

TECHNICAL SPECIALTIES

Groundwater and soil investigations; remedial system monitoring and operation and maintenance; construction management and oversight; Phase I/II environmental site assessments; AS/SVE System Design; soil delineation and excavation associated with UST removals and metals contamination; soil/landfill capping design; stormwater best management practices design and compliance; Site evaluation remedial treatment selection.

EXPERIENCE SUMMARY

10+ years' experience. Staff Engineer, Project Engineer, Project Manager and Principal Scientist with Roux Associates, Inc

CREDENTIALS

B.S., 2007; Environmental Engineering, Drexel University, Philadelphia, Pennsylvania

PROFESSIONAL TRAINING

OSHA 40-Hour Health and Safety
LPS Program

KEY PROJECTS

- Project manager for a multi-site Phase II site assessment project, involving over 100 Phase II environmental site assessments, for a major petroleum products corporation conducted over a 10-month period. Scheduled and coordinated field, office, contractor and health and safety personnel, as well as, with the client and client's consultant management group. Project Coordinator of office activities including preparation of the Phase II environmental site assessments encompassing report text, figures, boring logs, tables and laboratory data review.
- Management and execution of domestic private well sampling of over 30 homes to evaluate the extent of the plume from a large-scale gasoline release at a service station in Maryland. Sensitive Interaction with affected litigants, associated with the resultant multi-million-dollar lawsuit. Assisted with scheduling continued litigation support post field activities.
- Principal investigator for a multi-site Phase I site assessment project involving over 100 ASTM E1527-00 Phase I environmental site assessments for an international industrial gas manufacturer conducted over a 6-week period.
- Team Member for a multi-site Phase I/II site assessment project involving 185 AAI Phase I environmental site assessments performed for a major petroleum products corporation over a period of four months. The scope of work included development of work plans for Phase II activities. In preparation of the divestiture of its 1,400 east coast retail marketing facilities, a major petroleum products corporation

retained Roux Associates to provide environmental support services, at sites located in New Jersey, New York, Delaware, Maryland, Massachusetts, and Virginia.

- Provided technical assistance for an expert report to address the nature and extent of the environmental harm at a landfill in Connecticut.
- Provided day to day construction oversight of ten-plus man construction crew for the rehabilitation of a constructed treatment wetland system from mobilization to demobilization. The project consisted of clearing and grubbing of phragmites, demolition of the original constructed treatment wetland, installation of distribution piping and valves, berms, and elevation of the soil dike. The majority of the work occurred within a swamp. Prepared specifications, design drawings and bid package. Created the Soil Erosion and Sediment Control Plan and coordinated with the Virginia environmental division local officials, both on and offsite.
- Conducted LNAPL recovery and ground water monitoring at an inactive rail yard in Pennsylvania. Containerized and coordinated disposal for product. Prepared quarterly regulatory monitoring reports for the site.
- Contractor coordination and engineering support for the installation of 4,500 feet of 8-inch diameter water main including, scheduling, change orders, engineering plan modifications and invoice management. Post installation oversight of a ten-plus man paving crew for county road restoration. Prepared the as-built drawing of the water main as well as the easement drawings for the properties located on the site in Southern New Jersey.
- Management of a PCB contaminated soil capping utilizing geosynthetics at a wastewater treatment plant. Provided contractor oversight and project coordination between suppliers, laboratories, installers, clients, and contractors. Performed quality assurance and quality control activities including geosynthetic sample collection and archiving, as well as, interpreting geosynthetic testing results. Approved and maintained contractor submittals. Assisted in the preparation of the completion report.
- Construction management and oversight activities for multiple private residence underground storage tank removals involving excavation and load-out of contaminated soils. Completed soil delineation and temporary well installation for sample collection from residences throughout New Jersey. Preparation of a Remedial Action Work Plan Report detailing site histories, construction activities and analytical test results.

- Oversight of a Licensed Well Driller for the removal of a damaged high vacuum dual-phase extraction well and installation of a new extraction well at a specialty paint manufacturing plant in Jersey City, New Jersey. Well abandonment and replacement were performed in accordance with New Jersey Department of Environmental Protection (NJDEP) well installation regulations. Contaminants of concern at the site included benzene, xylene, toluene, and, ethylbenzene at concentrations requiring level C PPE.
- Oversight of remedial excavation activities to remove lead contaminated surface soils from an active multi-story residential unit construction site near Philadelphia, Pennsylvania. The work involved excavation until the target removal concentration was achieved and backhoe load out separating soil from debris and rock. Maintained Hazardous Waste Manifests for the off-site transport of the excavated soils to an approved treatment and disposal facility. Completed post-excavation soil sampling with test pits and soil borings.
- Provided engineering design support and construction oversight for a pilot-scale system designed to treat cyanide and fluoride at aluminum manufacturing company on the NY/Canada border. Performed intermixing analysis, located materials and vendors for the design and provided QA/QC for the Design Drawings.
- Supported the design of cover and drainage improvements for a site located in Southern New Jersey. Performed and analyzed stormwater runoff, piping, and energy dissipation calculations. Located materials and vendors for the design. Performed QA/QC activities for the specifications and design drawings.
- Design of stormwater drainage options and best management practices for a 20+ acre commercial and residential redevelopment in Northern New Jersey.
- Viability inspection of remedial wetlands on a capped landfill including the drainage swales, retention ponds, riprap, and species identification. Determined the extent of the wetlands, located in upstate New York, via a Global Positioning System.
- Preparation of a Pollution Prevention Contingency plan (PPC) for a pharmaceutical manufacturing facility including site inspection visits and client meetings.
- Assisted in the design for the expansion of a pilot scale sprayfield to achieve zero discharge. Permitting activities included No Discharge applications and construction permits for submission to the State Authorities.
- Assisted with the preparation and filing of Title V Air Permits for a chemical company storing large amounts of polyester resin located in southern New Jersey and an asphalt refinery in Georgia.
- Performed an asbestos and mold re-inspection at a former telephone service provider's headquarters. The re-inspection included a two million - square foot building as well as six private residential building locations surrounding the headquarters. Comprehensive sampling, report writing, and general oversight of the asbestos survey project conducted for pre-demolition certification.
- Provided field support for the annual operation and maintenance of a 15-acre phytoremediation project to mitigate zinc leachate in a former industrial landfill. Activities include maintenance of phyto plot, irrigation system and insect/herbivory controls.
- Researched options and evaluated applicability of SO₂ controls, based on treatment phase, capability, and capital and annual costs including, Solid/Liquid scavengers, LO/MINI-CAT, thermal oxidation, and Wet/Dry scrubbers. Completed cost/benefit analysis, proving additional removal provides higher cost than benefit, saving the southern New Jersey plant from purchasing and installing unnecessary equipment.
- Engineering and construction support for fast-paced remediation of PCB-impacted soils within the right-of-way of an interstate. Remedial activities were required to ensure clean working surfaces for contractors performing highway bridge expansion and lane expansion activities. Engineering and construction support activities included soil characterization, excavation design, stormwater management support, utility jacking/boring support, casing installation support and QA/QC activities for imported fill materials and compaction.
- Wetlands permitting for a rail line expansion located in and surrounding a crude oil refinery in Southern New Jersey. Activities included wetland assessment and preparation of Freshwater Wetlands Individual Permit, Waterfront Development Permit, Riparian Zone Mitigation Plan, Wetlands Mitigation Plan and USACE Nationwide Permit.
- Project Manager for a dry cleaner site located in a strip center in central New Jersey. The site has soil and groundwater contamination from chlorinated solvents. The remediation was designed to remove free-phase PCE (DNAPL), the source of groundwater contamination and indoor vapors in the building. The DNAPL and soil will be treated using electrical resistance heating (ERH) with vapor recovery. The groundwater will be monitored for natural attenuation.