

Southwestern Community College Firing Range



Executive Summary

SCC Firing Range is on a site of approx. 1.5 acres east of River Road and the TWSA Wastewater Treatment Facility. After more than 30 years of firing, there is an relatively small area (approx. 2500 SF) immediately adjacent and downgradient to the range that has been identified as being adversely impacted by contamination. SCC contracted with CCI Environmental services to remove lead impacted soil while ECS observed and collected soil samples. Soil was excavated, treated and disposed. Monitoring wells were dug and groundwater tested which did not detect lead above the NC Groundwater Quality Standards. Based on the test results, NCDEQ changed their guidance from capping the site and initiating best management practices (BMPs) to ensure lead does not migrate off the range in the future – to requiring additional soil be excavated, treated and removed, however ECS recommended additional testing to understand the extent of any additional contamination. The College in conjunction with ECS, dug test pits to determine the vertical extent of remaining contamination at various locations.

Based on the results of analysis of soil samples collected from the test pits – it appears that the remaining impacted soil may be able to be removed to unrestricted levels either at or near the soil / rock interface. NCDEQ has approved a workplan to excavate, treat and remove an additional 200 CY or 300 tons of soil which should result in clearing the site. After clearance best management practices should still be put in place to ensure no future migration of lead off the range.

Summary of Actions

- Area of possible contamination identified adjacent and downgradient of the firing range
- ECS selected as environmental consultants and testing agents
- Selected CCI who Treated / removed soil IAW NCDEQ approved plan
- NCDEQ requested installation of monitoring wells and at the same time stated we could plan to cap the site and install best management practices (BMPs) to ensure no future migration of lead from the range
- RFQ resulted in Amec Foster Wheeler selection as firm to design BMPs
- Water sampling came back within NC State limits for lead
- NCDEQ provides new guidance to treat and remove additional soil
- Following water testing, we dug test pits and conducted additional soil sampling to determine depth of any additional contaminated soil
- NCDEQ has approved the workplan to excavate, treat and remove additional 200 CY / 300 tons of soil
- Amec Foster Wheeler will design best management practices AND possible sound mitigation

Area of excavation activities and monitoring wells

- NCDEQ Requires additional soil be extracted, treated and removed from this area
- After removal, implementation of best management practices (BMPs) to ensure lead does not migrate off the firing range in the future
- Commissioners have also asked for proposals related to sound abatement



Budget Request

NCDEQ has approved the work plan to treat and remove approx. 200 CY / 300 tons of additional soil. This will require consulting, testing, project management, engineering services, and the excavation, treatment and removal of the soil.

ECS Project Mgmt / Testing / Consulting – \$39,750

Amec Foster Wheeler Engineering Services - \$54,600

Expected Cost for Soil Mitigation (must be bid) – approx. \$160,000

Total Requested Budget - \$254,350