

LESLIE P. SMITH, PH.D., E.I.

## Education

Doctor of Philosophy in Civil Engineering, Louisiana State University, 2017

Master of Science in Civil Engineering, Florida State University, 2012

Bachelor of Science in Civil Engineering, Florida State University, 2010



## Specialty Certifications

Engineer Intern, State of Florida EI#1100022809

OSHA 29 CFR 1910.120 HAZWOPER 40-hour Hazardous Workers

## Professional Experience

As a Senior Project Professional, Leslie Smith has over 5 years of experience in the environmental engineering and remediation field. Throughout her years in the environmental industry, she has gained field and management experience through various types of environmental projects, including environmental due diligence, the performance and preparation of site assessments, remediation implementation and contract management, hazardous material assessments and surveys, soil and groundwater sampling, underground storage tank removal oversight, report writing and review, and equipment maintenance.

Dr. Smith has worked with the Miami-Dade County Department of Environmental Resources Management (DERM) Cover, Florida Department of Environmental Protection (FDEP) Petroleum Restoration Program (PRP), the Drycleaning Solvent Cleanup Program, the FDEP Site Investigation Section (SIS) and the South Florida Water Management District (SFWMD) on a variety of projects and contaminant types, including chlorinated solvents, petroleum constituents, per- and polyfluoroalkyl substances (PFAS) chemicals, polychlorinated biphenyls (PCBs) metals, pesticides, and herbicides. Projects typically have involved feasibility studies, due diligence investigations, environmental studies, site investigations and assessments, remediation design and construction services, and preparation of various procurement documents. Facilities have included historic agricultural lands and golf courses, petroleum facilities, wetlands, stormwater treatment areas, transfer and substation stations, and support facilities (e.g., stormwater, utilities).

Dr. Smith currently manages and supports various advanced environmental projects, which include large-scale site assessments, remediation plans, soil management plans, and blending/source removal plans. She provides environmental services both in the private and public sectors.

## Contaminated Site Assessment and Remediation

**State of Florida, Petroleum Sites, Soil and Groundwater Assessment and Remediation.** Project/Staff Engineer responsible for managing or supporting State-funded assessment and remediation of more than 25 petroleum sites. Conducted Assessments including the delineation of soil and groundwater contamination plumes, which varied in scope and complexity, implementation of pilot test plans, and

coordination and preparation of remedial action plans including traditional soil excavation, soil vapor extraction, air sparging, in-situ chemical oxidation, and in-situ bioremediation.

**Mitsubishi Motors of North America, Inc., Environmental Assessment and NFAC Closure, Miami-Dade County, Florida.** Project Manager responsible for a wide-spread arsenic assessment involving a historic roadway in South Miami. Arsenic was detected at concentrations above 100 mg/kg at depths up to 6 feet below land surface. Directed historical research to identify the source, managed site assessment with direct push rig, conduct soil and groundwater sampling, IDW management, and evaluation of data. Provided organization for data evaluation, interpretation of results and developed a Site Assessment Report to document site conditions with recommendations for a No Further Action with Conditions using engineering controls.

**C-11 Twin Lakes Restoration Project, Environmental Assessment and Soil Management Plan, Broward County, Florida.** Project Manager responsible for a soil management plan (SMP) and assessment of approximately 33,000 cubic yards of stockpiles to provide procedures for the proper environmental use and/or disposal of stockpiled impacted soils and building materials/debris within the Twin Lakes Area. These relocated stockpiles are proposed for various uses and/disposal within the project footprint. Conducted soil sampling, evaluation and interpretation of analytical data. The site assessment identified arsenic, TRPH and PAHs were present within the two stockpiles above applicable SCTLs, accounting for approximately 40%, for disposal. The remaining 60% of the soils are potentially eligible for various reuse. Developed a SMP to document the stockpile conditions of impacted and reusable soils.

**Old Tamiami Trail, Environmental Assessment and Remediation, Miami-Dade County, Florida.** Project Manager responsible for field oversight of point source investigations for the Old Tamiami Trail land in the Everglades National Park during the due diligence assessment on behalf of the SFWMD. Managed benzo(a)pyrene equivalents assessment through the coordination of soil impact, soil delineation, and source removal of impacted area. Provided organization for data evaluation, interpretation of results and developed multiple source removal reports and a final inspection of the site prior to grading.

## Environmental Due Diligence

**Various areas of South Florida, Phase I ESAs.** Conduct numerous Phase I Environmental Assessments. Project Engineer responsible for detailed review of historical documents and environmental records, perform site reconnaissance, interviews, field exploration, assessment of potential recognized environmental conditions on the property and surrounding properties and report preparation.

**Various areas of South Florida, Phase II ESAs.** Conduct numerous Phase II Environmental Assessments. Project Engineer responsible for project management, communication with clients, supervision of subcontractors in the installation of monitoring wells, vapor extraction points and soil borings, conduct field assessments including soil, groundwater, and vapor sampling. Detailed review of analytical data, interpretation of results and report preparation.

**Military Canal, Environmental Assessment, Miami-Dade County, Florida.** Project Manager responsible for field oversight of point source investigations for the Military Canal land in the Biscayne Bay Coastal Wetlands (BBCW) during the due diligence assessment on behalf of the SFWMD. Managed soil assessment in areas where proposed construction of a syphon to enhance hydraulic flows into BBCW. Provided organization for data evaluation, interpretation of results and report preparation.

**Various areas of North Florida, Phase I ESAs.** Conduct numerous Phase I Environmental Assessments. Staff Engineer responsible for detailed review of historical documents and environmental records, perform site reconnaissance, interviews, field exploration, assessment of potential recognized environmental conditions on the property and surrounding properties and report preparation.

**Various areas of North Florida, Phase II ESAs.** Conduct numerous Phase II Environmental Assessments. Staff Engineer responsible for project management, communication with clients, supervision of subcontractors in the installation of monitoring wells, vapor extraction points and soil borings, conduct field assessments including soil, groundwater, and vapor sampling. Detailed review of analytical data, interpretation of results and report preparation.

## Chlorinated Solvents

**State of Florida, Chlorinated Solvent Sites, Soil and Groundwater Assessment and Remediation.** Staff Engineer responsible for supporting State-funded assessment and remediation of a number of chlorinated sites. Responsible for technical review of groundwater monitoring report submittal and QA/QC of analytical data reported to the Hazardous Waste Section.

**Army Corps. Of Engineers, Former Atlas "D" Missile Site 4, Cheyenne, Wyoming.** Staff Engineer responsible for site investigation in a joint venture project with the Army Corps of Engineers at the former Atlas "D" Missile Site 4 where TCE has been detected on-site at maximum concentrations of 200,000 mg/L. Performed groundwater deep well sampling and vapor sampling associated with the 703-acre site investigation.

**ReSolve Superfund Site, Louisiana State University, North Dartmouth, Massachusetts.** Research associate responsible in the evaluation and correlation of bioremediation tactics between a pilot-scale system and full-scale superfund site. Perform system model design, scaling, construction and maintenance of site to observe system reactions to perturbations in flow rate, contaminant fluctuations, and oxygen availability. Field work including sample collection and analysis of groundwater for chlorinated compounds, identification and analysis of microbial communities present within the soil in the field and model systems through DNA extractions, next generation sequencing and mother® software program. Conduct observations of microbial communities present and their role in anaerobic and/or aerobic degradation pathways. Spearheaded an in-depth continuing study concerning the effectiveness of advance polishing of the system effluent utilizing an oxygen source.

## PFAS Studies

**State of Florida, Chlorinated Solvent Sites, Site Investigation Program.** Project Engineer responsible for team support in the development of a Standard Operating Procedure for conducting PFAS assessment. Conduct field investigations, site assessments, and field work to evaluate PFAS in soil, sediment, surface water and groundwater from the use of aqueous film forming foam (AFFF). Deliverables were required for submittal within 24 hours of end of field work to document sampling locations and field notes. The second deliverable included the results of sampling program and were required for delivery within 24 hours of receipt of laboratory results.

## Publications

Clark, C.J., Cooper, A.T., Martin, C.L., and Pipkin, L. (2012). "Evaluation of Potential Degradation of Bisphenol A by Zero-Valent Iron (ZVI)." *Environmental Forensics* 13:248-254.

## Presentations

Pipkin, L. M., Elango, V.K., and Pardue, J.H. (2017). "Complete Degradation of Chlorinated Ethanes in Sequential Bioreactors Operated under Varying Redox Conditions." 4th International Symposium on Bioremediation and Sustainable Environmental Technologies, Miami, FL, May 22- 25, 2017.

Pardue, J.H., Symmes, F., Pipkin, L., Elango V., Worthy, M., and Last, M. (2016). "The ABR system for sustainable treatment of chlorinated VOCs: connecting treatment efficiency and microbial community structure." 10th Annual Conference on Remediation of Chlorinated and Recalcitrant Compounds, Palm Springs, CA, May 22-26, 2016.

Pipkin, L. M., Pardue, J. H., and Elango, V. (2015). "Effects of varying biogeochemical controls on anaerobic BTEX biodegradation in greenhouse-scale ABR systems." 3rd International Symposium on Bioremediation and Sustainable Environmental Technologies, Miami, FL, May 18-21, 2015.

Clark II, C. J., Martin, C. L., and Pipkin, L. M. (2013). "Examination of ZVI Degradation of Hazardous Chlorinated Chemicals." The 11th Symposium on Groundwater Hydrology, Quality, and Management, Cincinnati, OH, May 19-23, 2013.