

Professional Record

Professional Synopsis:

Mr. Maier has fifteen years of design and project management for geotechnical and geoenvironmental projects.

Waste Management Engineering. Mr. Maier has extensive experience in all aspects of the design, permitting, and construction of complete municipal waste management facilities, as detailed on the following pages. Mr. Maier has designed several leachate recirculation systems and has published three papers on the topic. Mr. Maier's landfill gas management experience includes design of landfill gas systems for sites in Maryland, Delaware, Pennsylvania, Georgia, and North Carolina.

Environmental / Remediation Engineering. Mr. Maier's environmental project experience includes design of an air sparging system, preparation of hazardous waste removal action work plans and environmental sampling plans for superfund sites, statistical analysis of analytical data, management of the removal of PCB-contaminated soils, and preparation of environmental site assessment reports.

Air Quality Permitting. Mr. Maier has extensive air quality permitting experience, including preparation of NSPS Tier 1 and 2 evaluations and Title V permit applications. He has performed air quality permitting work for sites in Maryland, Delaware, Pennsylvania, Georgia, North Carolina, Tennessee, and Mississippi.

Geotechnical Engineering. Mr. Maier has performed analyses of slope stability, earth retaining structures, settlement, bearing capacity, vertical and lateral pile capacity, sheetpile walls, blasting-induced vibrations, pressure-injected footings, liquefaction and dynamic compaction. Mr. Maier has significant experience with inclinometers, vibrating-wire piezometers, thermistors, and data acquisition/telemetry systems. Mr. Maier's earthquake engineering experience includes performing seismic impact analyses for nine landfills and using controlled source surface wave testing to determine the dynamic properties of incinerator ash.

Erosion and Sediment Control/Storm Water Management. Mr. Maier has prepared numerous erosion and sediment control plans and complete storm water management system designs for unique and challenging sites including the sensitive shoreline of the Chesapeake Bay, a superfund site abutting tidal marshes, and the rugged topography of coal-mining country. His designs have included all common E&S/SWM features as well as stream channel restoration, multi-stage sedimentation, and flocculation.

For Avery County, North Carolina, Mr. Maier designed multi-stage outlet structures for stormwater detention basins to both cool and aerate the outflow prior to discharge to a cold water trout stream. For Newton County, Georgia, he designed the phased development necessary to convert old unlined disposal cells to new lined cells without interruption to site operations.

Thomas B. Maier, P.E. Senior Project Engineer

Academic Credentials:

B.S., Civil Engineering, Rensselaer Polytechnic Institute (RPI), Troy, NY, 1987

M.S., Civil Engineering, RPI, Troy, NY, 1989

Professional Credentials:

Professional Engineer - Virginia

40 Hour Health and Safety Training (29CFR1910)

Employment Record:

1998-2001, 03-04, 2008-present – Richardson Smith & Gardner Associates (formerly G.N. Richardson & Associates, Inc.)

1993-1997 GeoSyntec Consultants

1989-1992 GZA GeoEnvironmental, Inc.

Principal Areas of Expertise:

Landfill Containment and Closure Design

Geotechnical Engineering

Construction Management

Construction Quality Assurance (CQA)

Professional Activities:

American Society of Civil Engineers

Publications:

Maier, T.B., Vasuki, N.C., Pohland, F.G., and Steinhauser, E.S., "Integrated Leachate and Landfill Gas Management," proceedings of the *Fifth International Landfill Symposium*, Cagliari, Italy, October 1995.

Maier, T.B. and Vasuki, N.C., "Expected Benefits of a Full-Scale Bioreactor Landfill," proceedings of *SWANA's Wastecon 1996*, Portland, Oregon, September 1996.

Maier, T.B., "Analysis Procedures for Design of Leachate Recirculation Systems," proceedings of *SWANA's Third Annual Landfill Symposium*, Palm Beach Gardens, Florida, June 1998.

Schmertmann, G.R., Kavazanjian, E., Matasovic, N., Bonaparte, R., and Maier, T.B., "Seismic Analysis for Four Geosynthetic-Lined Landfills," *Seismic Analysis and Design Considerations for Municipal Solid Waste Landfills*, Saratoga Springs, New York, March 1994.

RICHARDSON SMITH GARDNER & ASSOCIATES, INC.
Engineering and Geological Services