

Aggressive Action at Dump Site Avoiding Superfund Liability

Tyler McNabb	Geosyntec Consultants, Inc.
Leroy Leonard	Geosyntec Consultants, Inc.
Duane Graves	Geosyntec Consultants, Inc.
Daniel Dyer	CSX Transportation, Inc.

Third-party, illegal disposal on railroad properties combined with potential Superfund liability due to actions on adjacent sites can result in potential responsible party (PRP) designation. This presentation discusses actions that eliminated the threat of Superfund liability and lead to pending site closure with no long-term care requirements at a CSX Transportation, Inc. (CSXT) site in Big Stone Gap, VA. The example case involved a parcel impacted by the actions of neighboring scrap metal operations that cracked battery casings and transformers which caused lead and polychlorinated biphenyls (PCBs) contamination in soil on the scrap yards and nearby properties which included the CSXT parcel and private and public land in the vicinity. The Virginia Department of Environmental Quality (VA DEQ) (the lead agency) and the United States Environmental Protection Agency (EPA) Region 3 closely monitored the status of the CSXT site throughout investigation and remedial action.

A series of actions were initiated with approval of the VA DEQ and EPA that avoided a Superfund designation, demonstrated that site soil could be excavated and disposed as non-hazardous special waste, eliminated long-term site maintenance costs, and supported a request for site closure from the VA DEQ. Actions critical to the success of this project, that can be beneficially applied to other railroad environmental liabilities included the following:

- A preliminary inspection suggested that most of the debris originated from the neighboring metal scrap yard operating near the site.
- A survey was conducted to establish property boundaries which served to limit CSXT's responsibility to only property that was rightfully theirs. The survey reduced the area for remediation by showing that some land thought to belong to CSXT was actually owned by the scrap yard.
- A soil assessment identified contaminants and supported a preliminary characterization of the soil for disposal. Concentrations of PCBs, metals, and polycyclic aromatic hydrocarbons (PAHs) exceeding VA DEQ Regional Screening Levels (RSLs) were detected in surface and subsurface soil samples. One sample contained a concentration of lead exceeding the Toxicity Characteristic Leaching Procedure (TCLP) screening level for characteristically hazardous waste.
- A sampling procedure, derived from VA DEQ guidance, demonstrated that the total volume of soil was not characteristically hazardous and that the single TCLP screening level exceedance was extremely isolated and not representative of the volume of material to be excavated and disposed.
- In-situ waste characterization streamlined remediation by eliminating the need to stockpile soil for characterization during the remedial action (excavation and disposal).

- Using the VA DEQ approved soil sampling procedure, the waste was profiled as non-hazardous allowing the impacted soil and debris to be disposed in a nearby permitted subtitle D landfill, in spite of the failed TCLP test for lead in an early grab sample.
- Clean backfill was placed in the excavation and overlaid by geotextile and a stone cover to eliminate exposure risks and long-term maintenance.

In summary, substantial cost savings and liability reduction were realized by surveying property boundaries, demonstrating that materials at the site were non-hazardous, and by installing a cover system that does not require maintenance. Site closure is pending.