

City of Troy, New York South Troy Brownfield Assessment Demonstration Pilot Program

Public Meeting 5
May 3, 2006



Agenda

- Update on Other Projects
- Review Process
- Review Assessment Results
- Discussion of Remedial Strategies
- Next Steps

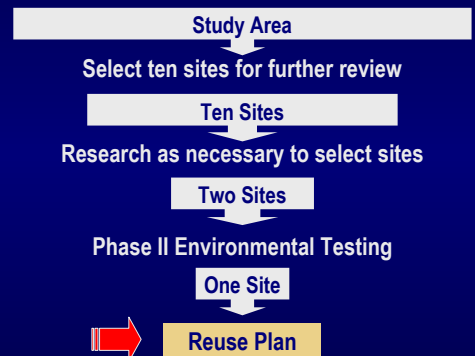


Other South Troy Projects

- South Troy Road
- Waterfront Bike Trail
- Remediation of "Area 4"
- Remediation of "Area 2" AKA King Fuels
- South Troy Industrial Park Assessment
- Brownfields Opportunity Area
- Burden Ironworks Gateway Building Improvements
- Rensselaer Iron Works Site
 - Upper Hudson Rivers & Estuaries Center
 - Site Improvements



Process To Date



Next Steps



- Remedial strategy selection for Rensselaer Iron Works is funded through this EPA Brownfields grant, will be discussed tonight.



- Additional assessment and remedial strategy selection for "the Alamo" will be funded with NY State and Federal funds. Federal funds in place, grant for state funds being pursued

Next Steps Rens. Iron Works

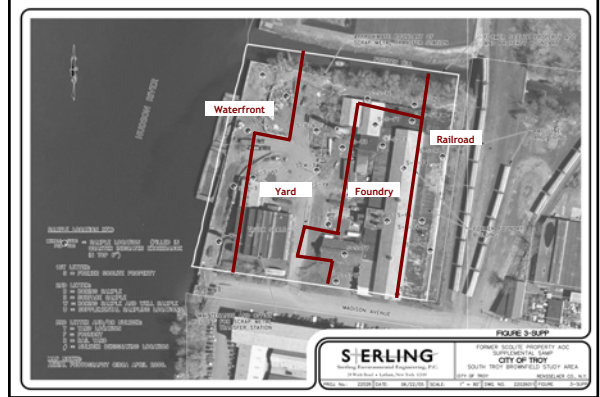
- Tonight: present and discuss preliminary recommendations for remedial strategy
- Comments: your comments accepted tonight, and through May 17th
- Further funding: NYS DEC application for remediation funds was submitted Feb. 28th [Andrea confirming date]
- Final Selection: DEC will build on this effort to make a final selection of remedial strategy. This will include a formal public meeting and public comment period

Rens Iron Works Site



- The former Rensselaer Iron Works foundry also sometimes called the "Scolite" property.
- The portion of the site adjacent to the Hudson River has been used for scrap metal stockpiling and management since 1995.
- The buildings on this site have been important in Troy's metal industry – valves and fire extinguishers were made here.

Rensselaer Iron Works



What was found

- SVOCs & Heavy Metals
 - Elevated levels found throughout the site in both soil and ground water samples
- PCBs
 - Elevated levels in certain areas, particularly near the waterfront
- All three contaminants found at only slightly elevated levels. Concern exists only if the soil is ingested or if it is disturbed and then inhaled, for example by workers digging a foundation.

Determining Strategy

- Identified possible clean up strategies.
- Considered benefits to human health, which eliminated many.
- Considered reliability of technology, which eliminated many others.
- Carefully considered the remaining ten or so possibilities, selecting three for detailed analysis.



Potential Strategies

- A "No Action" alternative must also be examined, as required by DEC and EPA
- Treatment in place "in situ"
- Excavation
- Capping

All strategies under consideration (except "no action") meet NYSDEC and USEPA requirements for protecting human health and the environment



Remediation: Definitions

- Engineering Controls:
 - Physical treatments such as erosion control, soil or synthetic covers, etc.
- Institutional Controls:
 - Legal restrictions such as covenants (sometimes called "deed restrictions"), zoning restrictions, and special building permit requirements.
- Both kinds of controls are reviewed annually by City and summarized in annual report to NYSDEC

No Action

- What's involved:
 - Nothing done
- Advantages:
 - Lowest possible cost
- Disadvantages:
 - Potential danger to community if the soil is ingested or if it is disturbed and then inhaled, for example by workers digging a foundation
 - Potential contamination of groundwater by precipitation that infiltrates the soil surface and passes through contamination

In Situ Treatment

- What's involved:
 - Mixing cement material, ash from burning coal, or silicon containing material into the soil.
 - Natural soil moisture allows material to "set up" and lock the contaminants in a microscopic lattice
- Disadvantages:
 - Requires engineering & institutional controls.
 - Difficult to ensure proper mixing of added material underground
 - Most expensive option (unexpected)
 - While residential use is not planned for the site, if residential was desired in the future, further remediation would be necessary

Excavation

- What's involved:
 - Removal of soil, disposal in solid waste land fill
- Advantages:
 - Permanent removal of contaminants
 - No need for engineering & institutional controls
 - Any future use would be permissible with no other action
- Disadvantages:
 - Noise, trucks and dust during excavation
 - Cost, about 4x Capping, unlikely that state would fund

Capping

- What's involved:
 - Clearing and digging out shrubs
 - Grading to a gradually sloped surface
 - Adding one foot layer of reduced permeability soil
- Advantages:
 - Significantly less dust, noise and truck traffic during remediation than excavation
 - Lowest cost – approximately \$500,000, very likely state fundable
- Disadvantages:
 - Requires engineering & institutional controls.
 - While residential use is not planned for the site, if residential was desired in the future, further remediation would be necessary

Sterling's Tentative Recommendation is to "Cap" the site

- Fully protective of human health and the environment
- Planned use of the site as Upper Hudson Rivers & Estuaries Center means engineering controls can be established and maintained
- City ownership means institutional controls can be easily enforced
- Residential use is not proposed for the site
- State funding for more costly alternatives is extremely unlikely

Questions & Comments

(River Street will bring a big pad & easel
Can someone volunteer to be note taker.)