

## CHARLES J. WARREN, PE

### Education

BS – Mining and Minerals Engineering, Virginia Polytechnic Institute and State University, 2007



### Professional Licenses

Professional Engineer – Virginia

### Professional Experience

As a Senior Project Engineer, Mr. Warren manages projects in landfill engineering, solid waste facilities design, site development, and mine planning. Since joining SCS in 2014, he has completed solid waste permitting, stormwater management, facility design, mine closure, and design projects for municipal and private clients.

Projects typically have involved operation analysis, budget planning, facility design, stormwater analysis, environmental permitting, and construction services. Facilities have included landfills, convenience centers, radio towers, mining operations, and support facilities.

### Landfill Engineering

**Amelia, Virginia, Waste Management Maplewood Landfill.** Project Manager for a partial closure and exposed geomembrane cover project. Prepared closure designs and analysis of options for closure. Identified opportunities to improve on existing permitted closure design. Prepared permit drawings to support a solid waste permit modification.

**Apex, North Carolina, South Wake Landfill Life of Landfill Extension Study.** Project Manager for the South Wake Landfill Life Extension Study to evaluate multiple strategies for increasing the capacity of the existing and future waste disposal units. Reviewed the existing landfill design and considered the impact and financial cost of implementing modifications such as increased final grade slopes, lower based grades, mechanically stabilized earth wall, overfilling, increased waste compaction, and lateral expansion.

**Bedford County, Virginia, Bedford County Landfill.** Project Manager for design and support of operations at the county's active landfill. Managed an update to the facilities wetland delineation and revised the site's master plan and life expectancy projections. Prepared estimates of capital expenditure for closure and expansion activities. Developed documentation for a major solid waste permit modification. Supported analysis of the County's current disposal methodology and possible alternative disposal option.

**Buena Vista, Virginia, Blue Ridge Resource Authority.** Task Manager for construction quality assurance during construction of an 18-acre final cover project.

**Chester, Virginia, Shoosmith Sanitary Landfill.** Senior Project Engineer to support expansion of the landfill. Conducted a review of the cell construction phasing plans identify the most beneficial cell construction sequence. Prepared permit amendments including updates to permit geosynthetics specifications to meet up to date industry standards and a major modification to permit and quarry as a disposal cell. Supported site plan development and efforts to secure local government

approval. Coordinates quality control of cell construction and closure and provided supporting documentation.

**Chester, Virginia Comerica Bank Due Diligence.** Project Manager for a review of the site's anticipated available capacity, anticipated development capital costs, and projected closure cost.

**Dumfries, Virginia, Possum Point Power Station.** Project manager for permitting, bidding, and construction of a slope stabilization project. Prepared and coordinated the development of construction drawings for modifications to a landfill to correct a slope failure. Prepared bid documents including a project manual and technical specifications. Reviewed bids and prepared analysis document and follow-up questions for bidders. Contributed to the development of geotechnical analysis of the proposed solution. Coordinated local site and building permitting efforts. Managed construction quality control efforts during construction and design modifications during construction.

**Staunton, Virginia, Augusta Regional Landfill** Project Manager for landfill engineering services at the Authority's landfill. Managed updates to the facility's airspace analysis and estimated closure costs. Assisted the county with liner repair oversight and documentation for regulatory compliance. Prepared documentation for alternate final cover design.

## **Solid Waste Facilities**

**Chatham, Virginia, Pittsylvania County Convenience Center Design.** Project Manager responsible for design of new citizen's convenience centers for the County and modification designs for existing convenience centers. Deliverables includes design report analyzing the existing network of convenience centers, preliminary design of proposed layouts, cost estimation, and location analysis.

**Natural Bridge, Virginia, Rockbridge County Fancy Hill Collection Center.** Provided stormwater design assistance for permitting of a new collection center.

## **Stormwater Management**

**Calvert County, Maryland, Pyramid Network Services.** Project Manager for stormwater planning for emergency communications towers. Specific activities involved development of stormwater management plans, erosion and sediment control plans, grading plans, and best management practice sizing and design.

**Richmond, Virginia, Pyramid Network Services.** Project Manager for stormwater planning for emergency communications towers in three jurisdictions. Specific activities involved development of stormwater management plans, erosion and sediment control plans, environmental site assessments, and grading plans.

## **Mining Engineering**

**Stony Creek, Virginia, Iluka Resources Virginia Operations.** Mining Engineer for two active mine sites and one reclamation site. Prepared reserve projections and modeled production outputs. Managed permitting with state agencies and coordinated local permitting. Used Geographic Information Systems (GIS) to track ore values on a per property basis. Managed closure design projects and design of support infrastructure. Completed troubleshooting and repairs of Trimble GPS systems and worked with operators to construct grading using the systems.

**Roanoke Rapids, North Carolina, Iluka Resources Aurelian Springs Project.** Mining Engineering support for the development of a new mining operation. Managed permitting activities and studies

in preparation for the new operation. Prepared Mine Engineering portions of the project pre-feasibility study. Prepared production models for financial analysis and project justification. Managed infrastructure design in coordination with land acquisition and environmental compliance teams.