Brownfields 101, Case Study and Funding Programs

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Welcome and Good Morning
What is a Brownfield?
What is a Brownfield?
Brownfield Cleanup Components

- **Investigation stage**
  - Phase I (historical search of the property)
  - Phase II (sampling and testing)
  - RAP (a proposed strategy for how the site will be cleaned)

- **Cleanup stage**
ENVIRONMENTAL DUE DILIGENCE FOR BROWNFIELD PROJECTS

PRESENTED BY MIKE HULTGREN, P.G.
PRINCIPAL GEOLOGIST
PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA)

- First step in due diligence process
- Report prepared for real estate buyer/developer/local government
- Identifies potential or existing environmental contamination
• American Society for Testing and Materials International
  • ASTM 1527-13
• AKA Phase I Site Assessment
  • Records Review – Regulatory and Historical
  • Site Reconnaissance
  • Interviews
  • Report
• Goal: Identify Recognized Environmental Conditions (RECs)
• Meets EPA All Appropriate Inquiry (AAI) Standard
HISTORICAL DOCUMENTATION

1938 Aerial Photo
1990 Aerial Photo
Sanborn Fire Insurance Map
Gas station was in parking lot
SITE RECONNAISSANCE
WHAT IS CONSIDERED A REC?

- Petroleum Products
- Pesticides
- Chlorinated Solvents
PHASE II SITE INVESTIGATION

- Strategic evaluation of potential environmental impacts
- Focused sampling plan to include multiple field methods
- Sampling plan submitted to MPCA voluntary program for review and approval
SOIL, GROUNDWATER, SOIL GAS SAMPLING

- Hydraulic Push Probes
- Standard Penetration Borings
- Monitoring Wells
- Hand Augers
- Test Pits/Trenches
- Soil Gas Vapor Borings
DELINEATE AREA OF CONTAMINATION

Test well TCE contamination levels

1800 µg/L
(parts per billion)

20 µg/L

The plume has been measured here... but the boundaries are not well defined.
STRATEGIC RISK MANAGEMENT DECISION

• Evaluate what type of media has been impacted and risk to human health/environment
• Evaluate whether sufficient information has been collected to make a decision
• Evaluate costs of potential clean up actions
• Determine what types of liability assurances/closure letters may be needed/desired
RESPONSE ACTION PLAN (RAP)

• Needed to properly manage or mitigate contaminated soil/groundwater/soil gas
• Risk-based Response Action Plan
  • Mitigate risk to human health or environment
  • Active remediation system
• Construction-related Response Action Plan
  • Properly manage impacted soil/groundwater during construction
RESPONSE ACTION PLAN (RAP)

- Site Conceptual Model
- Site geology, hydrology, soil types
- Risk evaluation to determine effect of contamination
- Soil-human health pathway
- Soil leaching pathway
- Groundwater pathway
- Vapor intrusion pathway
RESPONSE ACTION PLAN (RAP)

• Response Actions
  • Soil Removal and Disposal
  • Soil Stabilization
  • Engineering Controls
  • Engineered Systems
    ▪ Soil vapor extraction
    ▪ Air sparging
    ▪ Groundwater treatment
    ▪ Vapor mitigation
VOLUNTARY PROGRAM ASSURANCES

- MPCA Voluntary Brownfield Program
  - Technical Assistance
  - Review and Approve RAPs, Workplans
  - No Association Determination Letters
  - No Action/No Further Action Letters
  - Off-Site Source Determination
  - Certificate of Completion
Hilltop Plaza
Cleanup Costs

Total Cleanup Cost - $242,718

DEED Grant - $126,618
EDA Deferred Loan - $50,000
Developer Match - $66,100
How do you pay for all this?
Brownfields and Redevelopment Unit

- Contamination Cleanup and Investigation Grant Program
- Cleanup Revolving Loan Program
- Redevelopment Grant Program
- Demolition Loan Program
- Various smaller programs and Special Appropriations
Redevelopment and Demolition

- No $$$
Types of Grants Relating to Contamination

• Investigation ONLY
  Can apply for up to $50,000

• Cleanup (which may also include investigation costs already incurred)
  – Can apply for up to 75% of Costs
Contamination Cleanup and Investigation Grant Program

- Eligible applicants are:
  - Cities
  - Counties
  - HRAs
  - EDAs
  - Port Authorities
Contamination Cleanup and Investigation Grant Program

• Eligible sites include:
  – Both privately and publicly-owned sites
  – Known or (for investigations, suspected) contamination
  – Development plan will create jobs, increase tax base, or result in other public benefits
  – Resolution from applicant body and municipality (if different)
  – Cleanup Grant applicants need an MPCA-approved Response Action Plan (RAP)
# Contamination Cleanup and Investigation Grant Program

<table>
<thead>
<tr>
<th>Eligible Costs</th>
<th>Ineligible Costs</th>
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</thead>
<tbody>
<tr>
<td><strong>Investigation</strong></td>
<td>Project/Grant Administration</td>
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<tr>
<td>- Phase I, Phase II, RAP Development</td>
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<tr>
<td><strong>Cleanup</strong></td>
<td>Appraisal or other application costs</td>
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<tr>
<td>- Contaminated soil removal and disposal, vapor systems, groundwater treatment, etc.</td>
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<tr>
<td><strong>Public Acquisition</strong></td>
<td>Development Costs</td>
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<td><strong>Environmental Consulting Fees</strong></td>
<td>Asbestos Abatement in Buildings</td>
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<td><strong>Public Improvements</strong></td>
<td>Contingencies</td>
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<td><strong>Demolition</strong></td>
<td>Landscaping</td>
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<tr>
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<td>- Seeding, sod, trees, etc.</td>
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Contamination Cleanup and Investigation Grant Program

Grant Awards

- Up to 75% of eligible cleanup/investigation costs
- Required match = 25% of eligible cleanup/investigation costs
  - 12% must come from unrestricted source
- $50,000 max award for investigation grants
- Applications are competitive
- Request what you need
Scoring Criteria
Scoring Criteria

- Value of Blight Removal
- MPCA Ranking
- Need for State Assistance
- Tax Increase
- Job Creation and Retention
- Time Frame
- Project Readiness
- Match Contribution
- Public Importance
Contamination Cleanup and Investigation Grant Program

• Applications
  – Due at DEED office May 1\textsuperscript{st} and November 1\textsuperscript{st} by 4:00 PM
  – Template and instructions can be found at mn.gov/deed
  – Apply when project is ready to start
Cleanup Revolving Loan Program

• Eligible applicants are:
  – Cities
  – Counties
  – HRAs
  – EDAs
  – Port Authorities
  – Private entities
  – Non profits
Cleanup Revolving Loan Program

- Eligible sites include:
  - Completed “All Appropriate Inquiries”
  - Own or have ownership interest in property
  - MPCA-approved RAP
  - Cannot be responsible for the contamination
  - Ability to repay the loan
Cleanup Revolving Loan Program

- Eligible costs
  - Cost already incurred are not eligible for loan funds
  - Costs only eligible after project is determined eligible and the cleanup plan is “accepted” by the appropriate agencies
Cleanup Revolving Loan Program

• Loan Awards
  – Applications are accepted throughout the year
  – Loan can reimburse up to 78% of eligible costs
  – 22% match requirement from non-federal source
  – Rate and term negotiable
  – Portion forgivable if borrower is local unit of government
Other Funding for Cleanup

- Met Council
- Hennepin/Ramsey County
- MPCA
- Dakota County
- EPA Direct
- Other EPA recipients
Questions?

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