

MELISSA BURDIER

## Education

BS – Environmental Engineering, University of Florida, 2017

ME– Environmental Engineering, University of Florida, 2019

## Professional Experience

Ms. Burdier conducts projects for landfill and waste processing facility permitting and compliance. She works on solid waste permit applications, groundwater monitoring plans, construction quality assurance reports, landfill design, recycled screen material sampling, and slope stability analysis. Prior to joining SCS Engineers, she was a graduate research assistant and worked with construction and demolition debris (CDD) recyclers located around the U.S. to study alternative markets for recycled screen material and other CDD materials.

Notable projects that Melissa has been involved in are described below.

### Landfill Engineering

**Waste Management, Florida, Cells 9, 10, and 11 Base Grade Modification.** Associate professional responsible for the application report and lining system design calculations of a landfill located in Pompano Beach, Florida. The permit modification proposed a redesign of the base grades of the cells from a herring bone design to minimum head. The permit application also included site plan modifications.

**WCA, Florida, Lateral Expansion for Pembroke South CDD Processing Facility.** Associate professional responsible for updating the water quality monitoring plan for the Solid Waste Construction and Operation Permit Modification Application and the Environmental Resource Permit (ERP) Modification Application. The water quality monitoring plan was updated from the previous permit to accommodate the east and north lateral expansions at the site. Tasks included reviewing CDD landfill requirements for groundwater monitoring plans and selecting locations to add or abandon groundwater wells and staff gauges depending on phasing and final build out of the total landfill permit. The tasks for the ERP application included calculations for time of concentration, water quality treatment volume, and stage storage of basins. She also compiled the narrative and completed the required application forms.

### Recycled Screen Material

**Waste Management, Florida, WM Recycling Palm Beach, 2019.** Associate professional responsible for overseeing waste screening, sample collection, and documentation of eight hour sampling events. Samples were collected hourly in clean glassware, following proper sampling protocols.

**Waste Management, Florida, WM Recycling Pompano Beach, 2019.** Associate professional responsible for overseeing waste screening, sample collection, and documentation of eight hour sampling events. Samples were collected hourly in clean glassware, following proper sampling protocols.