Assessment and Cleanup Strategies for Site Redevelopment

(Section 1 -- Introduction)

Presented by
Kevin Mellott
Montana Tech
What is a brownfield?

- Abandoned, idled, or underused industrial or commercial facility where expansion or redevelopment is complicated by real or perceived environmental contamination
  - most contain low to moderate levels of contamination
Why redevelop brownfields?

- Restores property for use and increases property value
- Increases local tax base
- Improves community image
- Mitigates public health and safety concerns
- Uses existing streets, sewer systems, lighting, etc. (cost savings)
Redevelopment depends on ...
Land Use Goals

May steer site assessment and cleanup activities

- Affect $$ available for cleanup
  - what is the future value of the site
  - tax base, jobs

- Determine timing of assessment and cleanup
  - how quickly does developer need access to “clean” property
Buffalo, NY

The Former LTV Steel Site
Dallas, TX

Jefferson North End during redevelopment
Dallas, TX
Land Use Visions

- Buffalo, NY: Hydroponic tomatoes
- Indianapolis, IN: Self-storage units; office/light industrial space
- Dallas, TX: Neighborhood recreational center
- Dallas, TX: Multi-family housing and shopping development
Regulatory Standards

- Intended to limit environmental and health risks
- Sometimes a deterrent for redevelopment
  - fear of liability
  - unknown risks
Site Assessments

- Is the site contaminated?
  - ASTM Phase I
  - ASTM Phase II

- Cleanup
  - ASTM Phase III
Statistical Methods

May be used to:
- develop a sampling plan
- ensure quality control and reliability of results and decisions
- help develop cost estimates
A method used by EPA to estimate the increased risk of harm to human health or the environment from a contaminated site

- Calculations depend on:
  - current and future land use
  - results of the site assessment
  - statistical methods
Cleanup Options

- How clean is clean?
- What technology will work at the site?
- What are the cost factors?
- How quickly must cleanup occur?
Financial Issues

- Economic Viability
  - Is the project economically sound?

- Risk
  - How can the risk of unexpected financial loss be managed?
Community Concerns

The community needs to be involved:

- Who is the community?
- What does the project offer the community?
- Is there a common vision?
- How can stakeholders work together?