Ryan m mahon, PE

Education

MS – Civil and Environmental Engineering, University of Virginia, 2017

BS – Physics, Randolph College, 2015

Licenses/Certifications

Professional Engineer - Virginia

Plan Reviewer for Stormwater Management - Virginia Department of Environmental Quality

Professional Experience

As a Project Professional, Ryan Mahon is responsible for completing a number of landfill, geotechnical, landfill gas (LFG), and stormwater management-related tasks for a number of different clients. Since joining SCS, Mr. Mahon has contributed to landfill design and CQA and annual tasks, landfill gas design and LFG monitoring, stormwater management design and field sampling, and project management.

Projects have typically involved landfill and landfill gas permitting, as well as, construction level design. Landfill tasks have also typically included annual submittals and reports. Mr. Mahon has completed fieldwork which included landfill gas monitoring and adjustment, stormwater sampling, and Construction Quality Assurance for a number of landfill construction projects, as well as, provided construction management to a number of landfill and landfill gas projects.

Landfill Engineering

Dumfries, VA, Churchill Downs Incorporated – *December 2022 to Present:* Acted as owner’s representative for the Potomac Landfill Closure. Reviewed closure drawings, closure submittals, civil site designs, permit documents, and contractor work and provided feedback to the Owner. Acted as the owner’s representative during VDEQ inspections and meetings, as well as, discussions and meetings with earthwork contractors.

Madison Heights, VA, Amherst County - *July 2021 to Present:* Completed financial analysis for County disposal options between the Landfill and the Transfer Station.Managed and completed annual submittals including surveys, airspace analysis, reports to VDEQ, and financial assurance. Utilized grading plans created for the major permit modification to assist waste placement operations. Completed design calculations and updated stormwater channels and pipes on the landfill perimeter.

**Verona, VA Augusta Regional Landfill No.2 –** *June 2018 to Present:* Project manager for Phase 5 construction, landfill gas construction, and final closure construction project. Created drawing sets for each phase of the construction project. Worked with the client on feasibility and permitting requirements. Have completed or assisted with annual airspace analysis. Created new grading plans for both cell base and final closure. Provided PCstabl analysis and updated grading plans for issues arising during the annual airspace submittal to VDEQ. Completed construction cost estimates for upcoming projects. Provided updated grading plans and edit existing surveys based on new survey points.

**Bristol, VA, City of Bristol –** *May 2022 to Present:* Provided landfill and landfill gas updates and information for the recent Plan of Action Submittal to VDEQ and EPA. From August to the present, hosted weekly regulatory update calls between the City of Bristol, SCS, VDEQ, and EPA. Presenting/discussing ongoing construction, monitoring, and lab results, and potential solutions to site issues.

**Dumfries, VA, Dominion Energy –** *July 2018 to 2021:* Helped complete as-built drawings for final submittal to the county. Spoke with County officials to answer project and final submittal questions.Completed the slope stability analysis for the final design for the county using the program Geostase. Assisted in construction drawing submittals by completing various drawings mainly completing slope stabilization grading design and site layout. Reviewed contractor submittals for quality assurance purposes. Created and Reviewed cut/fill mapping for construction purposes.

**Chester, VA Shoosmith Sanitary Landfill –** *August 2017 to Present:* Assisted in expansion cell design. Helped prepare yearly financial assurance documents and cut/fill mapping documents for airspace submittal.

Construction Quality Assurance (CQA)

Virginia Beach, VA, Virginia Beach Landfill No. 2 – *August 2022 –November 2022:* Acted as the CQA manager for the Closure Cap at the Virginia Beach Landfill. Provided on-site CQA for geosynthetic closure, as well as, assistance to other on-site CQA technicians. Attend Bi-weekly meetings and reviewed submittals from the contractors. Provided answers to clients and contractors regarding geosynthetic closure completion, testing, etc.

Virginia Beach, VA, Waste Connections – *May 2022 to December 2022:* Acted as the CQA manager for Waste Connections during a landfill gas construction project. The project retrofitted the previous on-site header with a new larger diameter header. Provided assistance to the on-site CQA technician and responded to questions from the client and contractor. Completed the final CQA report

Madison Heights, VA, Amherst County - *September 2022:* Acted as CQA manager for liner repair at the Amherst County landfill. Contacted geosynthetic liner installers and manufacturers to receive immediate assistance. Provided assistance to on-site CQA technicians. Provided written notice and summary of completion to VDEQ

Virginia Beach, VA, Waste Connections – *January 2021 to May 2021:* Acted as the CQA representative for Waste Connections during a landfill gas construction project which constructed and connected 18 new extraction wells at the Hampton Roads Recovery Center C&D landfill. Provided well logs, daily reports, and photos during the 4-week project. Weekly updates to clients and necessary meetings. Provided a CQA report with all notes and logs for the client. Project Manager for the project.

**Christiansburg, VA, Christiansbug –** *August 2021:* Acted as CQA representative for landfill gas extraction well installation and header update. Provided technical assistance to contractors and recorded temperatures, well depths, and material backfill logs. Provided field notes and pictures for final results.

**Chesapeake, VA, John C. Holland LF –** *April 2020 to August 2020:* Acted as the CQA representative for the Holland LF during new cell construction. Provided daily updates to the owner of the landfill. Kept detailed daily reports as well as geosynthetic logs: panel placement, seaming log, repair logs, trial weld log, destructive tests. Assisted in the creation of the final CQA report

**Chester, VA, Shoosmith Sanitary Landfill –** *2018 to Present*: Acted as part-time CQA representative for portions of the LFG well expansion and LFG pipe placement for Morrow Energy. Performed part-time and full-time CQA for multiple new cell construction and closure projects between 2018 and 2020. Provided field notes and geosynthetic logs for each project. Acted as full-time CQA representative for the LFG well expansion during July 2018. Completed well logs and daily notes.

**Dumfries, VA, Dominion Energy** – *July 2018 to 2021:* Acted as the primary CQA representative for the north shore possum point slope stability project. Provided daily engineering feedback to the contractors and Dominion Energy. Provided Daily reports and weekly updates during construction meetings. Confirmed that all earthwork and material testing met project specifications.

Landfill/ Landfill Gas Permitting

**Madison Heights, VA, Amherst County –** *July 2020 to June 2022:* Project Manager for major permit modification. Submitted a Part B major permit amendment for the Amherst County Landfill to uncap and reactivate the closed portion of the landfill. Completed design drawings and updated all Part B Permit documents to include a new grading plan and reclaim forfeited airspace. Obtained the VDEQ Temporary Authorization for Uncapping. Updated all permit documents to allow the acceptance of Household Hazardous Waste on-site. Made Minor permit amendments to the monitoring plans of the closed landfill owned by Amherst County.

**Rustburg, VA, INGENCO –** *October 2021 to February 2022:* Completed site plan for the proposed Landfill Gas to Energy plan on the Livestock Rd Landfill. Submitted drawings and a report of the proposed facility to Campbell County for a Special Use Permit. Two public hearings were held as part of the Special Use Permit proceedings.

**Verona, VA Augusta Regional Landfill** – *June 2018 to December* 2021 – Assisted with permit level drawings, permit document revisions, and technical review response for the major permit amendment to update the base grading plan and the final closure plan. Completed permit-level drawings for a new landfill gas collection and control system for Augusta County. Replied to the Technical Review response for the Landfill Gas designs.

Landfill Gas Monitoring

**Chester, VA, Shoosmith Sanitary Landfill –** *July 2018 to Present*: Performed LFG monitoring starting in April 2019, including wellfield monitoring with GEM 5000/2000 and well adjustments, weekly flare monitoring and flow meter readings, air monitoring with Jerome hydrogen sulfide analyzer

**Blue Ridge Resource Authority, VA** – *September 2019:* Completed third-quarter probe monitoring and interior monitoring with GEM 5000

**Dublin, VA, New River Resource Authority Landfill** – *October 2017 to December 2018:*  Performed LFG design for landfill gas expansion in the winter of 2017-18 and landfill gas system repairs. Completed fieldwork which included CQA of landfill gas system expansion and repairs, as well as, monthly wellfield monitoring from May 2018- December 2018 using GEM 5000/2000

Stormwater Management

**Charlottesville & Troy, VA, Republic Services –** *January 2018 to Present:*Conducted stormwater management site evaluations for Republic-owned sites. Handle Semi-annual stormwater sampling for these sites.

**Calvert County, MD Pyramid Network Services –** *March 2018 to Present:* Assisted in the stormwater design of a number of Pyramid sites. As well as, assisted on stormwater calculations/ design on a number of Pyramid sites.

**Lexington, VA, Rockbridge County Fancy Hill Collection Center.** Assisted on the stormwater management design and calculations for recent construction drawings for the new collection center