

SAFIYAH N. JUNAID, E.I.T

Education

Bachelor of Science in Civil Engineering, University of South Florida, 2018

Professional Licenses

Engineer in Training – Florida License No. 1100022128

Specialty Certifications

Certified Liquid Boot Inspector

Special Recognitions

Conrad Quality Focus Award Recipient – 2022

Julian W. Silliman Memorial Scholarship Recipient – Aug 2017

Society of Women Engineers Collegiate Leadership Institute – Aug 2016

Vasant Surti Engineering Scholarship Recipient – Aug 2015

USF Dean's List – May 2015

Professional Affiliations

Theta Tau

Professional Experience

As a Project Manager, Safiyah Junaid is experienced in environmental engineering and remediation. She is experienced with various types of environmental projects including environmental site assessments, development and implementation of remediation strategies (i.e. soil blending/source removal plans), preparation of dewatering plans and associated regulatory permit applications, preparation of Site-Specific Health and Safety Plans, Dust Control Plans, Soil Management Plans, groundwater Monitoring Only Plans, Drainage Assessment Plans, Quarterly Monitoring Reports, Site Assessment Reports, etc. She also has experience with well installation, soil and groundwater sampling, methane gas monitoring, groundwater depth to water surveys, drum disposal oversight, construction oversight, coordinating field events, training staff on field sampling and reporting, and report writing and review. She works closely with SCS's southeast regional clients.

Safiyah has worked with Miami-Dade County Department of Environmental Resources Management (DERM), Broward County Resilient Environment Department Environmental Permitting Division, Florida Department of Environmental Protection (FDEP), and South Florida Water Management District (SFWMD) on a variety of projects, including due diligence investigations, site investigations, remediation, land redevelopment, and construction services. Facilities have included historical agricultural land and golf courses, landfills/lakefills, former railroad yards, municipal parks, residential and commercial/industrial properties, wetlands, transfer and substations, and support facilities (buildings, drainage, stormwater, utilities). Contaminants encountered in soil and groundwater media include metals, pesticides, herbicides, ammonia, nitrate, petroleum products, polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and solvents. Notable projects that Junaid has been involved with are described below.



Phase I/Phase II ESA

Prologis, Florida, MIC. Assisted in a detailed review of historical documents and regulatory databases, ground penetration radar (GPR) survey oversight, field investigations, the presentation of findings and opinions, and assessment of potential recognized environmental conditions (RECs).

Site Assessment

Lennar, Caple Two, Miami-Dade County, Florida. Responsible for leading a team of field staff in site assessment activities, such as groundwater sampling and soil sampling (discrete, composite, and incremental sampling methodology (ISM)).

Skilled Nursing Facility, Miami-Dade County, Florida. Conducted soil sampling, well installation and monitoring well top-of-casing survey oversight, groundwater monitoring, and groundwater depth to water survey. Assisted with coordination of field sampling events, report preparation, and data analysis.

GL Homes, Former Calusa Country Club, Miami-Dade County, Florida. Assistant Project Manager for a 160acre site. Responsible for communication with clients and subcontractors, coordination and oversight of site assessment activities (soil sampling, well installation, groundwater sampling, groundwater elevation study, dust monitoring, etc.) and field staff, report preparation (site assessment report, soil management plan, dust control plan, health and safety plan, lake re-use plan, soil blending pilot test plan, drainage assessment report, groundwater monitoring only plan, etc.), historical aerial reviews, development of remediation strategies (i.e. soil blending, engineering controls, and soil flipping), and data management, evaluation, and statistical analysis.

Various Projects within South Florida. Perform field sampling activities (i.e., soil sampling, monitoring well installation, and groundwater sampling), supervision of subcontractors (monitoring well installation, source removal excavation and backfilling, soil borings) review of historical documents (regulatory databases, historical aerials, environmental records, etc.), review and interpretation of analytical results, statistical analysis, QA/QC of analytical data, report preparation, and development of remediation strategies.

Construction Dewatering & Permitting

Fontainebleau Development, Bombardier Aircraft Service Center, Florida. Assisted with dewatering calculations, review of contaminated sites, preparation of dewatering plans, and permitting.

Various Projects within South Florida. Perform water table drawdown, flow rate, and radius of influence (ROI) calculations, design effluent treatment systems and monitoring plan, review engineering drawings (paving and grading plans, water and sanitary sewer plans, etc.) review historical records and regulatory databases to evaluate potential contaminated sites within the vicinity of the ROI, and preparation of dewatering plans (Miami-Dade County and Broward County) and associated permit applications (SFWMD).

Petroleum Remediation

Flagler Global Logistics Center, Miami-Dade County, Florida. Performed construction oversight of the removal, stockpiling, and disposal of jet fuel-impacted soil, re-installation of the water main and stormwater management system, and trench backfilling. Performed oversight of the start-up of the

air sparge (AS)/soil vapor extraction (SVE) system, designed by GES, and dewatering operations. Completed daily reports denoting the activities being conducted, product status, etc.

Florida Power & Light (FPL), Sweetwater Substation, Miami-Dade County, Florida. Prepared a Pilot Study Work Plan to address non-PCB petroleum mineral oil and free-floating product (FFP) in groundwater, including historical records review, review of historical analytical results and remediation, design of a groundwater treatment system, and develop a sampling and monitoring plan.

FPL, Various Groundwater Remediation Projects, Miami-Dade County, Florida. Assist with the preparation and submittal of the arsenic and/or petroleum mineral oil groundwater remediation system quarterly monitoring reports, including review and evaluation of analytical results, review of system performance and anticipated future maintenance, evaluating groundwater flow direction and on-site plume migration.

Various Projects within South Florida. Perform soil assessment of petroleum products and/or diesel aboveground storage tanks (AST), review and interpret analytical results, perform statistical analysis (PAHs), and develop remediation strategies.

Methane Gas Mitigation Systems (MGMS)

Flagler Global Logistics Corporate Park, Miami-Dade County, Florida. This site was an approximate 500-acre former construction and demolition (C&D) landfill that is being redeveloped into an industrial and commercial park. The closure strategy for this site was No Further Actions with Conditions, which included engineering controls, a methane gas management system (combination of active and passive systems, including vents, probes, gas sensors/ambient air monitoring, blowers), dynamic compaction, and a groundwater recovery, extraction, and deep injection well system to address potential off-site migration of ammonia-impacted groundwater. Safiyah performed weekly gas monitoring (ambient air, probes, and vents) of the MGMS, conducted routine groundwater and stormwater monitoring, conducted oversight for a nested well installation, and performed Construction Quality Assurance (CQA) inspections for the MGMS on an as-needed basis.

SoleMia, Miami-Dade County, Florida. This site is a 200-acre former Class I landfill that is being redeveloped for commercial use. Safiyah performed CQA inspections and construction of the MGMS on an as-needed basis.

Groundwater Nitrate Background Study

Lennar Homes, LLC., Miami-Dade County, Florida. This site was historically used for agricultural purposes and was redeveloped for residential use. The contaminants of concern at the site were arsenic and copper in soil and arsenic and nitrate in groundwater. On-site horizontal delineation of nitrate in groundwater was not obtained at several locations; therefore, due to similar agricultural use throughout the region, a nitrate background study was conducted. The nitrate background study included: historical document review of the site and nearby properties, evaluation of groundwater flow direction and the on-site groundwater plume gradients, data analysis, and statistical evaluations.

Sub-regional Arsenic Background Study

Various Projects within Miami-Dade County, Florida, 2022. Previously, DERM had evaluated anthropogenic arsenic, in addition to other metals, throughout the county and had established background concentrations above the direct exposure residential soil cleanup target level (R-SCTL), and background data sets that could serve as an alternative target criteria for remediation. However, since 2021, DERM is no longer accepting this approach. As an alternative to direct comparison to the R-SCTL, sub-regional background studies may be conducted to evaluate potential exposure within the vicinity of the site. The background study includes: a review of historical documents and regulatory databases, compiling, review, and evaluation of historical analytical results, and statistical analysis.

Publications and Presentations

Espinoza, A. & Junaid, S. N., "South Florida Golf Course Redevelopment," SCS ES College, Oklahoma City, Oklahoma, August 19-21, 2022.