

WOOD TREATING SOIL STABILIZATION *BRUNSWICK, GEORGIA*

PROJECT MANAGER
KENT GEIS

PERFORMANCE PERIOD
January 2008 - Present

CONTRACT VALUE
\$5.2 million



PURPOSE

Project scope involved the stabilization and placement of soil contaminated from a former wood treating facility.

HISTORY

The project site is a former wood treating facility in Brunswick, GA. The site is on the National Priority List, and is being remediated by US EPA Region IV under their Remedial Action Contract with an engineering firm.

PROJECT APPROACH

The scope of the work performed to date included:

- Clearing of brush and trees from areas along the creek to gain access to excavation areas.
- Stabilization of organic and inorganic contaminants using a portland cement and fly ash mix.
- Over 90,000 tons of soil were excavated and stockpiled under separate removal actions. Greenleaf performed the stabilization of soil using and ARAN 280 pugmill.

- Treated soil was placed into two onsite cells that will be capped.
- An adjacent stream was remediated, with impacted sediments brought back to the main site for inclusion into the treated soil.

LEAD CONTAMINATED SOIL STABILIZATION AND REMOVAL *ATLANTA, GEORGIA*

PROJECT MANAGER
DALE CARPENTER, CHMM

PERFORMANCE PERIOD
August 2005 – October 2005

CONTRACT VALUE
\$200,000



PURPOSE

Initial project scope involved the stabilization of 1600 tons of previously excavated and stockpiled lead contaminated soil. Additional work was added to the project scope to include soil excavation and building demolition.

HISTORY

The project site is slated for a major revitalized effort near downtown Atlanta. The site was under contract to be sold with the stipulation that all contaminated soil above residential standards was to be removed from the site. The lead contamination was the result of numerous manufacturing enterprises at the site, including a pencil factory and metal stamping operation.

PROJECT APPROACH

The scope of the work performed to date included:

- Stabilization of the stockpiled soil using TSP at a 3% concentration. A mixing pit was formed in the center of the stockpile. An excavator placed 15 buckets of soil and ½ bucket of TSP in the pit. Water was added to promote the chemical

reaction. The excavator dug buckets of the soil in the pit until a visibly homogeneous mixture was obtained.

- Confirmation samples of the stabilized soils were collected at the rate of 1 per 200 tons of soils.
- Treated soils were loaded into tandem dump trucks and sent off site for disposal at an approved landfill.
- Excavation, stockpiling, treatment and offsite disposal of 600 tons of contaminated soils.
- Demolition of 2 cinder block walled building and removal of associated concrete footers and floors. Debris was stockpiled on site.
- Equipment decontamination and demobilization.

RESULTS

The job was completed on schedule and within budget. In addition, there was no lost work time due to accidents.

FORMER BATTERY BREAKING SITE ATLANTA, GEORGIA

PROJECT MANAGER
DAVID WHEELER, CHMM

PERFORMANCE PERIOD
August 2007 – September 2007

CONTRACT VALUE
\$725,000



PURPOSE

Project scope involved the excavation, stabilization and disposal of soil contaminated from a former battery breaking operation.

HISTORY

The project site was a parking lot that had previously been backfilled and paved over top of soil impacted from a lead salvage operation. The property was being remediated to allow for construction of a new parking deck and condominium.

PROJECT APPROACH

The scope of the work performed included:

- Clearing of brush and trees from a stone wall along the perimeter of the excavation areas.
- Excavation and onsite stabilization of 4,200 tons of lead impacted soil.
- After treatment verification, loading, hauling and disposal of soils at a Subtitle D landfill.

LEAD CONTAMINATED SOIL STABILIZATION AND REMOVAL *ATLANTA, GEORGIA*

PROJECT MANAGER
JEFF ROTHWELL, CHMM

PERFORMANCE PERIOD
October 2002– December 2002

CONTRACT VALUE
\$ 485,000



PURPOSE

Initial project scope involved the stabilization of 8000 tons of previously excavated and stockpiled lead contaminated soil. Additional work was added to the project scope to include AST cleaning and TPH contaminated soil disposal.

HISTORY

The project site was slated for a major revitalized effort near downtown Atlanta. The site was under contract to be sold with the stipulation that all contaminated soil above residential standards was to be removed from the site. The lead contamination was the result of a stockpile of battery casings as a road-base prior to RCRA regulations.

PROJECT APPROACH

The scope of the work performed to date included:

- Stabilization of the stockpiled soil using TSP at a 4% concentration. Two mixing pits were buried

and set up inside a warehouse building. Greenleaf utilized a formula derived by a treatability study. Water was added to promote the chemical reaction. Ag Lime was then applied to bind the reaction and dry the residual. The excavator dug buckets of the soil in the pit until a visibly homogeneous mixture was obtained.

- Confirmation samples of the stabilized soils were collected at the rate of 1 per 500 tons of soils and batch samples were collected for future evaluation if needed.
- Treated soils were loaded into tandem dump trucks and sent off site for disposal at an approved Subtitle D landfill.
- Excavation, stockpiling, treatment and offsite disposal of 8000 tons of contaminated soils.
- Cleaning of an AST fuel tank located at another part of the property
- Excavation, stockpiling, and disposal of TPH contaminated soil and concrete from AST area.

Lead Contamination Soil Stabilization and Removal

Atlanta, Georgia

- All loads were weighed on site with a mobile scale during the course of the project
- Equipment decontamination and demobilization.

RESULTS

The job was completed on schedule and within budget. In addition, there was no lost work time due to accidents. The site was successfully remediated within the deadline presented by the client. Due to the sensitive nature of the property transfer, the site work was expedited and Greenleaf worked many overtime hours, including Thanksgiving holidays.

LEAD REMEDIATION ATLANTA, GEORGIA

PROJECT MANAGER DALE CARPENTER, CHMM

PERFORMANCE PERIOD

January 2006

PURPOSE

Lead contaminated soil excavation, transportation and off site disposal.

HISTORY

This project site is an apartment complex located in downtown Atlanta. The exterior of the complex was originally painted with lead based paint. Over the years the paint flaked off the exterior siding and contaminated the soil adjacent to the buildings. Prior to a sale of the property a Phase 1 environmental audit was performed which revealed lead concentrations in the soil exceeding the regulatory limit for residential locations. The client was contracted by the property owner to identify areas that required remediation. Three areas were identified as needing remediation. Subsequently, the client contracted with Greenleaf Environmental Services to implement the corrective measures.

- Excavation of soil to a 1 foot depth. Due to the tight configuration of the buildings and sidewalks the soil was excavated using a mini excavation and then dumped into the bucket of a Bobcat loader. The soil was then dumped into a rolloff box. A subcontract collected confirmation soil sampling.
- Backfilling excavation areas as confirmation revealed areas as “clean”.
- Transportation and disposal of soil at an approved landfill.
- Site restoration included site grading, seeding and mulching disturbed dike areas, stockpile staging areas and access roads.

PROJECT APPROACH

The scope of the work performed included:

- The identification of all utilities within and near the proposed excavation areas.
- Providing 24-hour site security for all equipment and excavation areas.