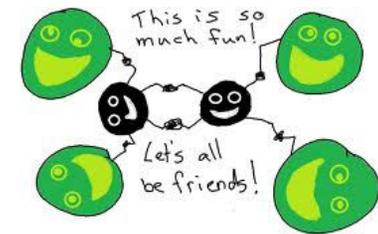


What Things Are Looked For?

- Petroleum Products
- Drycleaning Solvents
- PCBs
- Heavy Metals
- PAHs
- Pesticides



manium 32	Arsenic 33 As 74.92 2.0	Sel 3 S 78.1
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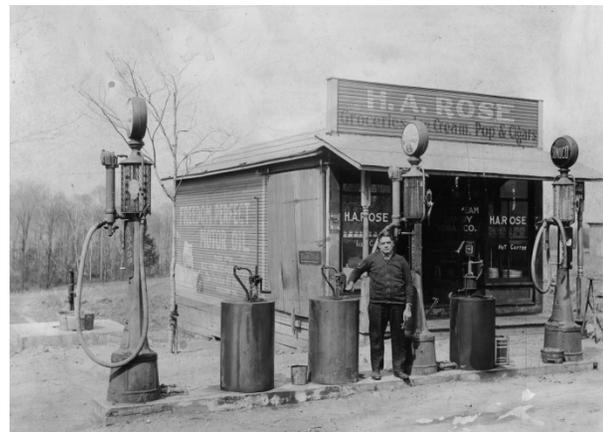


What Things Aren't Looked For?

- Asbestos
- Lead-Based Paint
- Radon
- Mold
- Annoying Neighbors



Examples of RECs



Examples of Wrecks



The Phase I Report

- Narrative: Site description, records review, site recon, interviews, findings & conclusions, deviations, signature and qualifications of Environmental Professional
- Appendices: Site map, photos, historic photos/maps, topographical maps, regulatory records documentation, interview documentation



Phase II Site Assessment

- ASTM E 1903-11
- Developed from Site RECs
- Invasive Investigation, though not Exhaustive
- Soil Borings
- Monitoring Wells



Phase II Soil Boring Map



Jumping Jacks Shoe Factory

Sampling

- Surficial Soil Samples
- Subsurface Soil Samples
- Surface Water Samples
- Groundwater Samples
- Asbestos-Containing Material (ACM)
- Lead-Based Paint (LBP)



The Phase II Report

- Narrative
 - ✓ Background Info
 - ✓ Work Performed
 - ✓ Results of Investigation
 - ✓ Interpretations/Conclusions
- Tables
- Figures
- Appendices
 - ✓ Site Photos
 - ✓ Boring Logs/Monitoring Well Construction
 - ✓ Lab Data with Quality Control Information



Phase II Addendum

- Following a Phase II
- More Detail
- Investigating a Particular Area from a Phase II or Expanding Investigation of Original Area



Phase II Site Addendum Site Map



Results

- If Phase I shows no RECs, no Phase II necessary
- If Phase I shows RECs, but Phase II shows no contamination above Default Target Levels (DTLs), no further investigation necessary
- If Phase II shows contamination above DTLs, either Phase II Addendum performed or enrollment is BVCP recommended

Free Lollipop with Every Application

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- Call your Friendly Neighborhood BVCP Project Manager @ 573-526-8913



Questions?

