EPA’s Removal Program and Brownfields
CERCLA

In 1980, in response to public concern about abandoned hazardous waste sites such as Love Canal, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 42 U.S.C. 9601 et seq. (commonly referred to as Superfund).

Superfund authorizes the government to assess and cleanup contaminated sites and provides authorities for emergency response involving hazardous substances.
Superfund Programs

• Remedial
  – addresses long term threats to human health and the environment. Remedial responses financed by the Fund can only be undertaken at sites on the National Priorities List (NPL).

• Removal
  – short term or emergency responses to mitigate a release or threat of release of hazardous substances into the environment. Typically removal actions are limited to 12 months in duration or $2 million in cost.
EPA’s Removal Process

• The National Contingency Plan (NCP), 40 C.F.R. Part 300, provides the blueprint for conducting removal and remedial actions under CERCLA.

  – Referral
  – Removal Site Evaluation (RSE)
  – Removal Action
  – OSCs – On Scene Coordinators
RSE

• Typically involves field sampling
• Purpose is to determine eligibility for a removal action
• Sampling to determine the extent of contamination can also be a goal
• Reports include a data report from an EPA contractor and an RSE from EPA (decision document)
Removal Action

• Triggers for conducting an action must be met:
  • Release or threat of release of a hazardous substance, pollutant or contaminant that causes an imminent and substantial endangerment.
  • At least one of the NCP Section 300.415(b)(2) factors are met.
NCP Section 300.415(b)(2) Factors:

• Actual/potential exposure to humans, animals, or the food chain
• Actual/potential contamination of drinking water or sensitive ecosystems
• Haz substances, pollutants or contaminants in containers which pose a threat of release
• Haz substances, pollutants or contaminants in soils that may migrate
• Weather conditions which could cause a release or migration of haz substances, pollutants or contaminants
• Threat of fire or explosion
• No other response mechanisms available
Removal Action

• Once statutory and regulatory triggers are met, NCP Section 300.415(b)(1) states: “. . . the lead agency may take any appropriate removal action to abate, prevent, minimize, stabilize, mitigate, or eliminate the release or the threat of release.”

• This could mean anything from a fence to a drum or tank removal to a large soil excavation or a building demolition.
Brownfields

• Properties where redevelopment or reuse is complicated by the presence or potential presence of contamination.
• Often the Feds are not involved in the cleanup of Brownfields sites – States and local programs play the most significant role along with private parties.
• EPA launched the Brownfields initiative in the mid 1990s. Congress codified EPA’s initiative practices and policies when it passed the Small Business Liability Relief and Brownfields Revitalization Act of 2002
The Brownfields Amendments

• Defined a Brownfield
• Provided statutory authority for EPA’s grant program
• Provided Liability protection provisions:
  – BFPPs
  – CPOs
  – ILOs
Relationship between Removal and Brownfields

• We work in the same neighborhood
• We can help each other
  • Requires communication, relationship building and coordination (e.g – Paterson, Camden, Milltown)
• OSC buddy system (How we can help you!)
  – Technical assistance
  – Site assessment
  – Removal of imminent hazards
  – Occasional full site cleanup – redevelopment ready (rare – and becoming rare – er ...IMO)
Potential Drawbacks and Impediments

• Brownfields Law Restrictions

• Enforcement (Despite B-fields protections)

• Petroleum Exclusion

• Asbestos and the Budget
  – HQ Review and approval
  – More stringent eligibility requirements these days
So Many Different Ways a Site can be Addressed and Redeveloped- just in my experience

- Superfund
- PPA
- Brownfields
- Superfund/Brownfields split
- State HSRF
- SEPs

- Integrated Cleanup Initiative
Some Examples

• Barry Bronze, Camden NJ (an ongoing effort)

• Borden Chemical, Camden NJ (cleanup towards re-use)

• General Color Camden, NJ (complete cleanup and redevelopment)

• Michelin Tire Ford Avenue (Removal/Brownfields team up)

• Paterson, NJ (more common work)
Barry Bronze
Heavy Metals in Soil
Assessment
Soil Removal
Building Interior
View of perimeter air monitoring station at west fenceline.
Protecting Public Health

View of a typical homeless shelter/dwelling within the building.
Asbestos Removal

View of ACM pipe insulation removal at Building #1 - 1st floor.
Asbestos Removal

View of ACM debris/ concrete block removal activity at Building #2, 1st floor.
Asbestos Fiber Encapsulation

View of sprayed-on ACM encapsulant application activity at Building #2- 2nd floor.
Completed Removal Action

View of completed decontamination and ACM encapsulation activity at Building #2.
General Color - Former Dye and Pigment Manufacturer
Waste Containing Up to 20% Lead
Public Housing Next Door
Excavation to 17 Feet BGS
Over 125,000 Tons of Contaminated Soil Removed
Redevelopment at this Site

• Part of a large brownfields redevelopment effort in Camden- In an EJ Community

• EPA created a partnership with the community, municipal and State government, local nonprofit organizations and the private sector to redevelop the site and help the revitalization of the community

• Eventually the site of a large redevelopment effort (affordable housing) through an EPA PPA with a Developer

• The removal action was taken to the end point of the superfund program - reuse and revitalization. Considered a major revitalization success story by both regional management and HQ

• One of the largest and most expensive removal actions in Region 2
General Color Redevelopment
Milltown, NJ- Ford Avenue
Building 13
Building 10
Building 10
Paterson, NJ
Picture No. 68 – Laboratory Room No. 2 located inside Building 10
Picture No. 17 - Earth Tech personnel overpacking drum of high pH material in the Waste Storage Building
Lets Work Together