

### TECHNICAL SPECIALTIES

Design, implementation and management of Environmental Site Assessments, Remedial Investigations, and Remedial Actions at Brownfield Redevelopment sites and Industrial sites; Development of regulatory strategy and regulatory agency negotiations; Characterization, Decontamination and Decommissioning of Industrial Manufacturing Facilities.

### EXPERIENCE SUMMARY

Twenty years of experience: Principal, Senior, Project, Staff and Staff Assistant Environmental Scientist at Roux Associates, Inc., Islandia, New York; Field Manager/Staff Scientist at Long Island Analytical Laboratories, Holbrook, New York.

### CREDENTIALS AND TRAINING

B.A., Biological Sciences, University of Delaware, Newark, Delaware, 1999  
 Licensed Site Remediation Professional, New Jersey (License No. 627589)  
 New York State Professional Geologist (License No. 000437)  
 OSHA 40-Hour Health and Safety Course (29 CFR 1910.120)  
 OSHA 8-Hour Health and Safety Refresher Course (29 CFR 1910.120)  
 NJDEP UST Certification Program-Subsurface Evaluator (License No. 239024)

### PUBLICATIONS

*Significant Acceleration of Time Frame to Closure via Transition from Long-Term Biological Treatment to ZVI/EVO Injection*, Kovacs, R., Senh, S., Silverstein, W., Moss, D., Kelley, R., Proceedings of the Tenth International Conference on Remediation of Chlorinated and Recalcitrant Compounds, Abstract and Poster, 2016.

### KEY PROJECTS

- *Amtrak Sunnyside Yard State Superfund Site* – Project Principal for multiple projects to support investigation and remediation activities at this State Superfund site. Mr. Kovacs was responsible for overseeing activities in all six Operable Units (OUs), including unsaturated and saturated soil, groundwater, separate-phase hydrocarbon, soil vapor and on-site sewer system. His responsibilities on these projects included characterizing subsurface conditions, including soil (collected hundreds of soil samples to characterize the 130+ acre active railyard), as well as characterizing a 250,000-gallon PCB-contaminated separate-phase hydrocarbon plume. Additionally, he was responsible for overseeing the design and implementation of remediation activities, including soil excavation and offsite disposal, removal and abandonment of USTs

ranging in sizes up to 17,000 gallons, demolition of contaminated buildings and infrastructure, and installation and operation of a dual phase high vacuum extraction (DPVE) system to recover PCB-contaminated separate-phase hydrocarbon through a network of over 40 recovery wells. Due to the highly volatile nature of the separate-phase hydrocarbon and the urban setting of this site, extensive emissions and odor engineering controls were used when excavating and managing soil and product. Additionally, extensive Community Air Monitoring was completed during all phases of work. He was also responsible for managing environmental activities associated with construction of the new, state of the art Next Generation High Speed Rail facilities to support Amtrak's Acela train service, and construction associated with MTA's massive East Side Access project on and beneath Sunnyside Yard.

- *Pharmaceutical Manufacturing Facility – Brooklyn, NY* – Project Manager/Project Principal for environmental work associated with the seven-block former manufacturing plant. This Site included a former 700,000 square foot manufacturing plant, as well as several other former industrial facilities with operations starting as far back as the 1850's. Responsibilities include the design and completion of multiple phases of subsurface investigations to characterize soil and groundwater quality, as well as soil vapor. Contaminants included hydrocarbons, benzene, PCBs, and heavy metals, including lead, mercury, and arsenic. Work included development and preparation of investigation and remediation work plans, coordination and management of field investigations, including the installation of shallow and deep monitoring wells and soil borings using sonic drilling methods, completion of a geophysical survey, collection of groundwater samples, and management of remediation activities. Remediation activities included soil excavation, UST removals, and the installation of a soil vapor extraction and air sparging system. Work was completed under several different regulatory agencies, including NYSDEC and NYCOER. Also provided presentations to school authorities, including the NYC DOE, to communicate the progress of the project and to educate administrators regarding the Site's environmental issues.
- *Chlorinated Solvent Remediation – Parsippany-Troy Hills, NJ* – Project Principal for the Remedial Investigation and Remedial Action implementation associated with a former dry cleaner release located in Parsippany-Troy

Hills, New Jersey. We were retained by one of the largest real estate developers in the United States to complete this project. Soil, groundwater and subsurface vapor were impacted with chlorinated VOCs as a result of the former dry cleaner operations. Responsibilities included the design and management of a Supplemental RI that included the installation of soil borings, monitoring wells and the completion of groundwater vertical profiling. Additionally, Mr. Kovacs was responsible for the design, implementation and management of an extensive groundwater remediation injection program in which approximately 200,000 pounds of Zero-Valent Iron (ZVI) and 2,500 gallons of Emulsified Vegetable Oil (EVO) were injected into the subsurface using pneumatic fracturing. Initial post-treatment results show over 95 percent reduction in concentrations of chlorinated VOCs in groundwater. Furthermore, he was responsible for the design, installation and operation of a SVE system to address impacted vadose zone soil.

- *Chlorinated Solvent Release – Bernardsville, NJ* – Project Principal for the investigation of an extensive chlorinated solvent plume emanating from a former dry cleaner site. Contamination from this site has migrated far off site in groundwater, and has potentially impacted nearby surface water. Work includes installation of soil borings and monitoring wells to characterize contamination in soil, perched water, groundwater in the deep unconsolidated aquifer zone, as well as groundwater in the weathered bedrock matrix and bedrock matrix. Further, contamination from the Site is co-mingled with contamination from other solvent release sites, complicating NJDEP negotiations and investigation/remedial requirements. Mr. Kovacs serves as the LSRP of record for this project.
- *UST Spill Site – Brooklyn, NY* – Project Principal for the investigation of a Spill in Williamsburg, Brooklyn, New York. M. Kovacs lead the project team in successfully demonstrating to NYSDEC’s Spills Group that impacts to a deep groundwater zone beneath the client’s site were a result of offsite contamination migrating onsite from a nearby active gasoline station (not a result of the client’s former industrial operations). Impacts included the presence of several feet of free-product in a deep groundwater zone. Furthermore, he was successful in getting the client’s Spill Case closed, saving the client from

additional investigation activities, and what will likely be a multi-million-dollar remediation to address free-product beneath a semi- confining clay zone.

- *Waterfront Redevelopment – Greenpoint, NY* – Project Principal for a large project located on the waterfront in Greenpoint, New York. This 110,000-square foot site will be redeveloped into a multiple 40-story towers. This project has included the completion of a Phase I and Phase II ESA, as well as negotiation with NYSDEC regarding entry to the NYSDEC BCP. As part of this work, soil borings, monitoring wells, piezometers, and soil vapor monitoring points were installed, and hydrogeologic cross sections were prepared. Additionally, as part of this project, the tidal influence of the East River on site groundwater was studied, and a benthic sediment investigation was conducted in the East River.
- *Former Vehicle Maintenance Facility – Parlin, NJ* – Project Manager for the removal of (2) waste oil USTs, a subsurface oil water separator, piping, and remediation of associated petroleum contaminated soil at a former vehicle maintenance facility in Parlin, New Jersey. Roux was retained by one of the largest real estate developers in the United States to complete this project. This remediation was completed to allow for a new, national tenant to occupy this retail space. As part of this this work it was determined that a historic release occurred from the OWS, triggering a RI for petroleum-related VOCs and chlorinated VOCs in soil. Mr. Kovacs was also responsible for the development and implementation of the Remedial Action for the Site, which included excavation and off-site soil disposal. SESOIL modeling was also utilized to demonstrate groundwater (approximately 100 feet deep) was not impacted by the shallow soil contamination. As part of this project, he took a lead role in preparing the SI Report, RI Report, RAW, RAR, Receptor Evaluation, and the Unrestricted Use RAO.
- *NJ Transit Active Bus Facility* – Project Principal for the completion of a RI at an active bus garage located in Fairview, New Jersey for a major transit agency. Responsibilities included the delineation of a free-product plume, characterization of soil and groundwater quality, report preparation, and correspondence with the NJDEP. Moreover, Mr. Kovacs was responsible for implementing free-product Interim Remedial Measure efforts. Currently,

he is finalizing the RI report for the Site, and managing the Remedial Action design, and supporting the LSRP in meeting all NJDEP administrative requirements.

- *Residential Hi-Rise Development – Manhattan, NY* – Project Principal for a redevelopment site in mid-town Manhattan working for a private developer who is building a mixed-use retail/commercial tower. Work included a Phase I ESA and Phase II ESA. As part of the Phase II shallow bedrock was identified in portions of the site, and an LNAPL plume was identified in the overburden soils. Responsibilities included bedrock evaluation, LNAPL recovery utilizing multiple different techniques. Responsibilities also included construction support, health and safety support, management of all soil excavated and transported off site, and the design of a Sub-Slab Depressurization System (SSDS) to mitigate vapors in the vadose zone beneath the new building structure that were emanating from groundwater.
- *Ship Dry Dock Facility – Hoboken, NJ* – Project Manager for the completion of a Preliminary Assessment and Site Investigation (PA/SI) at an active ship dry dock facility in Hoboken, New Jersey. Responsible for the coordination and management of field investigation activities, which included soil, groundwater, and sediment sampling, as well as the preparation of a PA and SI report. This work was completed on behalf of a potential buyer of the property who planned to redevelop this site into a New York City ferry terminal.
- *BICC Cables – Yonkers, NY* – Project Manager for the investigation and remediation of the interior and subsurface soils of a former cable manufacturing facility located in Yonkers, New York to be redeveloped into a movie studio. Responsibilities included the completion of several large-scale investigations, including the collection of wipe, soil and building material samples to characterize PCB and lead impacts at this 200,000+ square foot facility. Additional tasks included oversight of the remediation of interior surfaces using several different methods for the removal of PCBs and lead, and remediation of a sub-surface drainage trench and process water system. Further work included the preparation of a Remedial Investigation report and a Feasibility Study report for submittal to the NYSDEC.

- *Amtrak Electrical Substation – Rahway, NJ* – Project Manager for the RI and RA design and implementation at an active electrical substation in Rahway, New Jersey for a national passenger railroad agency. Responsibilities included completing an RI to delineate PCBs in soil, and the management of free-product recovery programs. Further, Mr. Kovacs was responsible for managing the RA at the Site, which included soil excavation and offsite disposal, and free-product recovery. As part of this project, he supported the Site LSRP and took a lead role in preparing the Supplemental RI Report, RAW, RAR, Receptor Evaluation, and the Unrestricted Use RAO. Additionally, he assisted the LSRP in satisfying all NJDEP administrative requirements, including preparation of forms, public notifications, and submittal of fees.
- *Echo Bay Redevelopment – New Rochelle, NY* – Project Manager for the completion of Phase I and Phase II Environmental Site Assessment activities associated with a proposed mixed-use redevelopment located in Westchester, New York. Work included management of subsurface investigation activities to characterize soil conditions, and working closely with client's architects and construction contractors to integrate the proposed site remediation into the project development plan (including evaluating multiple potential disposal scenarios). Site contaminants included hydrocarbons (including free-product plume from former USTs), and historic fill constituents.
- *Former Dry Cleaner – Ramsey, NJ* – Project manager for the SI, RI, and vapor intrusion investigation at a former dry cleaner in Ramsey, New Jersey. Responsibilities included managing and coordinating field investigations, preparing remedial cost estimates for redevelopment, and preparation of reports and satisfying NJDEP Administration requirements. This work is being done to support redevelopment of the Site for a large, national fitness center tenant.
- *Former Service Station* – Project Manager for the implementation of a groundwater remediation injection program to address petroleum contamination at a former service station located in Paterson, New Jersey for a major transit agency. Responsibilities included implementation of a PA and SI to further investigate chlorinated VOCs at this Site. As part of this project, Mr. Kovacs took a lead role in preparing reports and

the Permit-by-Rule Request, as well as assisting in satisfying all NJDEP administrative requirements.

- *NJ Transit Active Railyard* – Project manager for the investigation of a diesel release at an active railyard in Roxbury Township, New Jersey. This release was caused by a faulty underground pipe located in the locomotive fueling area. The diesel release resulted in a free-product plume, groundwater impacts, and impacts to a subsurface drainage culvert and a nearby lake. Responsibilities included the development and coordination of a field investigation program, coordination of routine gauging and free-product recovery events, correspondence with NJDEP, and preparation of a baseline ecological evaluation. Additionally, Mr. Kovacs supported the Site LSRP in meeting all NJDEP administrative requirements.

#### **Facility Demolition/Decommissioning**

- *Former Pharmaceutical Manufacturing Facility Decommissioning – Brooklyn, NY* – Project Manager for the interior decontamination and decommissioning of a 700,000+ square foot former manufacturing facility located in Brooklyn, New York to allow for redevelopment of the building for commercial, retail, and light industrial use, and use as a movie studio, and for local food businesses. This redevelopment has earned significant positive press, as it is considered a highly beneficial reuse for the community. This project included the development of decontamination and decommissioning work plan, technical support of bidding process, and full time onsite engineering support of the entire project.

Decontamination and decommissioning activities included removal/cleaning of hundreds of air handling units and dust collector units impacted with manufacturing dusts and residues, as well as thousands of feet of intricate vacuum, ventilation and dust collection lines. This project also included the removal of concrete impacted with metals, PCBs, and/or VOCs, selective interior demolition, and decontamination of former laboratory, milling, compounding, blending, and packaging areas, as well as asbestos abatement. At the conclusion of this project, a Final Report was prepared, documenting in detail the extensive work completed and that the work plan objectives were achieved.

- *Former Pharmaceutical Manufacturing Facility Demolition* – Project Manager for the demolition of two former

manufacturing buildings in Brooklyn, New York. Both buildings were impacted with hazardous levels of PCBs, mercury and lead. Responsibilities included in situ waste characterization of building materials, oversight of hazardous waste removal, completion of waste manifests, and full-time Community Air Monitoring during all demolition activities. Additionally, Roux Associates performed daily inspections and monitoring to ensure the protection of a nearby elementary school and prepared a completion report at the conclusion of the project.

- *PCB Building Material Remediation* – Project Manager for the investigation and TSCA remediation of PCB containing paint in a former manufacturing area. This location (approximately 2,000 square feet in area, and two stories in height) was found to contain PCBs in the paint matrix at concentrations as high as 10,000 parts per million. The underlying building material (brick, concrete, and terra cotta) was also found to be impacted with PCBs from the paint. Responsibilities included preparation of a Self-Implementing Notification and Alternative Decontamination Methods and Verification Sampling Work Plan to remediate the PCBs under the TSCA regulatory framework. This project also included providing field oversight of the PCB remediation, completion of the extensive verification sampling program of the underlying porous building material, and collection of confirmation air samples and confirmation wipe samples outside of the exclusion zone to confirm proper function of all critical barriers. Following the successful completion of the project, a Final Report was prepared and submitted to USEPA documenting the entire project in detail.

#### **Expert/Insurance Litigation Support**

- Consulting Fact Witness for an insurance litigation claim where insured was seeking to be reimbursed for over \$15mm of previous environmental investigation/remediation costs. My responsibilities included a formal deposition and testifying in US District Federal Court – Eastern District of New York. Case resulted in favorable ruling for our client.
- Consulting expert for a PRP to the Gowanus Canal Superfund Site, Brooklyn, New York. Evaluated all RI data, performed fate and transport analysis, and evaluation of historic site operations to support facility *de minimis* status.