ROUX

PROFESSIONAL PROFILE

Michael Ritorto, P.G.
Principal Hydrogeologist

TECHNICAL SPECIALTIES

Design, implementation, and management of Remedial Investigations and Feasibility Studies for sites in the United States Environmental Protection Agency Federal Superfund Program; Management of due diligence Phase I and Phase II Environmental Site Assessments; Preparation and management of Brownfields projects including Cleanup Applications, Remedial Investigation Work Plans, Remedial Investigation Report, Remedial Action Work Plans, and Remedial Action Reports; Investigation and evaluation of petroleum-related contamination, including LNAPL volume and mobility modeling; Application of groundwater models to solve hydrogeologic problems; Completion of hydrogeologic evaluations including aquifer testing and baildown testing; Technical and regulatory expertise focused on petroleum, industrial, and real estate transfers.

EXPERIENCE SUMMARY

Twelve years of professional experience as a Hydrogeologist at Roux Environmental Engineering and Geology, D.P.C., Islandia, New York; Research Assistant with the University of Florida; Research Assistant with the University of Michigan.

CREDENTIALS

M.S. Geology, University of Florida, 2007
B.S. Environmental Geosciences, University of Michigan, 2004
New York State Licensed Professional Geologist (P.G. license #000269)
OSHA 40-Hour Health and Safety Course, 2008
OSHA 8-Hour Health and Safety Refresher Course, 2009-2019
First Aid and CPR Certified
Transportation Worker Identification Credential (TWIC)
ExxonMobil Loss Prevention System Certified
National Ground Water Association – Member
American Institute of Professional Geologists – Member

EXPERIENCE

- Project Manager for a Federal Superfund Remedial Investigation/Feasibility Study (RI/FS) at a 1,300-acre former aluminum smelter facility in Columbia Falls, Montana. Responsible for developing an RI/FS Work Plan in accordance with USEPA Superfund guidance. Work Plan preparation included discussions/negotiations with the USEPA and preparation of multiple Sampling and Analysis Plan (SAPs) and Quality Assurance Project Plans (QAPPs). Successfully implemented the Remedial Investigation in two phases at a total cost of more than $5 million. The Phase I Scope of Work included a geophysical survey of the Site, soil gas surveys, use of incremental sampling methodology (ISM) for soil sampling, drilling/installation of 43 monitoring wells (including 17 deep monitoring wells up to 300 feet in depth), slug testing of 43 monitoring wells, and asbestos landfill test pitting. The Phase I also included collection of approximately 750 samples for laboratory analysis from various media, including soil, sediment, surface water, and groundwater as well as a Screening Level Ecological Risk Assessment. The Phase II involved management of a similar Scope of Work including the installation of 8 monitoring wells, collection of over 750 soil, landfill cap, sediment, porewater, groundwater, and surface water samples, and management of a Background Study. A Remedial Investigation Report was prepared in accordance with Superfund guidance and included the development of a Baseline Ecological Risk Assessment and Baseline Human Health Risk Assessment utilizing the Remedial Investigation data. Management of the project also includes oversight and technical support during preparation of the Feasibility Study Work Plan and future Feasibility Study completion.

- Project Manager providing technical strategy/consulting on behalf of a potential responsible party (PRP) participating in a Federal Superfund Remedial Investigation/Feasibility Study (RI/FS) at an industrial waterway in Brooklyn, New York. Technical responsibilities include historical file review, review of Remedial Investigation data and reports, review of risk assessment results, review of sediment transport and chemical fate and transport modeling results, review and preparation of feasibility study documents, and review of remedial strategies/remedial cost estimates. Project management responsibilities include management of annual budget exceeding $1 million, management of various technical subcontractors on behalf of client, routine communication with other PRPs and litigation team, and interaction with regulatory agencies.

- Project manager of a multi-million-gallon release of petroleum hydrocarbon product from a former refinery and petroleum storage terminal in Brooklyn, New York. Site is being managed by the New York State Department of Environmental Conservation under a Consent Decree. Technical responsibilities included preparation of work plans; implementation of investigation work (multiple soil and groundwater remedial investigations for the various operable units); the preparation of investigation summary reports; and the preparation of remedial IRM and AAR reports. Also evaluated soil vapor intrusion and conducted explosive gas surveys resulting in the development and implementation of targeted soil vapor mitigation measures in a complex urban environment. Daily project management responsibilities included

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scheduling/management of field crew consisting of more than 10 engineers/geologists, management of annual budget of exceeding $20 million, and routine communication with regulatory agencies.

- Groundwater modeler for a former petroleum refinery and terminal bordering a USEPA Superfund site in Brooklyn, New York. Developed a three-dimensional groundwater flow model, MODFLOW, to assess the influence of a free-product recovery system on Site-wide groundwater levels. Utilized the groundwater model to simulate groundwater hydraulic control scenarios for optimization of recovery system pumping.
- Project Manager providing environmental consulting support and management of a surface water sampling and filtration program for a major petroleum company at a USEPA Superfund site in Brooklyn, New York. Performed technical review of treatability studies and managed the coordination of subcontractors, collection of surface water samples, and filtration and processing of samples using a peristaltic pump and sterivex filters.
- Project Manager for a LNAPL transmissivity study at a 175-acre former petroleum refinery and terminal in Brooklyn, New York. Applied various techniques including the use of recovery system data, baildown testing, and dye tracer testing. Evaluated transmissivity data analytically and estimated free-product volume using American Petroleum Institute LDRM model.
- Project Manager for a LNAPL recoverability study at an active rail depot in Sunnyside, New York. Applied various techniques including the use of recovery system operational data, baildown testing, and LNAPL mobility modeling.
- Project Manager for a Remedial Investigation being conducted at a New York State Brownfield commercial facility in Glen Cove, New York. The facility is located between two existing USEPA Superfund sites and is required to be investigated as part of the USEPA Superfund process. Reviewed the preparation and submittal of the New York State Brownfields Application.
- Field manager for multiple soil, groundwater, and soil vapor investigations completed at a former petroleum refinery and terminal in Brooklyn, New York. The field investigation tasks included: the implementation of cone penetrometer testing (CPT) and laser induced fluorescence (LIF) screening technologies during soil boring programs; the installation of single- and double-cased monitoring wells using multiple drilling methods; lithology and screening of soils; the collection of soil samples; the collection of groundwater samples; the collection of soil vapor samples; and the collection of in situ core samples. More than 150 locations investigated.
- Project Manager for multiple aquifer tests completed at a former petroleum refinery and terminal in Brooklyn, New York. Field tasks included monitoring groundwater levels with a network of In Situ LevelTrolls during a step-drawdown test and during a constant-rate pump test. Aquifer test data was subsequently used to determine hydrogeologic parameters of the aquifer beneath the Site using AQTESOLV software and various methods of analyses.
- Project Manager for multiple Phase I Environmental Site Assessments for due diligence in connection with property transfers within the New York Metropolitan Area and other areas in the United States.
- Field manager during the demolition of two former chemical manufacturing buildings in Brooklyn, New York. Field responsibilities included coordinating, manifesting, and tracking of hazardous waste loads, collecting waste characterization samples, and completing a community air monitoring program (CAMP).
- Field manager responsible for the completion of numerous Phase II field investigations at various petroleum station locations around the NYC and Long Island Areas. The investigations included the installation of soil borings and monitoring wells. Responsible for the logging and characterization of soils, collection of analytical soil and groundwater samples, and development of well logs.
- Field manager during the demolition of a former petroleum terminal building in Cold Spring Harbor, New York. Field responsibilities included the oversight of the demolition subcontractor, completing a community air monitoring program (CAMP), and collecting soil and groundwater samples.
- Field manager responsible for overseeing a petroleum spill delineation in Hastings on Hudson, New York. Field responsibilities included directing the excavation of petroleum-impacted soils to delineate grossly-contaminated soil impacts. Performed visual and olfactory survey of soils and conducted petroleum shake tests on soil samples. Collected soil samples for analytical analysis.

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- Field manager for an in situ waste characterization soil sampling program at an active rail site in Brooklyn, New York. Completed logging and characterization of soils, the collection of analytical soil and groundwater samples, and the development of well logs.
- Field manager during the removal of underground storage tanks (USTs) and subsequent soil and groundwater investigations at three NYDEC spill sites in Brooklyn, New York. Field responsibilities included contractor oversight during test pit excavation to locate USTs; oversight of the excavation and disposal of more than 10 USTs and associated piping; the collection of post excavation soil samples; disposal of contaminated soil; and oversight during an in situ chemical oxidation (ISCO) injection program.

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