

CARLOS MICHEL, EIT

Education

B.S. – Environmental Engineering, University of Miami, Miami, Florida 2019

Professional Licenses

Engineering Intern – Florida (License No. 1100025360)

Currently pursuing P.E. License



Professional Experience

Carlos Michel is an environmental professional with experience in field inspection, environmental monitoring and sampling, documentation, and project coordination. His experience includes environmental regulatory compliance and site remediation projects for various municipal and private clients. Carlos conducts due diligence investigations, site investigations, groundwater and soil contamination assessments, remedial action plans (RAPs), and construction services throughout South Florida. His experience includes working with local and state regulators. Projects include agricultural sites, municipal parks, former recreational sites (golf course), FPL substations, and commercial sites. Chemical contaminants encountered in both soil and groundwater media includes petroleum, heavy metals, dioxin, pesticides, and solvents. His notable project experience includes:

FPL, Groundwater Remediation, Princeton Substation, Miami, FL *Assistant Project Manager*. Prior to 2022, field experience maintaining the system by changing bag filters, manual FFP recovery, backwashing treatment cells, washing flow meters from algae growth, and purging of monitoring/recovery wells. Performed system sampling from assembly rack and system readings from flow meters, pressure gauges, and flow totalizers. Performed static groundwater sampling events of the monitoring wells that were designated as part of the monitoring program in the RAP.

Post 2022, co-designed the modification of the arsenic and petroleum groundwater remediation system, including calculating total head loss, retention times in cells, hydraulic loading rates, mass loading rates, pump curve sizing, piping and trench details, process and instrumentation diagrams, etc. Primary report generator of the quarterly status reports. Coordinated the maintenance of recovery wells, treatment vessels, monitoring wells, and extraction wells.

FPL, Groundwater Remediation, Sweetwater Substation, Miami, FL *Staff Professional*. Participated in the construction and installation of a pilot test petroleum groundwater remediation system, including trench digging, the installation of piping for recovered groundwater water and associated electrical lines, the construction of a manifold for flow totalizers, sample ports, pressure gauges, and flow meters, oversight of recovery well installations, etc. The pilot test was successful, and the full-scale groundwater remediation system actively recovers dissolved TRPH and FFP from the aquifer. Primary report generator of the quarterly status reports. Field experience maintaining the system, sampling the system under both dynamic and static conditions.

FPL, Groundwater Remediation, Coconut Grove/Lawrence Substations, Miami, FL *Assistant Project Manager*. Managed and/or conducted maintenance of the arsenic groundwater remediation systems. Experience sampling the systems under both dynamic and static conditions. Primary report generator of the quarterly status reports for both substations.

Lennar, Presidential Estates Golf Course, Environmental Assessment, Miami, FL. *Assistant Project Manager.* Assisted in the oversight and coordination of groundwater and soil sampling activities, and corresponding report generation. Has managed and/or conducted the sampling activities throughout the project timeline. The Site is a former golf course and is approximately 100 acres. The Site is complex, as it wraps around a developed community that was built in the 1990s, and was previously part of the former golf course. With very little groundwater and soil data inside the community, and similar historic uses between the two properties, SCS and the regulators are currently discussing a path to drainage approval, which ultimately would lead to a no further action with conditions, where both soil and groundwater usage are restricted.