

TRENT M. ARNEY, EIT

Education

BS – Biosystems Engineering, Auburn University, 2019

Professional Licenses

Engineer in Training – General

Specialty Certifications

40-Hour Hazardous Waste Operations (OSHA 29 CFR 1910.120)

Professional Affiliations

United States Composting Council – National Chapter Member

United States Composting Council – State Chapter Member

Publications and Presentations

SWANA FL Talking Trash – Turning Trash to Treasure – Organics Management for Landfill Operators - December 19, 2022 - <https://swanafl.org/wp-content/uploads/2022/12/Talking-Trash-Fall-Winter-2022.pdf>

SCS Solid Waste Workshop, Composting Technology – presentation May 2022.

Professional Experience

Mr. Arney is a Staff Professional II in SCS's Tampa office. He provides services for a multitude of sites, with an emphasis on Hillsborough Southeast County Landfill. He also is involved in the Organics Management initiative and has completed numerous trainings and presented on the topic. Mr. Arney's primary services include solid waste permitting, cost assessment, field data collection and evaluation, landfill liquid assessment and monitoring, stormwater permitting review, assistance, application, landfill cell and closure design, and composting education.

Solid Waste

Hillsborough County, Florida, Southeast County Landfill August 2019 - Present. Associate Professional works with the project team to provide general engineering services and technical assistance to the client. The services provided include:

- Liquid Level Monthly Progress Monitoring Reports as a part of the Corrective Actions Plan.
- Monthly Waste and Daily Cover Soil volume reporting and analysis.
- Monitoring and reporting on the Water Use Permit groundwater irrigation pumping held by Balm Farms and relaying the data to the client.

- Overseeing and coordinating subsurface conductivity monitoring surveys and generating reports utilizing the data for submittal to Hillsborough County.
- Conducting field investigations, collecting groundwater data, and overseeing and assisting subcontractors in inspections and data collection.
- Coordinating with vendors in order to generate cost estimates and recommend solutions to the client.
- Overseeing and coordinating the monthly compliance tasks for the landfill.
- Generating estimates of remaining airspace and site life.
- **Biosolids Composting Facility Expansion Design, Permitting, and Construction Oversight (2022)** – Staff Professional worked alongside a multidisciplinary design team to design, permit, bid (ongoing), and construct (ongoing) an expansion of the existing Biosolids Composting Facility at Southeast County Landfill. Preliminary evaluation of the site included utility locate, ground survey, geotechnical explorations, and continuous client feedback to improve upon the design of the existing facility. The expansion design incorporated a 6,000-gallon above ground diesel tank for equipment, approximately 3-acre structure with composting floor and leachate collection, leachate conveyance and pumping infrastructure, an improved leachate storage and tanker loading area, stormwater improvements, and permitting through multiple agencies.
- **Waste tire permit renewal (2020)** – Staff Professional worked closely with FDEP and the County to help to facilitate an expedited renewal of the site’s waste tire permit. Provided assistance to facilitate the successful updating, incorporation of County and FDEP comments, and submittal of the final permit application package to FDEP within one week.
- **Intermediate Modification for Closure Permit (2022)** – Staff Professional worked closely with a team of technical professionals preparing design and permit documents for the accelerated closure of Phase I-VI at the Southeast County Landfill. Because Phase II and III of the landfill will be closed as final elevation is reached while the remainder of the landfill will continue to accept waste, Staff Professional worked with the Project Manager and FDEP to modify the Operations Permit to incorporate regulation-required closure information. Through intermediate modification of the Operations Permit, facilitated the incorporation of landfill closure permit, design, Construction Quality Assurance Plan, design calculations, and technical specifications into the Operations Permit to satisfy the Alternate Procedure. Additionally, final design of the GCCS system was incorporated into the closure design documents, mitigating the need for additional permitting to expand the existing GCCS system to final closure condition. The thoroughly prepared intermediate modification was approved without regulatory delays and without a Request for Additional Information.
- **SLCF Section 10 Conceptual Design (2022)** – Worked with a team of technical professionals to complete calculations, technical specifications, and preliminary design for a future cell consisting of three subcells that piggy-back onto an existing landfill. The design was modified from the master plan design to increase disposal capacity by over 1 million cubic yards while remaining in compliance with the site’s master stormwater permit. Utilizing PCStabl software, generated a slope stability model to assess the factor of safety and ensure that the design is compliant with current FDEP standards.
- **EPA SWFR Grant Application for Food Waste Composting Program** - Worked closely with the client and the Project Manager to develop a thorough and highly competitive grant application to implement a food waste composting program in under two months. This

process included identification of program requirements, development of preliminary construction and operations plan, a thorough accounting of proposed expenditures by quarter over the three-year period, an evaluation of environmental justice criteria, and preparation of application and attachments. Developed a comprehensive plan for the facility, including throughput, recipes, projected production, and methodology.

- **SCLF Stormwater Pond Sediment Evaluation (2022)** – Project Manager oversaw a team of technical professionals that conducted a field assessment of stormwater ponds on site, prior to closure activities. The assessment allowed the client to target specific areas within the ponds to restore design capacity and allow for increased stormwater runoff following installation of the closure cover.
- **Soil Borrow Area Mulch Evaluation (2017-2022)** – Project Manager worked with client to evaluate capacity to store shredded yard waste in the site's soil borrow area and later evaluations to assess stored volume. Project Manager lead a team of technical professionals to evaluate the design, existing conditions, permit requirements, and 3D volume through AutoCAD Civil 3D.

Hillsborough County, Florida, South County Transfer Station. Researched and provided the county with the maximum possible volume of waste that the yard waste processing area could hold based on F.A.C, EPC, NFPA, and CFA regulations. Utilizing GIS and Autocad, generated a scale map dictating the appropriate layout of the area. Provided FDEP with the information required for the Waste Tire Processing Center Application and Operation Plan modification application Request for Additional Information.

Hillsborough County, Florida, Northwest Transfer Station and Resource Recovery Facility. Researched and provided the county with the maximum possible volume of waste that the yard waste processing area could hold based on F.A.C, EPC, NFPA, and CFA regulations. Utilizing GIS and Autocad, generated a scale map dictating the appropriate layout of the area.

Manatee County, Florida, Lena Road Landfill. Provided field services in the collection and compilation of liquid level data at monitoring wells on the property. Provided landfill gas liquid level readings for the annual event 2020-2022.

United States Navy, Cuba, Guantanamo Bay Municipal Solid Waste Landfill. Provided assistance in refining calculations regarding moment of inertia calculations to determine if a leachate collection pipe could withstand the maximum exerted forces of a landfill compactor for 12 different pipe sizes and positions, as well as three orientations of the compactor relative to the pipe.

Charlotte County, Florida, Zemel Road Landfill. Provided engineering assistance in the calculation and drafting of the 2019-2021 annual remaining airspace analysis. Provided project management services from 2021-2023.

The World Bank Group, Philipsburg, Sint Maartin. Provided assistance in the drafting and quality assurance of the Debris Management Plan. Drafting an example flier for distribution to the public to educate on proper placement of debris piles for efficient disposal.

Confidential Client (BTG Pactual, Noble Hill Landfill, Alabama), Solid Waste Due Diligence Review. Provided assistance in the permit history, site data review, compilation, report drafting, and quality assurance of the due diligence report for a confidential client.

Confidential Client (Manatee County), Landfill Siting Study. Provided assistance in zoning, investigation, permit history, assessment of each available site in the area. Provided calculation for potential cell volumes, location, and footprint. Drafted site plans for each of the top 5 siting locations, which accounted for all relevant regulatory criteria. Provided cost estimations for each site for both capital expenses and operational expenses, and averaged that over the projected life to generate an annual cost. Communicated with the client to discuss expectations. Communicated extensively with the project team to ensure that tasks were being completed in order to facilitate a polished final product.

Atlas Organics (Under Generate Capital), Stormwater Permit Due Diligence and Permitting Assistance Provided project management assistance in the investigation, permit history, assessment of each requested site in the area. Coordinated and worked closely with the client and management to assess options and ensure that the client can make a well-informed decision for each site. Aided the client in the navigation of complex permitting issues with sites that were out of compliance.