# SCS ENGINEERS

# JEFFREY K. REED, PE

Vice President/Business Unit Director National Partner – Landfill Engineering Practice

#### Education

University of Illinois, Bachelor of Science in Civil Engineering (Honors)

# **Professional Licenses**

Registered Professional Engineer: Alabama, Florida, Louisiana, Minnesota, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, and Texas

#### Professional Affiliations

American Society of Civil Engineers Solid Waste Association of North America

# Professional Experience

Mr. Reed has over 32 years of experience working predominantly on solid waste landfill projects. Project experience includes storm water management, erosion control, hydrogeologic/hydraulic analysis, landfill and transfer station design, landfill and transfer station permitting, geosynthetic lining and cover systems, landfill leachate control, slope stability analysis, and construction quality assurance (CQA). He has provided design and consulting services for projects at over 100 landfill facilities in 26 states across the U.S. and in Canada.

#### **Design and Permitting**

- Project Director for a landfill reconfiguration modification in Nacogdoches, Texas.
- Project Director for a greenfield MSW transfer station registration application in Bastrop County, Texas.
- Project Director to horizontally and vertically expand a C&D landfill in Houston, Texas.
- Project Director to vertically expand a C&D landfill in Houston, Texas.
- Project Director for a greenfield MSW transfer station permit application in Williamson County, Texas.
- Project Director for a greenfield MSW transfer station registration application in Bastrop County, Texas.
- Project Director for a Limited Scope Permit Amendment for Class 1 waste disposal at a municipal landfill in Needville, Texas.
- Project Director for a Limited Scope Permit Amendment for Class 1 waste disposal at a municipal landfill in Laredo, Texas.
- Project Manager for a 17 acre cell construction design and bid package for earthwork and geosynthetics for a municipal landfill in Nacogdoches, Texas.

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- Project Director for a 15.4 acre cell construction design and bid package for earthwork and geosynthetics for a municipal landfill in Laredo, Texas.
- Project Director for a permit renewal for a municipal landfill in Jackson, Mississippi.
- Project Director for an alternate liner permit modification for a municipal landfill in Nacogdoches, Texas.
- Project Director for a 20 acre final closure design and bid package for earthwork for a municipal landfill in Nacogdoches, Texas.
- Project Manager for a CQA Plan revision for a landfill in West Memphis, Arkansas.
- Project Manager to reconfigure a MSW transfer station in Houston, Texas.
- Project Manager for preparation of a minor permit amendment to redesign the landfill base grades and upgrade the construction details for a landfill in Angleton, Texas.
- Project Manager for preparation of a major permit amendment for a landfill expansion in League City, Texas.
- Project Manager for preparation of a major permit amendment for a landfill expansion in League City, Texas.

# **Construction Quality Assurance**

- Design Engineer for over 45 cell construction projects in 10 states. Responsibilities included
  preparation of landfill cell and final cover construction plans, specifications, bid documents,
  technical support, construction progress review, and regulatory liaison. Liner and cap design and
  construction includes compacted clay, geosynthetic clay liners, geomembranes, geonets,
  geocomposites, and geotextiles.
- Certifying Engineer for over 50 cell Subtitle D liner systems and final cover installation projects in Alabama, Georgia, North Carolina, Oklahoma, and Texas. Responsibilities included reviewing the progress of the work, review field reports, laboratory data and files, review and approve submittals and applications for payment from the contractor, make site visits to observe the progress of construction, and certify the documentation report.

#### Hydrologic/Hydraulic Analysis and Design

- Project Manager or Design Engineer for hydrological and hydraulic analysis and design at over 25 landfills in 14 states. Experience includes the analysis of drainage areas from less than 0.1 acre to over 200 acres. Designs include open channel systems such as earthen channels and riprap, concrete, and other lined channels; and closed conduit drainage systems; stormwater control basins for detention, retention, and/or sedimentation purposes; temporary and permanent erosion and sediment control berms, swales, terraces, benches, and other sediment and erosion protection measures.
- Responsible for preparation of a flood plain location restriction study for a landfill in Brownsville, Texas.
- Project Manager for design of access road and drainage plan for a landfill in Chicago, Illinois.
- Project Manager for design of an access road and drainage plan for a landfill and recycling facility in Elwood, Illinois.

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• Project Manager for design of a drainage plan and sedimentation pond, sediment pond construction plans and technical specifications for a landfill in Natchez, Mississippi.

# Publications and Presentations

Reed, J.K., "Technical Content of Regulations", Automated Manufacturing Exhibition and Conference, Greenville, South Carolina, May 1994.

Reed, J.K., "Utilizing Design Alternatives to Optimize Operational Flexibility at a Subtitle D Landfill", Wastecon 1999, Reno, Nevada, October 1999.

Reed, J.K. and Elizondo, M.R., "Effective Landfill Design and Operation in Coastal Regions", Waste Tech Landfill Technology Conference, Phoenix, Arizona, February 2006.

Reed, J.K., Allendorf, M. and Elizondo, M.R., "Effective Design and Construction of Subtitle D Landfill Liners Below the Groundwater Table", Global Waste Symposium, San Antonio, Texas, October 2010.

Reed, J.K. and Elizondo, M.R., "Design and Operational Considerations For Managing E&P Oilfield Waste in MSW Landfills", SWANA 20th Annual Landfill Symposium, Charleston, South Carolina, April 2016.