

## MATEJA VIDOVIC KLANAC

### SENIOR PROJECT PROFESSIONAL



### Education

M.S. – Civil Engineering, Florida Atlantic University, 2017

M.S. – Environmental Engineering, Faculty of Chemical Engineering and Technology, Croatia, 2012

B.S. – Environmental Engineering, Faculty of Chemical Engineering and Technology, Croatia, 2010

### Professional Affiliations

Solid Waste Association of North America (SWANA) – Young Professionals (YPs) Steering Committee, Chair for SWANA International Student Design Competition (<https://swana.org/community/young-professionals/solid-waste-design-competition>)

### Professional Experience

Ms. Vidovic Klanac is a Senior Project Professional in SCS Engineers West Palm Beach office with over 7 years of experience in the environmental field currently focusing on solid waste management. Her experience in solid waste includes involvement in a diverse range of projects including construction and design plans for landfills, economic analysis, stormwater management calculations, geotechnical evaluations, permitting, and field experience in observing and documenting construction projects and verifying adherence to plans, specifications, and construction quality assurance plans. She has strong leadership, managerial, and team building skills within multicultural teams, has assisted both public and private entities, and has experience with local and federal environmental regulations.

### Professional Experience with SCS Engineers

**EcoSouth Services, Desoto Recycling & Disposal, Arcadia, Florida.** Ms. Vidovic Klanac is involved in permit modification to redesign the base grades and leachate management systems for the remaining undeveloped Cells 8-18 at the site.

**EcoSouth Services, Desoto Recycling & Disposal, Arcadia, Florida.** Ms. Vidovic Klanac was involved in permit modification to redesign the permitted base grade and the leachate management system for the future Cell 7 at the site. The base grade in Cell 7 is being revised to simplify construction and optimize the base slope and the leachate collection pipe slope.

**Waste Management Inc. of Florida, Homestead C&D Facility Vertical Expansion, Homestead, Florida.** Ms. Vidovic Klanac was involved in preparing the solid waste application for permitting a vertical expansion for the site. The application required submittal and approval by Miami-Dade County. The tasks included implementing regulations, preparing the engineering report, landfill capacity analysis, geotechnical evaluations, stormwater management evaluations, financial assurance and closure cost estimates, design drawings, and technical specifications.

**Waste Management Inc. of Florida, Monarch Hill Vertical Expansion Feasibility Analysis, Pompano Beach, Florida.** Ms. Vidovic Klanac was involved in preparing the preliminary calculations and review

the requirements of the solid waste license modification application to determine the feasibility of a vertical expansion of the Class I landfill.

**GFL, Desoto Landfill Lateral Expansion, Arcadia, Florida.** Ms. Vidovic Klanac was involved in design and permitting of lateral expansion at Desoto Landfill, FL. Ms. Vidovic Klanac work consisted of preparing a solid waste application for a proposed lateral expansions and performing geotechnical, stormwater, leachate management, lining and closure system design evaluation analysis and modeling.

**Solid Waste Authority of Palm Beach County, Class III Overlay Engineering Solution, West Palm Beach, Florida.** Ms. Vidovic Klanac was involved with evaluating the stability of a proposed vertical expansion and the stability of the proposed interphase of the Class III and Class I landfills. Extensive geotechnical analysis have been performed. Three different critical cross sections were evaluated for stability using additional material strength information and considering areas with the highest thickness of ash. Stability of the landfill slopes was analyzed for both two-dimensional deep seated block failure and deep seated circular failures along selected section lines.

**GFL, Pembroke Landfill Lateral Expansions, Fort Meade, Florida.** Ms. Vidovic Klanac was involved in design and permitting of two lateral expansions at Fort Meade Landfill, FL. Ms. Vidovic Klanac work consisted of preparing a solid waste application for a proposed lateral expansions and performing geotechnical, stormwater, leachate management, lining and closure system design evaluation analysis and modeling. Ms. Vidovic Klanac was also involved in preparing the Environmental Resource Permit (ERP) including the stormwater management design to accommodate the changes from the proposed expansion.

**Osceola County, Development of Disaster Debris Management Plan, Kissimmee, Florida.** Ms. Vidovic Klanac was involved in updating the County's Disaster Debris Management Plan by reviewing current FEMA publications, County DDMP and related County Agreements. Using the information gathered, Ms. Vidovic Klanac compiled the updated information into a comprehensive DDMP that achieved the objectives identified.

**Waste Management Inc. of Florida, Monarch Hill Sliver Fill Expansion, Pompano Beach, Florida.** Ms. Vidovic Klanac was involved in preparing a solid waste application for a proposed Sliver Fill Expansion of the Class I Landfill. Due to changes to the landfill footprint, the landfill stormwater management system was changed to accommodate the proposed expansion. Ms. Vidovic Klanac was also involved in preparing an environmental resource permit (ERP) modification application for permitting the changes to the stormwater management system.

**Miami-Dade County Department of Solid Waste Management, North Dade Landfill Feasibility Study for Landfill Gas System Improvements, Miami, Florida.** Ms. Vidovic Klanac was involved in performing a feasibility study to identify the required gas collection and control system (GCCS) improvements and modifications to continue to ensure compliance with the Title V permit.

**Keystone Properties, L.L.C, Keystone Class III Landfill Closure Design, Jacksonville, Florida.** Ms. Vidovic Klanac was providing assistance with design components of the final cover system required for the closure permit application of the Keystone Class III Landfill.

**Waste Management Inc. of Florida, Medley Landfill Vertical Expansion, Medley, Florida.** Ms. Vidovic Klanac was involved in preparing a solid waste modification application for a proposed vertical expansion of the Class I Landfill. Ms. Vidovic Klanac performed the geotechnical evaluation analyses, calculations, and modeling for the site. Ms. Vidovic Klanac was also involved in preparing

the Environmental Resource Permit (ERP) including the stormwater management design to accommodate the changes from the proposed expansion.

**Waste Management Inc. of Florida, Medley Landfill East Expansion, Medley, Florida.** Ms. Vidovic Klanac was involved in preparing the permit application for intermediate modification changing the currently permitted design for the site in consideration of a potential additional future expansion east of this permitted eastern expansion area, where the cells should be redesigned to divert all leachate to only the northern and southern borders of the expansion area.

**Waste Management Inc. of Florida, North Manatee Recycling and Disposal Facility Class III Landfill Closure Cost Estimate Updates, Duette, Florida.** Ms. Vidovic Klanac was involved in preparing an updated closure cost estimate to include Cell 8 into the landfill footprint approved for receipt of waste.

**Waste Management Inc. of Florida, Medley Landfill Biennial Technical Report, Medley, Florida.** Ms. Vidovic Klanac prepared a Technical Report on Water Quality for the site, summarizing water quality results from the past 2.5 years. Work performed included various trend graphs and analysis, along with Mann-Kendall statistical tests for each well and each routinely detected parameter.

**Waste Management Inc. of Florida, Homestead C&D Facility Biennial Technical Report, Homestead, Florida.** Ms. Vidovic Klanac prepared a Technical Report on Water Quality for the site, summarizing water quality results from the past 2.5 years. Work performed included various trend graphs and analysis, along with Mann-Kendall statistical tests for each well and each routinely detected parameter.

**Waste Management Inc. of Florida, Monarch Landfill Construction Quality Assurance Cells 12-13, Pompano Beach, Florida.** Ms. Vidovic Klanac assisted as a monitor with the construction quality assurance (CQA) at both Cells, which involved inspecting and documenting of the work performed while being responsible that the work performed is in compliance with the technical specification and CQA Plan for the site. Additionally, Ms. Vidovic Klanac performed geotechnical evaluation analyses calculations and modeling for the proposed construction design at the site. Ms. Vidovic Klanac also assisted in preparing the construction certification report.

**Waste Management Inc. of Florida, Homestead C&D Facility Minor Modification Permit Application, Homestead, Florida.** Ms. Vidovic Klanac prepared a permit application to modify the Miami-Dade County Department of Regulatory and Economic Resources (RER) Solid Waste Permit and Annual Operating Permit to increase the maximum daily acceptance rate of construction and demolition debris.

**Waste Management Inc. of Florida, Medley Landfill Phase 5 Closure, Medley, Florida.** Ms. Vidovic Klanac is involved in performing the geotechnical evaluation analyses, calculations, and modeling for the proposed closure design for the site.

**Waste Management Inc. of Florida, Glades LLC Landfill Phase 4 Construction, Moore Haven, Florida.** Ms. Vidovic Klanac assisted with preparing the financial assurance documentation and the closure and long-term care cost estimates for the site. Also, Ms. Vidovic Klanac is involved in performing the geotechnical evaluation, analyses, calculations, and modeling for the proposed construction design for Phase 4 at the site.

**Waste Management Inc. of Florida, Homestead C&D Facility Biennial Technical Report on Water Quality, Homestead, Florida.** Ms. Vidovic Klanac was involved in preparing the technical report on water quality for the site. The report summarized water quality results from the past 2.5 years.

**Waste Management Inc. of Florida, Okeechobee Landfill Cells 105-106 Landfill Expansion Design and Construction Quality Assurance, Okeechobee, Florida.** Ms. Vidovic Klanac assisted with the financial assurance documentation and the closure and long-term care cost estimates for the site. Ms. Vidovic Klanac also assisted with preparing the construction certification report for the site.

**Solid Waste Authority of Palm Beach County, Closure Design and Permitting Class I and Class III Landfills, West Palm Beach, Florida.** Ms. Vidovic Klanac was working on the stormwater management design for the proposed closure cap configuration at the site. Several new design features will be incorporated to improve stormwater management. Work included layout of the system and calculating the stormwater runoff, estimate peak runoff rates and volumes, delineation of basins, design of hydraulic structures, capacity check for downchute pipes, etc. Ms. Vidovic Klanac also performed geotechnical evaluation, analyses, calculations, and modeling for the proposed closure design for the site.

**Flightway Twelve, LLC Gas Management System Design, Coral Gables, Florida.** Ms. Vidovic Klanac assisted with obtaining information regarding the incorporation of the gas management system (GMS) with proposed utilities, building features and other subsurface obstructions that may affect the gas management system. Work also included assisting with the GMS design and preparing the associated engineering plans for the Owner's use in permitting, bidding, and constructing the GMS, and preparing Operations, Maintenance and Monitoring Manual.

**Solid Waste Authority of Palm Beach County, Surface Emissions Monitoring, West Palm Beach, Florida.** Ms. Vidovic Klanac performed surface emissions monitoring (SEM) at the Class I and Class III Landfills using a flame ionization detector (FID) meter. Additionally, H<sub>2</sub>S monitoring was performed concurrently with the quarterly SEM event using a Jerome Analyzer. Ms. Vidovic Klanac prepared the required semi-annual reports summarizing the surface emissions monitoring events.

**Waste Management Inc. of Florida, North Manatee Recycling and Disposal Facility Class III Landfill Airspace Report, Duette, Florida.** Ms. Vidovic Klanac prepared the annual airspace report for the landfill. Work included volume calculations for the remaining airspace within the developed portion of the landfill and within the permitted footprint.

**Waste Management Inc. of Florida, Monarch Hill Landfill Phase 7 Closure Design, Pompano Beach, Florida.** Ms. Vidovic Klanac performed geotechnical evaluation, analyses, calculations and modeling for the proposed closure design. Additionally, work included stormwater management system design calculations and preparing the construction certification report.

**Solid Waste Authority of Palm Beach County, North County Resource Recovery Facility Landfill Gas Operation and Maintenance Services, West Palm Beach, Florida.** Ms. Vidovic Klanac assisted with gas well inactivation under the LFG Well Inactivation Program, including review and analysis of the site's monthly landfill gas well data.

**Solid Waste Authority of Palm Beach County Converting/Re-Permitting the Class III Landfill into a Class I Landfill, West Palm Beach, Florida.** Ms. Vidovic Klanac was involved in review of the historical rules and requirements at the time in which the Class III Landfill was permitted and constructed to confirm if the design and construction features of the existing landfill meet the requirements of a Class I Landfill at the time. Findings of the regulatory and permitting review were summarized in a memorandum.

**Waste Management Inc. of Florida, Homestead C&D Facility Vertical Expansion, Homestead, Florida.** Ms. Vidovic Klanac was actively involved in preparing the solid waste application for permitting a vertical expansion for the site. The application required submittal and approval by Miami-Dade

County. The tasks included implementing regulations, preparing the engineering report, landfill capacity analysis, geotechnical evaluations, financial assurance and closure cost estimates, design drawings, and technical specifications.

## Professional Experience with Other Firms

**Florida Atlantic University Laboratories for Engineered Environmental Solutions (Lab.EES): Investigation of Effective Odor Control Strategies, Boca Raton, Florida.** Ms. Vidovic Klanac was a part of the Graduate Research Team with Dr. Daniel Meeroff. Tasks included working with two local landfill sites investigating the influence of meteorological parameters of interest on the frequency of odor complaints, sophisticated statistical analysis, recommendation of a revised odor complaint form, and operational adjustments. “Odor Threat Assessment” was proposed to assist landfill site personnel in managing daily operations based on weather conditions. Additionally, work involved writing engineering reports and participating in technical advisory group presentations.

**Meteorological and Hydrological Institute, Sector for Air Quality, Service for Measuring Air Quality, Zagreb, Croatia.** Ms. Vidovic Klanac supervised the operation/monitoring of the national network for monitoring air quality in Croatia, which involves checking device status and condition of all communication devices, data capture, and responses to the zero and span. Work also included daily data validation, statistical analysis and creating reports in accordance with regulations in Croatia.