Samuel Burgess

Education

B.S.E. – Mechanical Engineering, Messiah University, 2021

Training / Certifications

Drilling Atop Lined Landfills Training by SCS Engineers

Professional Experience

Mr. Burgess is a Staff Professional with SCS Engineers based in the Harrisburg, Pennsylvania office. He has assisted in the design of construction drawing sets in AutoCAD, reviewed contract submittals for approval, has prepared as-built record documentation and Construction Certification Reports, and provided construction quality assurance for gas collection and control expansion systems, as well as final cap and bottom liner construction projects. Examples of Mr. Burgess’ project experience include:

**Republic Services Conestoga Landfill, Morgantown, PA.** Assisted on the design of the 2021 and 2022 GCCS Expansion projects, and reviewed and compiled documents and data for Monthly Landfill Gas SOP meetings. Assisted O&M personnel to collect liquid level measurements, and created well liquid level and dewatering reports for the Quarterly Data Review. Provided CQA for the 2021 Phase 2 GCCS Expansion, to include drilling LFG wells and the installation of 36” header piping.

**Republic Services Modern Landfill, York, PA.** Assisted on the design of the 2021 and 2022 GCCS Expansions and created documents for Monthly Landfill Gas SOP meetings and Enhanced Monitoring Program meetings. Assisted O&M personnel to collect liquid level measurements, and created well liquid level and dewatering reports for the Quarterly Data Review.

**Waste Connections Blue Ridge Landfill, Chambersburg, PA.** Provided CQA for the installation of a blower/flare station, including the installation of LFG header piping, condensate sumps and setting new blower skids. Documented construction activities, tracked change orders, performed testing and other construction activities.

**Lanchester Landfill, Narvon, PA.** Provided CQA for a partial final cap and closure turf construction project, documented construction activities, tracked repairs, destructs, seams, and other construction activities.

**BRADS Landfill – H2S Treatment Evaluation, Saint Clair, PA.** Provided CQA for a bottom liner system construction project, documented construction activities, tracked repairs, destructs, seams, and other construction activities. Additional work included conducting media changeouts of the hydrogen sulfide treatment system.

**Republic Services Carleton Farms Landfill – H2S Treatment System, Siloxane Treatment System, and Blower/Flare Station Design.** Assisted on the evaluation for treatment options to reduce hydrogen sulfide from the landfill gas upstream of flares and an energy facility, and siloxane from the landfill gas upstream of an energy facility. Prepared a design of H2S and Siloxane treatment system, centralized blower and flare station.

**Burlington County Resource Recovery Complex, Columbus, NJ.** Assisted O&M personnel to collect liquid level measurements, and created well liquid level and dewatering reports for pump installation recommendations. Prepared complete O&M manual of the Blower and Flare system to aid onsite staff in the daily operations and maintenance.

**Greater Lebanon Refuse Authority, Lebanon, PA.** Performed CQA monitoring for multi-layered 12-acre bottom cell liner system and cap repair construction project. Responsibilities included daily monitoring of testing and installation, along with complete record keeping and design of as-built information. Aided in the development of a standardized logging system for documenting liner installation.

**Bethlehem Landfill, Bethlehem, PA.** Prepared various SEM routes for SCS quarterly gas monitoring

**Landfill Site 1E, North Arlington, NJ.** Aided in the design of a low point condensate collection drain, size of pump to be installed, and header modification at blower inlet for the pump station.

**Salem County Landfill, Alloway, NJ.** Aided SCS Field Services with the installation of 6” LFG vacuum risers. Additional work included installing gas collection piping below final capping and corresponding liner repairs.

**Kin-Buc Landfill, Edison, NJ.** Aided with and documented the liner repair of damaged capping material due to below grade fires.

**Waste Connections LRI Landfill – H2S Reduction System, Puyallup, WA.** Aided in the design of a hydrogen sulfide treatment system for partial treatment of H2S prior to a flare station.

**Bristol Landfill, Bristol, VA.** Assisted on the design of the Phase 1 GCCS Expansion project in 2022. Duties included analysis of landfill gas quality, liquid quantities and vacuum availability for providing concepts of piping networks, extraction well locations and pump sizing.