

MARTIN R. STURZL, PE

Education

B.S., Mechanical Engineering, University of Wisconsin-Platteville, 1985

Professional License

Professional Engineer – Wisconsin



Specialty Certifications

40-Hour Hazardous Materials Handling Training
Operator - Troxler Nuclear Testing Equipment

Professional Experience

Mr. Sturzl has over 30 years of experience as an environmental engineer with extensive experience in landfill planning, permitting and design, mining, construction, and quality assurance/control. His landfill project experience includes cover installation, gas system construction, waste relocation, plan of operation, plan modification, and ash disposal facility design and construction. He has also prepared landfill feasibility reports and a variety of construction observation reports. His mining experience includes preparation of long-term mine plans, tailings/waste rock management, and reclamation planning.

MSW Landfills

Brown County, Wisconsin, Landfill Plan of Operation. Acted as lead engineer responsible for the design and preparation of a Plan of Operation report for the Brown County South Landfill. Proposed facility had a capacity of approximately 9 million cubic yards. Report was prepared in accordance with NR 500 of the Wisconsin Administrative Code.

Outagamie County, Wisconsin, Landfill Feasibility and Plan of Operation Report. Acted as project manager/lead engineer responsible for the design and preparation of feasibility and plan of operation reports for the Outagamie County Northwest Landfill. Proposed facility had a capacity of approximately 12 million cubic yards. Report was prepared in accordance with NR 500 of the Wisconsin Administrative Code.

LaCrosse County, Wisconsin, Landfill Redevelopment. Acted as certifying engineer and project manager for large scale redevelopment project at the LaCrosse County Landfill which included relocation of a closed landfill. Responsible for preparation of construction specifications, bidding documents, construction quality assurance (CQA) plans, and construction observation reports, in addition to construction management and contract administration. The project included permitting for a major vertical and horizontal expansion of the existing landfill.

Various, Wisconsin and Illinois, Landfill Design. Acted as lead engineer for various landfill design projects in the Midwest, including the LaCrosse County Landfill, Outagamie County Landfill, Winnebago County Landfill, Deer Track Park Landfill, and Lake Area Disposal Landfill in Wisconsin; a hazardous waste containment facility in Freeport, Illinois; and an ash disposal facility and paper mill sludge landfill in Michigan. The projects included preparation of feasibility reports, plan of operations, closure plans, and plan modifications.

Various, Wisconsin, Landfill Gas System Design. Acted as lead engineer for the design of active gas systems for the Winnebago County Landfill, Outagamie County Landfill, LaCrosse County Landfill, Shawano Landfill, and the Lake Area Disposal Landfill.

Various, Wisconsin, Landfill Closure Construction. Acted as certifying engineer and project manager for landfill final cover construction projects at the Winnebago County Landfill, Outagamie County Landfill, Shawano Landfill, and LaCrosse County Landfill. Responsible for preparation of construction specifications, bidding documents, CQA plans, and construction observation reports in addition to construction management and contract administration. Projects included installation of active gas extraction systems.

Various, Wisconsin, Landfill Construction. Acted as certifying engineer and project manager for landfill cell construction projects at the Winnebago County Landfill, LaCrosse County Landfill, Outagamie County Landfill, and Lake Area Disposal Landfill. Responsible for preparation of construction specifications, bidding documents, CQA plans, and construction observation reports in addition to construction management and contract administration.

Various, Wisconsin, Landfill Surface Water Management. Acted as lead engineer for the design of surface water management systems for the Winnebago County Landfill, LaCrosse County Landfill, Deer Track Park Landfill, and Lake Area Disposal Landfill.

Shawano, Wisconsin, Shawano County Landfill, Landfill Plan of Operation. Acted as lead engineer responsible for design of the east expansion.

Menominee, Michigan, United Waste, Landfill Cover Installation. Acted as lead CQA engineer for final cover installation. Coordinated construction observation activities and certification report preparation.

Oshkosh, Wisconsin, Winnebago County Sunnyview Landfill, Landfill Gas System Construction. Acted as project manager for Phase I gas system installation. Prepared bidding and construction documents and drawings, and coordinated construction observation activities and report.

Oshkosh, Wisconsin, Winnebago County Snell Road Landfill, Landfill Waste Relocation. Acted as project manager for relocation of waste from an unlined area. Prepared permit and bidding documents and supervised construction observation activities.

Oshkosh, Wisconsin, Winnebago County Sunnyview Landfill, Landfill Plan Modification. Acted as project manager responsible for the preparation of a major plan modification. Modification incorporated the use of geosynthetics and a horizontal gas collection system.

Rice Lake, Wisconsin, Lake Area Disposal Landfill, Construction Documentation. Acted as project manager for construction observation activities associated with construction of Phases 3A, 3B, and 4 of the South Expansion. Responsibilities included:

- Coordination of field personnel
- Preparation of a pre-construction report
- Review of test results and procedures
- Shop drawing review
- Resolution of design oriented issues
- Preparation of a construction observation report following construction

Rice Lake, Wisconsin, Lake Area Disposal Landfill, Feasibility Report. Acted as project manager responsible for the preparation of a feasibility report for the East Expansion. Proposed facility had a capacity of approximately 5 million cubic yards which included an ash monofill area. Report was prepared in accordance with NR 500 of the Wisconsin Administrative Code.

Rice Lake, Wisconsin, Lake Area Disposal Landfill, Plan Modifications. Prepared numerous plan of operation and closure plan modifications. Designs included incorporation of active gas systems, composite covers and liners, and other modifications in response to Subtitle D regulations.

East Troy, Wisconsin, Troy Area Landfill, Initial Site Report Preparation. Acted as project manager responsible for preparation of an initial site report for the East Expansion. Duties included coordination of drilling and sampling activities, design, report, and drawing preparation.

Menominee, Michigan, United Waste Systems of Menominee Landfill, Landfill Closure Construction. Prepared construction specifications and CQA plan in accordance with Michigan Act 641 for closure.

Marquette, Michigan, Marquette County Landfill, Municipal Landfill Construction. Prepared bidding documents and construction drawings and provided bid administration for phase construction. Design featured a double geomembrane liner with a composite layer consisting of bentonite amended soil.

Rice Lake, Wisconsin, Lake Area Disposal Landfill, Landfill Gas System Design. Designed an active gas system for the South Expansion.

Industrial Landfills

Iowa, Coal Ash Landfill Closure. Acted as lead engineer responsible for the design and preparation of construction drawings and specifications for closure of a large coal combustion residue (CCR) impoundment for the large electric utility in Iowa. Total construction costs were in excess of \$50 million.

Freeport, Illinois, Modern Plating Corporation Landfill Design. Acted as lead engineer responsible for design of a hazardous waste containment landfill. Design included a double synthetic liner and a phased construction involving relocating waste from existing lagoons to the landfill.

Michigan, Ash Disposal Facility Design and Construction. Prepared bidding documents for construction of a Michigan Department of Natural Resources Type III ash disposal facility. The design featured a double composite liner consisting of geomembrane, geosynthetic clay liner material, and geocomposite drainage material. The design also included a double lined leachate pond featuring a leachate recirculation and ash conditioning system. Responsibilities included shop drawing review and troubleshooting during construction.

Mosinee, Wisconsin, Mosinee Paper Sludge Landfill, Paper Mill Sludge Landfill Closure. Prepared bidding documents and construction drawings for initial closure.

Wisconsin Rapids, Wisconsin, Consolidated Paper, Paper Mill Sludge Landfill Feasibility Report. Involved with the preparation of a feasibility report for an expansion to an industrial waste landfill. Design included a clay liner and groundwater gradient control system.

Quinnesec, Michigan, Champion International, Paper Mill Sludge Landfill Construction. Acted as project manager responsible for construction quality assurance for Phase 2 of the paper sludge landfill. Responsibilities included preparation of bidding documents, bid administration, construction

observation, and preparation of a certification report. Design included a double geomembrane liner and leachate collection system.

Thilmany Paper's Red Hills Landfill, Paper Mill Sludge Landfill Construction. Acted as project manager responsible for preparation of bidding documents and construction drawings for initial construction. Design consisted of a clay lined, zone of saturation facility for disposal of industrial waste.

Mining

Black River Falls, Wisconsin, Badger Mining Corporation, Mine Planning. Acted as lead engineer responsible for preparation of short-term and long-term mine plans for the silica sand mine. The plans included management of overburden, process water, and storm water.

Northern Manitoba, Canada, Victory Nickel Minago Proposed Mine, Mine Tailings, and Waste Rock Storage Facility Design. Acted as lead engineer responsible for design of tailings and waste rock storage facilities.

Marquette County, Michigan, Kennecott Eagle Project, Mine Site Design. Acted as lead engineer responsible for design of surface facilities. Design included a storm water management system, roadways, development rock storage areas, and process water ponds.

Menominee County, Michigan, Mine Tailings and Waste Rock Storage Facility Design. Acted as lead engineer responsible for design of tailings and waste rock storage facilities for the Back Forty Joint Venture. Design included preparation of phased development drawings from initial construction through closure and reclamation.

Ladysmith, Wisconsin, Flambeau Mine, Mine Reclamation. Acted as lead engineer responsible for developing final reclamation grades. Design included incorporation of engineered wetland areas in addition to balancing on-site materials.

Miscellaneous

Midwest, Industrial Wastewater Pond Design and Construction. Acted as lead engineer responsible for the design, preparation of construction drawings and specifications, and construction certification for industrial wastewater ponds for a large Midwestern food processor.

Publications and Presentations

Paruvakat, PhD, PE, N.; M. Sturzl, PE, 1998. "Cover Soil Placement Over Geosynthetics." Presented at the 20th International Madison Waste Conference, University of Wisconsin-Madison.

H. Koch, PE; M. Sturzl, PE "Extreme Makeover – La Crosse County Landfill Edition – A Case Study of One of the Midwest's Largest Waste Relocation Project," 2009. Presented at SWANA's 14th Annual Landfill Planning and Management Conference, Savannah, Georgia.