What we do

We recycle contaminated soil and use it to remediate and cap large, distressed, polluting brownfield properties, replacing natural, mined materials with sustainable recycled products to create vibrant new habitat and industrial development to fund the ongoing maintenance of the remedial action permit

Stakeholders

- Landowners
- Host community and county
- Prime contractor
- Consultants
- Regulators
- Opposition

Current Site

- Zoning and planning – surrounding area
- 2,000,000 alum sludge and undocumented fill
- 6 impounds – berms in disrepair
- Exposed sludge – direct contact issues
- Cyanide, metals, semi-volatiles (list of others)
- Leaching and groundwater - modeling
- Groundwater condition
- Surface water run-off and breakout water
- Animal exposure
- Flooding

Plan

- Construct Class B Facility
- Produce and place capping material
- Loading plan and monitoring
- Stormwater management
- Air – minor permit, DMP, BMP’s, met station

Regulatory Structure

- Local
- County
- State
- Federal
- Other

Potential materials

- Hazardous – characteristic or listed waste - NO
- Solid Waste – discarded or health risk - NO
- Recyclables – Non-hazardous, sustainable, source separated, Class B certified materials

Soil Safe Process

- Characterization and certification
- Documentation and Inspection
- Stockpile and homogenize
- Screen and mix with cement
- Solidification – factors met
- Stabilization – factors met
- Confirmatory characterization
- Placement and monitoring
- Demonstrated effectiveness
- Sustainability

Product requirements

- Chemical
  - Constituents
  - Modeling and Risk assessments
- Physical
  - Requirements
  - Properties
  - Functionality
- Cost, availability and reliability

Cap requirements

- Permeability
- Stormwater control
- Durability
- Placement
- Monitoring

Brownfield to greenfield

- Wetlands
- Habitat
- Commercial
- Topography
- Access

Evolution – Concept to Final Plan

- History
- Previous plan and assumptions
- New Plan and approvals
- Key Touchpoints
  - Flooding
  - “Toxic” and “highly contaminated”
  - Geotechnical failure
  - Staten Island
  - Alternatives
  - Schedule
  - Avid community support

Summary

- 5 year project – temporary Class B
- Near flat, impermeable cap finished with topsoil and native vegetation
- Riparian restoration
- Eliminate flooding exposure and imminent dangers
- No cost to government - fund municipal projects