

Sarah J. MacCarter, LSRP

Senior Environmental Scientist / Project Manager



Mrs. MacCarter is a Senior Environmental Scientist and Project Manager with over ten years of professional experience, including project and task management and implementation, client development and management, budget preparation and tracking, and resource planning, coordination, and management. Mrs. MacCarter is a New Jersey Licensed Site Remediation Professional (LSRP) and leads the QA/QC of VERINA's laboratory analytical program and serves as Laboratory manager for the firm's New Jersey Laboratory Certification. Mrs. MacCarter participates in activities of:

- Environmental due-diligence and preliminary assessments of potentially contaminated sites, including the evaluation for potential soil and groundwater impacts from hazardous wastes and toxic constituents, preparation of New Jersey Department of Environmental Protection (NJDEP) Preliminary Assessment (PA) reports and American Society for Testing and Materials (ASTM) Phase I and Phase II Environmental Site Assessment (ESA) reports;
- Validation, verification and reduction of both full and reduced laboratory data packages and electronic data deliverables preparation in accordance with NJDEP guidance, United States Environmental Protection Agency (USEPA) National Functional Guidelines, and Air Force Environmental Resources Program Info Management System (ERPIMS) database system specifications;
- Execution of all phases of site assessment, remedial investigations, and remediations as governed by the NJDEP, the New York State Department of Environmental Conservation (NYSDEC), the New York State Department of Health (NYSDOH), the USEPA and the U.S. Army Corps of Engineers (USACE) programs;
- Assessment and evaluation of vapor intrusion (VI) risk, and participation in VI mitigation system design and installation oversight;
- Bench and field scale pilot testing to evaluate remedial alternatives and feasibility to address soil and groundwater impacts;
- Assistance in the preparation of final remedial action outcomes for both soils and groundwater at various sites, including deed notice and classification exemption areas, in accordance with NJDEP regulations; and
- Remediation system operation and maintenance activities and remediation performance monitoring and evaluations, including in-situ chemical oxidation, soil vapor extraction, bioventing, air sparging, biosparging, dual-phase extraction, and vapor intrusion mitigation.

Education

B.S./Environmental Science, Douglass College, Rutgers University - New Brunswick, New Jersey, January 2011

Professional Certifications

New Jersey Licensed Site Remediation Professional (LSRP License No. 972092)

Professional/Business Training

The 40-Hour Training Course in Hazardous Waste Operations and Emergency Response (HAZWOPER Certificate), required by OSHA 29 CFR 1910.120

The 8-Hour Training Course in Hazardous Waste Operations: Supervisor in accordance with OSHA 29 CFR 1910.120(e)(8)

CPR/AED/FA Certification

Awards

American Chemical Society, Environmental Chemistry Division Undergraduate Student of the Year award for Rutgers University- New Brunswick - 2010

Memberships

NJ LSRPA - 2020-current

Volunteerism

Volunteer Firefighter, Penn Forest Volunteer Fire Company #2, November 2017- present

SELECTED PROJECTS

Former Air Force Plant, Johnson City, New York – Served as task manager for a groundwater monitoring and reporting project to address environmental compliance of groundwater impacted with chlorinated volatile organic compounds (VOCs) at former Air Force Plant 59. The scope of the project included conducting potable water supply and groundwater monitoring well sampling as well as regulatory reporting under oversight of the NYSDEC. Specific activities included preparation of technical documents and workplans, including a site specific health & safety plan, a field sampling plan and a quality assurance plan, and coordination with vendors, subcontractors, field personnel and outside stakeholders to perform the water supply well and groundwater monitoring well sampling. Following completion of the field work, project activities included data validation, data review and analysis, preparation of the annual report for submittal to NYSDEC; and formatting and submission of analytical data through the Air Force ERPIMS database system. Additional project activities included supporting the program manager on progress reporting to the Air Force as well as billing and invoice preparation.

Former LO-58 NIKE Missile Battery Launch Site, Caribou, Maine – Assisted in project management and project plan preparation in coordination with the New England District of the USACE. Project plans prepared include: Accident Prevention Plan (APP) prepared in accordance with USACE EM 385-1-1, Sampling and Analysis Plan (SAP), Quality Assurance Project Plan (QAPP), including assistance with the electronic QAPP (eQAPP) in accordance with FUDSChem requirements, as well as assistance with finalization of the Remedial Action Workplan, the Long Term Monitoring Plan and Long Term Monitoring Report developed for the site. Participated in groundwater sampling events and indoor air sampling events, as well as oversight of the installation of vapor intrusion mitigation system (VIMS) at the site, including pre- and post-diagnostic testing. She additionally coordinated with and assisted field staff and subcontractors in preparation for various field events, as well as post-field record and data management, including the preparation of a VIMS installation report.

Fort Randall Dam, Pickstown, South Dakota, Garrison Dam, Pick City, North Dakota, and US Army Reserve Center, East Windsor, Connecticut – Assisted in various report and work plan preparations as part of various construction, demolition, investigation and abatement projects for both asbestos and lead-based paint performed for the USACE Omaha District and the U.S. Army Engineering and Support Center (CEHNC). Reports and plans were prepared according to USACE EM 385-1-1 and contract specifications including the APP, Project Work Plan, Environmental Protection Plan (EPP) Contract Quality Control Plan (CQCP) and Project Completion Report which included numerous stages of laboratory data management.

Biddle Air National Guard Base, Horsham, Pennsylvania – Assisted in plan and report preparation, resource management, project execution and laboratory data management for a soil excavation project completed at the base under the oversight of the USACE Philadelphia District. The soils excavation was completed at the base to address historic soils impacts of jet fuel 4 (JP-4) at a former aboveground storage tank (AST) area. Plans and reports prepared include the APP, Project Work Plan and Remedial Action Completion Report in accordance with Pennsylvania Department of Environmental Protection (PADEP) Act 32 requirements. Two stages of soil excavation were completed at the site, for which she assisted in coordinating the resources and laboratory analysis required for each phase. The final excavation activity showed all post-

excavation results to have attained the specified PADEP soil standards, and therefore effectively closed the former AST area as requiring further remediation per PADEP requirements.

Underground Storage Tank (UST) Sites, Various Locations, New Jersey – Participates in the remedial investigation and remediation activities for a number of underground storage tank (UST) sites, with the majority of the UST sites being impacted by petroleum hydrocarbons and/or chlorinated VOCs. Responsibilities include oversight of UST closures and removals; soil excavations, soil borings and well installations; aquifer tests and analysis of groundwater flow network; air, soil, and groundwater sampling; contamination delineation; well search and receptor evaluations; laboratory data validation, verification and reduction; data analysis, modeling and interpretation; management, operation and maintenance of soil and groundwater remediation systems; coordination and scheduling of site personnel, tenants, and subcontractors; and, report preparation and data submittals.

Former Specialty Chemical Manufacturing Site, Hackensack, New Jersey – Participates in multiple phases of site investigation and active remediation at a former speciality chemical manufacturing facility shown to be heavily contaminated with various chlorinated VOCs, including dense, non-aqueous phase liquid (DNAPL). Participated in bench scale and pilot-scale testing as well and currently manages the full-scale, multi-year, multi-phased implementation of an in-situ chemical oxidation (ISCO) remediation strategy at the site. Responsibilities include chemical demand calculations and application planning; tracking and ordering of chemicals; daily tracking of ISCO progress; the direct application of ISCO chemicals; ISCO response monitoring; oversight of the installation of soil borings and monitoring and remediation wells; soil and groundwater monitoring and sampling; VI sampling and mitigation system monitoring; health and safety planning and monitoring; receptor evaluation; contaminant delineation; laboratory data validation, verification and reduction; data analysis and interpretation; coordination and scheduling of site personnel, tenants, and subcontractors; and, report preparation and data submittals.

Preliminary Assessments and Phase I and Phase II Environmental Site Assessments, Various Locations, New Jersey – Conducts Preliminary Assessments (PAs) and Environmental Site Assessments (ESAs) for private, commercial and governmental properties. Prepares Phase I and Phase II ESA reports, in accordance with the ASTM Standards E1527-13 and E1527-21 for both private and federal clients, as well as NJDEP PA Reports for multiple sites within New Jersey. Responsibilities include diligent inquiry into local, state and federal records concerning the site; interviews with site owners and tenants; detailed visual inspections of the site; historic site data gathering and analysis; planning and coordination of site sampling, as needed; interpretation of guidance documents; and, final report preparation.

Former Electronics Manufacturing Sites, Binghamton and Kirkwood, New York – Manages field activities including groundwater monitoring and sampling; ISCO system operation, maintenance and monitoring; inspection of deed notice areas; inspection of the active sub-slab depressurization (ASD) systems; and, monitoring of the indoor air quality at both sites. Responsible for project management; field activity planning and coordination; coordination of field materials, supplies and chemicals; laboratory data validation, verification and reduction; data analysis and interpretation; and, progress report preparation for both sites. Prepared the deed notice for institutional control of the residual contaminants of concern at the Binghamton site. Additionally, assisted in the preparation of Site Management Plans and Final Engineering Reports for both sites

to allow each site to move into the “inactive” within NYSDEC’s Hazardous Waste Disposal Site Registry.

Former Manufacturing Facility, Union, New Jersey – Participated in the soil remediation activities at the site, including soil excavation and post-excavation sampling; the analysis of current and historic soil sampling data needed to establish site-specific soil remediation standards for the site; preparation of the unrestricted use Remedial Action Outcome (RAO) issued for the site soils. Conducted groundwater investigation activities for the site, including groundwater elevation measurements and sampling; aquifer testing and hydraulic conductivity calculations; historical data gathering and analysis; and assisted in the preparation of a classification exemption area (CEA) established for the site groundwater.

Historic Fill Site, Wharton, New Jersey – Serves and project manager and is retained as the LSRP site for a commercial site undergoing redevelopment to become a multi-tenant apartment complex. Conducted and submitted a comprehensive PA Report for the site in accordance with NJDEP regulations and guidance, which identified historic fill as the only Area of Concern (AOC) at the site requiring additional remediation. Oversaw the remedial investigation (RI) activities at the site, which installation of several soil borings at the site to confirm presence and distribution of historic fill material. Documented the findings of the RI activities and provided details on proposed alternative capping remedial actions for the site in a combined Remedial Investigation Report/Remedial Action Workplan (RIR/RAW) submission to the NJDEP. The RAW was approved by the NJDEP, and the site is currently undergoing redevelopment. At the completion of site development, a Remedial Action Report (RAR) will be prepared for the site documenting site capping details, the establishment of a Deed Notice and a CEA for the site in accordance with current NJDEP regulations. A restricted use RAO will also be issued subsequent to RAR submission.

Data Validation, Various Superfund Sites, USEPA – Performed review of several laboratory data packages and preparation of Tier 1 data validation reports in accordance with USEPA’s National Functional Guidelines (NFGs) for both organic and inorganic Superfund methods laboratory data review, as well as comparison of the laboratory data to project-specific QAPPs. Data validation was performed for both groundwater and sediment matrices for a variety of analyses, including VOCs, semi-volatile organic compounds (SVOCs), volatile fatty acids (VFAs), bacteria, pesticides, polychlorinated biphenyl (PCBs) and biogeochemical parameters.

EMPLOYMENT HISTORY

2022 – Current	Senior Environmental Scientist and Project Manager Verina Consulting Group, LLC, Bridgewater, New Jersey
2015 – 2022	Project Scientist Verina Consulting Group, LLC, Bridgewater, New Jersey
2011 – 2015	Environmental Scientist Verina Consulting Group, LLC, Somerset, New Jersey
2011 – 2011	Environmental Scientist AMEC Earth & Environmental, Inc., Somerset, New Jersey