BELINDA M. RICKLIN, PE

Education

MS – Environmental Engineering, University of Florida, 2005 BS – Environmental Engineering, University of Florida, 2000

Professional Licenses

Professional Engineer – Environmental, Florida P.E. No. 66567 Professional Engineer – Civil, California P.E. No. 80784

Professional Affiliations

Solid Waste Association of North America

Professional Experience

Ms. Ricklin is a Senior Project Manager responsible for overseeing solid waste projects in landfill engineering, landfill gas management, and construction. She has 15 years of professional experience with projects that typically involve permitting, design, and construction services, compliance monitoring and reporting, cost estimating, feasibility studies, due diligence investigations, facility siting, and site investigations. Facilities have included landfills, landfill gas control facilities, and support facilities (e.g., roadways, stormwater, utilities).

Landfill Design and Permitting

Waste Management Inc. of Florida, Florida, Monarch Hill Cells 9, 10, and 11 Base Grades Redesign and Permitting, 2019-2020. Add description

Waste Management Inc. of Florida, Florida, Glades Landfill, LLC Base Grades Redesign and Permitting, 2019-2020. Add description

Solid Waste Authority of Palm Beach County, Florida. Palm Beach Renewable Energy Park Class I and Class III Landfill Closure Design and Permitting, 2017-2019. Lead design engineer for the landfill closure design and permitting of the Class I and Class III landfills at the site.

Solid Waste Authority of Palm Beach County, North County Resource Recovery Facility Capacity Analysis, West Palm Beach, Florida. Assisted with preparation of the capacity analysis for both the Class I and Class III landfills for various scenarios of future expansion. Tasks included volumetric calculations using AutoCAD Civil 3D models based on the current site aerial surveys.

WCA of Florida, Florida, Pembroke CD&D (Ft. Meade) Landfill Expansion, 2018-2020. Add description

Waste Management Inc. of Florida, Florida, Monarch Hill Sliver Fill (Landfill Expansion), 2018-2019. Add description

Waste Management Inc. of Florida, Florida, North Manatee Class III Landfill Cells X-X Base Grades Redesign, 2019. Add description

Waste Management Inc. of Florida, Florida, Monarch Landfill Partial Closure Design and Construction Quality Assurance, 2018. Add description

Waste Management Inc. of Florida, Florida, North Manatee Landfill Temporary Closure Design, 2019. Add description

Waste Management Inc. of Florida, Florida, Homestead C&D Facility Landfill Vertical Expansion Design and Permitting, 2017-2018. Add description

Waste Management Inc. of Florida, Florida, Okeechobee Landfill Cell 105-106 Landfill Expansion Design and Construction Quality Assurance, 2017-2018. Add description

Waste Management Inc. of Florida, Florida, Vista Landfill Permit Renewal, 2017. Add description.

Waste Management Inc. of Florida, Florida, Okeechobee Landfill Cell 104 Landfill Expansion and Construction Quality Assurance. Design engineer responsible for the base grading and leachate collection system for Cell 104. Engineer of Record for the construction of Cell 104 and provided construction management services tasks including evaluation and approval of construction materials, quality control, and advising the client on issues related to the construction contract and the contractor's compliance with the contract terms and requirements.

Waste Management Inc. of Florida, Florida, Monarch Landfill Cells 13 and 14 Preliminary Design, 2018. Design engineer for of Cells 13 and 14. Task included preparation of deep dynamic compaction plans and relocation of utilities within the area of the landfill cells.

Waste Management Inc. of Florida, Florida, Deland Landfill Cells 8 and 9 Design and Permitting, 2017. Design engineer for the unlined Cells 8 and 9 for the C&D waste landfill. Tasks included base grading, revising the closure design to accommodate existing scales within the landfill footprint, and environmental resource permitting.

Waste Management Inc. of Florida, North Manatee Landfill Cell6 Design, Naples, Florida. Design engineer for the base grading of Cell 6 for the Class I landfill. Tasks included preparation of construction drawings, specifications, and bid item list.

City of Albuquerque Solid Waste Management Department, New Mexico, Cerro Colorado Landfill, 2009-2010. Project engineer tasked with updating the landfill capacity analysis, designing base grading and leachate collection system for Cell 8, providing construction services, and developing the final grading plan for closure of the site.

Solid Waste Authority of Palm Beach County, Florida, North County Resource Recovery Facility Cells 15 and 16 Design, Permitting, and Bidding, 2008-2009. Engineer of Record for the design of Cells 15 and 16 which included a double liner system, leak detection system, leachate collection system, cleanouts, roadway extension, relocation of overhead electrical wires, and stormwater management. Tasks included preparation of the Basis of Design Report, construction drawings, and permitting services.

Jefferson Parish, Landfill Expansion Design, Jefferson Parish, Louisiana. Design Engineer assisting with the design of the landfill expansion for Phase 4A at the Jefferson Parrish Landfill including the

liner system and leachate collection system design. Tasks included preparation of construction drawings and specifications.

Landfill Gas Design and Management

Solid Waste Authority of Palm Beach County, Florida, Palm Beach Resource Recovery Facility Landfill Gas Services and Surface Emissions Monitoring (Multiple projects), 2017-Current and 2007-2010. Professional engineer providing services related to the operation and maintenance of the landfill gas (LFG) collection and control systems. Tasks included optimization of the LFG system, evaluation of quality and reuse options, and surface emissions reporting. Belinda certified gas well inactivation as needed under the LFG Well Inactivation Program that assisted in providing flexibility in the operation of the site's LFG collection system.

Miami-Dade County, Florida, North Dade Landfill Feasibility Study, 2019. Add description.

Waste Management Inc. of Florida, Florida, Landfill GCCS Expansion CQA (Multiple sites), 2017-2019. Add description. Third party reviewer of well schedules for Monarch Hill, Medley, and Okeechobee landfills as compared to each site's base grades.

Polk County, Florida, North County Landfill Class I Phase III Landfill Gas Collection and Control (GCCS) Expansion, 2018-2019. Add description

Private Client, Dominican Republic, La Duque Landfill GCCS Preliminary Layout and Cost Estimating, 2017. Add description

Reno County Landfill Gas Collection and Flaring System Design, Reno County, Kansas. Engineer for the design of a landfill gas collection and flaring system for an operating landfill including areas of municipal solid waste and construction and demolition waste disposal. The design was developed with the intent of installing a pipeline to a large manufacturer (confidential) nearby that will use the landfill gas in its operations. The design also included gas extraction wells to mitigate gas migration from a section of the uncapped landfill.

Landfill Closure Design

Municipality of Cayey, Puerto Rico, Cayey Landfill Closure Plan, 2017-2018. Design engineer developing a landfill closure and post-closure plan for the 25 acre unlined landfill in Puerto Rico. Tasks include a landfill capacity analysis, slope remediation, landfill gas management, stormwater management, and landfill expansion evaluation.

Private Developer, Florida, Countyline Landfill Closure Cost Estimate and Water Use Permitting. Project Engineer tasked with updating the landfill closure cost estimate for former the C&D landfill and materials recovery facility currently being redeveloped. Also tasked with preparing the water use permit application for the groundwater remediation system to treat the ammonia contaminated groundwater migrating from the site.

United States Air Force, California, Vandenburg Air Force Base (AFB) Landfill Closure Design, 2016. Design engineer for the landfill closure design of the Vandenburg AFB Landfill. Tasks included redesign of the final closure grading as a result of closure of the landfill prior to final build out, preparation of the closure plan report, and preparing a closure cost estimate.

Solid Waste Authority of Palm Beach County, North County Resource Recovery Facility Cells 7-10 Partial Closure Design, Permitting, and Construction, West Palm Beach, Florida. Project Engineer for the partial closure design of Cells 7-10 to reduce the potential for leachate seepage on side slopes,

reduce rainfall infiltration and leachate generation. Tasks included the grading of the cells, design of the liner system for the side slopes, and expansion of the existing landfill gas collection system.

Environmental Resource Permitting

Waste Management Inc. of Florida, Florida, Monarch Hill Sliver Fill (Landfill Expansion), 2018-2019. Add description

Waste Management Inc. of Florida, Florida, Medley Landfill Expansion ERP Permitting, 2018-2019. Add description

Landfill Siting

Solid Waste Authority of Palm Beach County, Western Landfill Preliminary Design and Permitting, West Palm Beach, Florida. Task Manager for the preliminary design and permitting of a new 1,600acre landfill site in western Palm Beach County providing the County approximately 50 years of disposal capacity. As task manager and project engineer, she assisted with site planning, rezoning, solid waste facility permitting, Title V air permitting, environmental resource permitting, and county site plan approval.

Solid Waste Facilities

City of Los Angeles Bureau of Sanitation, California, City of Los Angeles Recycling and Transfer Station (CLARTS) Master Plan 2010-2011. Design engineer and project manager tasked with the master plan study to optimize the existing CLARTS facility. Tasks included site visits, facility evaluation, three workshops with city employees to identify improvements, in-person survey of waste haulers using the facility, and developing preliminary concepts and an engineer's estimate. Tasks were documented in a master plan report.

Due Diligence

Confidential Client, Puerto Rico, Acquisition Due Diligence, 2018. Review of facility contracts, consent orders, and agreements in Spanish.

Confidential Client, United States, Due Diligence of Waste-to-Energy Plants, 2017. Review of facility contracts, consent orders, agreements, and financials for waste-to-energy plants.

Civil and Stormwater Design

South Florida Water Management District, Florida, Lakeside Ranch Stormwater Treatment Area, Okeechobee, Florida. Design Engineer for the preliminary, intermediate, pre-final, and final design of the Lakeside Ranch Stormwater Treatment Area (STA) for the South Florida Water Management District (SFWMD) in Okeechobee, Florida. Served as the civil/site design engineer for the STA component of the project, which consists of containment cells covering 2,400 acres and more than 20 miles of earthen embankments. Assisted with the design of the civil/site components and general coordination with other disciplines as part of the overall preparation of construction drawings, specifications, and design report.

Private Developer, Biscayne Landing Phase 1A (Munisport Landfill Redevelopment), North Miami, Florida. Project management and consulting engineering services for the Biscayne Landing Phase 1A development, a multi-million-dollar project to redevelop an existing landfill into a residential community. Assisted in the design, permitting, and preparation of construction drawings for the landfill development plans associated with the redevelopment of the Munisport Landfill into a

residential community consisting of four high-rise residential towers, two parking garages, an amenities building, and 12 townhome structures. The construction plans consisted of earthwork plans for the removal, relocation, and deep dynamic compaction of landfill material; water, sanitary sewer, and stormwater infrastructure; and site grading and roadway design. Assisted with the landfill closure and environmental resource permit modifications for the various phases on the site. She also assisted with the design of a landfill gas management system for inhabited structures built over the existing landfill site. She completed landfill gas monitoring for the inhabited structures, soil gas probes, and perimeter gas probes, and prepared quarterly gas monitoring reports to satisfy closure permit conditions. In addition, Provided engineering services during construction, construction inspection for the gas management system, and review of record drawings for certification. She also assisted in the development and maintenance of a permit database for all permits obtained for the site.

Private Clients, International Land Development Design Projects, Dominican Republic and British Virgin Islands. Participated in international land development design projects for private developers in the Dominican Republic and the British Virgin Islands. She made site visits, collected water samples, and researched local regulations. Assisted in the design and preparation of master plans, construction documents for the utilities and civil/site work, including water, sewer and stormwater management.

Solid Waste Authority of Palm Beach County, North County Resource Recovery Facility Leachate Collection System Assessment, West Palm Beach, Florida. Assisted with the evaluation of the leachate collection system at the North County Resource Recovery Facility Landfill. The project included oversight of jet cleaning of the leachate collection system, manhole inspection, and preparation of a summary report with recommendations. A request for proposals for technology demonstrations available for cleaning clogged leachate collection systems was developed.

Water and Sewer Design

Los Angeles County Department of Public Works, California, North Los Angeles/Kern County Regional Recycled Water Project Phase 2, 2010-2011. Assistant project manager and design engineer for the design of a recycled water backbone distribution system to provide recycled water to the cities of Palmdale and Lancaster and the unincorporated communities of the Antelope Valley. The project included preparation of plans, specifications and cost estimate for approximately nine miles of steel pipe, a pump station, a forebay tank, and conversion of two existing water storage tanks.

City of Pompano Beach, Drainage Improvements, Pompano Beach, Florida. Project Engineer assisting in the design, modeling, and preparation of contract documents for storm sewer systems for various drainage projects for the City of Pompano Beach. Projects included proposed French drains, gravity piping, and a surface water discharge.

City of Miami, Fairlawn, Avalon, and Pinehurst Storm Sewer Improvements, Miami, Florida. Project engineer assisting in the design, modeling, and preparation of contract documents for storm sewer systems for the City of Miami. This project included proposed French drains, gravity piping, and a surface water discharge.

City of Miramar, Eastern Infrastructure Improvements, Miramar, Florida. Assisted in the design, permitting, and preparation of construction drawings of sanitary sewer systems, potable water distribution, and stormwater collection systems. The project consisted of approximately 25,500 linear feet of gravity sewer, 1,500 linear feet of force main, 12,000 linear feet of water mains, and one wastewater pump station.

City of North Miami, N.E. 151 Street Force Main Design, North Miami, Florida. Project Engineer for the design of the force main, including preparation of construction documents, cost estimates, permitting, specifications, and engineering services during construction.

City of Homestead, Flagship Cinemas Infrastructure Improvements, Homestead, Florida. Project Engineer for the design of the water main, gravity sewer, force main, and pump station provided by the city for the proposed commercial development at the site. In addition, she prepared specifications, construction documents, and cost estimates, and provided engineering services during construction.

City of North Miami, Stormwater Master Plan Drainage Improvement Projects, North Miami, Florida. Assisted with the hydraulic modeling, design, preparation of construction drawings, and permitting for drainage projects identified in the City of North Miami Stormwater Master Plan.

Village of Key Biscayne, Water and Sanitary Systems, Key Biscayne, Florida. Project Engineer tasked in designing, permitting, and preparing construction drawings for water and sanitary sewer systems to provide sanitary services to approximately 700 residents and replace existing water mains on Key Biscayne. The project consisted of approximately 40,000 linear feet of gravity sewer, 1,800 linear feet of force main, two wastewater pump stations, and approximately 44,000 linear feet of water mains.

City of North Miami, Pump Station Evaluations, North Miami, Florida. Assisted in the evaluation of existing pump stations for the City of North Miami. Tasks included field inspections and preparation of a summary report with recommendations for improvements.