

SHASHANK PATEL, EIT

Education

MS – Engineering (Environmental), University of Florida, 2017

BE – Engineering, (Environmental), Gujarat Technological University, 2014

Professional Licenses

F E-E.I.T. - Engineer in Training

Specialty Certifications

LEEDv4 Green Associate

OSHA 40-Hr HAZWOPER

Professional Affiliations

Solid Waste Association of North America (SWANA)

Professional Experience

Shashank is a Project Professional in SCS's Atlanta office. He has over three years of environmental and solid waste engineering experience. He provides engineering support services for design, permitting, construction management, liner installation CQA services, and reporting for landfill projects all around the southeast region. He also supports projects involving GCCS system design, construction, and regulatory compliance. He is responsible for tasks involving regulatory compliance of several sites subject to the New Source Performance Standards (NSPS) throughout the state of Georgia and Alabama, specifically the review of monthly LFG data and system design and construction quality assurance (CQA) for several landfills. His education focused in water, solid waste, and air quality regulations and water quality, energy systems, and solid waste design. Examples of his project experience include the following:

Landfill Gas Control, Air Permitting, and Renewal Energy

Dalton-Whitfield Solid Waste Authority, Greenhouse Gas Reporting 2018. Prepared and reviewed calculations and reports based on GCCS flare and pipeline data, waste tonnage and remaining capacity reports, and other LFG site specific information to submit to the EPA.

Santek Waste Services, Gas Collection and Control System Design and Final-Buildout Design

- Assisted in design of a full-buildout of the landfill gas collection and control system utilizing components of the ongoing initial GCCS design, the EPA LandGEM model, and the KYPipe model.
- Provided assistance to prepare bidding documents for construction contractors.

Republic Services, Inc., Title V Compliance, Various Sites

- Responsible for preparing, reviewing, and submitting bimonthly compliance reviews for LFG extraction wells that are exceeding New Source Performance Standards (NSPS) regulatory limits



and providing recommendations to remediate the exceedances by reviewing wellhead monitoring data, liquid level measurements, and OM&M evaluations (May 2018 to Present).

- Responsible for preparing presentations and participating in monthly gas calls between the client, OM&M LFG contractor, LFG design and compliance engineers, and other parties to go over operational and compliance issues and develop action items (May 2018 – Present).
- Responsible for preparing, reviewing, and sending out alternate timeline (ATL), higher operating value (HOV), alternate operating procedure (AOP), and decommissioning requests for landfill gas extraction wells exceeding NSPS regulatory limits to maintain compliance to the state Environmental Protection Division (EPD) (May 2018 to Present).
- Responsible for preparing and reviewing semi-annual reports for multiple sites throughout the Southeast. Tasks include evaluating landfill gas extraction well exceedances, monitoring excursions, and EPD compliance submittals, landfill surface emissions monitoring (SEM) results, dust suppression plan recordkeeping, LFG flare data and other site-specific documentation to send to the state Environmental Protection Division (EPD).
- Preparing greenhouse gas (GHG) calculations and reports for the 2018 and 2019 reporting periods for multiple landfills in the Southeast region which included evaluating flare/gas to energy facility data, waste tonnages, and other LFG site specific information to send to the Environmental Protection Agency (EPA).

Republic Services (RS) and Advanced Disposal Services (ADS), Construction Quality Assurance (CQA), Various Sites

- Performed design assistance and full-time construction quality assurance (CQA) field work for multiple landfill gas collection and control system (GCCS) well drilling and piping construction projects.
- Facilitated communication between the construction contractors, SCS project managers and directors, and the client to ensure that the design specifications and intentions were adhered to and to the clients' expectations. Worked with all parties to identify and troubleshoot any design/field changes that occurred during the projects and to come up with timely solutions.
- Prepared the construction completion certification reports and as-built drawings from the construction to provide to the client and design engineers for bookkeeping and future use.
- Projects included:
 - ADS, Eagle Point Landfill Cell 13 Leachate Extraction Well System, Ball Ground, GA (October 2018).
 - ADS, Turkey Trot Landfill 2019 GCCS Expansion, Citronelle, AL (June-July 2019)
 - ADS, East Baton Rouge Parish North Landfill 2019 GCCS Expansion, Zachary, LA (September 2019).
 - RS, Forward Landfill 2017 GCCS Expansion, Manteca, CA (September 2017)
 - RS, Newby Island Landfill 2018 GCCS Expansion, Milpitas, CA (February 2018)
 - RS, Oak Grove Landfill 2018 GCCS Expansion, Winder, GA (May-July 2018).
 - RS, Richland Creek Landfill 2018 GCCS Expansion, Buford, GA (July-August 2018).
 - RS, Pine Ridge Landfill 2018 Phase II GCCS Expansion, Griffin, GA (October-December 2018).
 - RS, Pine Ridge Landfill 2019 GCCS Expansion, Griffin, GA (July-September 2019).

Merced Regional Waste Authority, Highway 59 Landfill, Merced, California. Performed design assistance and full-time construction quality assurance (CQA). The system expansion includes the re-drilling and installation of landfill gas extraction wells. Providing communication between the construction crew and the design engineers when needed and initiate preparation of the construction completion certification report.

Republic Services (RS) and Advanced Disposal Services (ADS), Landfill Gas Collection and Control System (GCCS) Expansion Designs, Various Sites

- Evaluated existing LFG collection coverages based on radiuses of influence for LFG extraction wells, surface emission exceedance locations, and recommendations from the OM&M personnel to design LFG extraction wells to maintain or increase gas collection coverages in areas of the landfill
- Evaluated liquid level and depth to bottom measurements and wellhead monitoring data for existing LFG extraction wells to determine whether a well would need to be replaced/redrilled or would require a pump due to regulatory or operational concerns.
- Designed LFG extraction well depths and materials specifications based on surveyed ground surface elevations and landfill top of protective cover, subgrade, or top of clay layer elevations.
- Designed LFG collection (header/lateral), air supply, and liquid conveyance piping in order to meet and improve landfill gas operational needs and capabilities.
- Evaluated predicted LFG collection flows and condensate generation to size and evaluate condensate management systems.
- Provided cost estimates to be able to keep clients informed based on budgetary requirements.
- Assessed OM&M and site specific needs and recommendations to design GCCS components that were more durable and sustainable.
- Reviewed shop drawings and specifications provided by construction contractors to meet the requirements and intentions of the designs.
- Provided construction management services to provide guidance on the design specifications and intentions and troubleshoot design/field issues that occurred during construction with contractors and CQA personnel.
- Projects included:
 - RS, Pineview Landfill 2019 GCCS Expansion design, Dora, AL (July 2019)
 - RS, Pine Ridge Landfill 2019 GCCS Expansion design, Griffin, GA (January-March 2019, May 2019)
 - ADS, Star Ridge Landfill Vertical LFG Extraction Well design, Moody, AL (August-September 2019)
 - ADS, Turkey Trot Landfill 2019 GCCS Expansion design, Citronelle, AL (June 2019)
 - ADS, East Baton Rouge Parish North Landfill 2019 GCCS Expansion, Zachary, LA (September 2019).

Waste Containment Facility Design and Permitting

Waste Management Inc., Marana Regional Landfill, Marana, Arizona. Engineer. Prepared slope stability calculation package for the existing footprint of the landfill, with the proposed horizontal expansion to demonstrate the stability and approach piggy backing waste on the existing slopes.

Asarco LLC, Silver Bell Mine, Tucson, Arizona. Engineer. Prepared slope stability calculation package for the waste rock storage on the mine footprint.

Waste Management Inc., Marana Regional Landfill, Marana, Arizona. Engineer. Served as the secondary CQA Monitor for the cell construction event. Maintained proper documentation of construction activities, and prepared final CQA certification report.

Waste Management Inc., Kirby Canyon Landfill, Morgan Hill, California. Engineer. Served as a staff engineer for designing the CASP pad for composting. Prepared calculation package for air

compressor and blower specs for the CASP. Assisted in the stormwater calculations and permit package for the CASP pad.

City of Tucson, Los Reales Landfill, Tucson, Arizona. Engineer. Designed stormwater management and control system for the final slope of the landfill. Prepared the calculation package for the design system.

DeKalb County Public Works Sanitation Division, Seminole Road Landfill, Phase 3, Unit 2, Cell 1 and Cell 2 (subgrade), DeKalb County, Georgia. Construction Project Manager. Served as the construction project manager and Owner's Representative for the cell construction project, along with Leachate Tank and permanent access road construction. Specific tasks included managing the on-site CQA technician, reviewing and approving construction submittals and design change requests by Contractor, reviewing Contractor invoices and change order requests, conducting weekly construction progress meetings, and preparing the as-built report and drawing.

DeKalb County Public Works Sanitation Division, Seminole Road Landfill, GA EPD 5 year Permit Review, DeKalb County, Georgia. Engineer. Prepared the slope stability calculation package for the entire footprint for the landfill as a part of the 5 year Permit Review by GA EPD. Analyzed the waste tonnage for the site, wastewater sludge intake and properties at the site.