# SHERREN CLARK, PE, PG

# Education

M.S., Civil and Environmental Engineering, University of Wisconsin-Madison, 1988

B.A., Geology, Carleton College, 1982

## **Professional Licenses**

Professional Engineer, Wisconsin

Professional Geologist, Wisconsin

## Professional Experience

Ms. Clark has more than 25 years of experience in civil engineering and environmental science, with a technical background in both engineering and hydrogeology. She manages multidisciplinary projects including landfill design and monitoring, brownfield site investigation and remediation, and environmental management and permitting for private and public sector clients. Ms. Clark has an M.S. in Civil and Environmental Engineering from the University of Wisconsin-Madison.

## Solid Waste Management

Managed permitting of solid waste landfill expansions, including hydrogeologic investigation, engineering design, environmental impacts assessment, contested case hearing support, air permitting, wastewater discharge permitting, wetlands analysis, agency negotiations, and local negotiations support.

Managed an investigation to evaluate the feasibility of removing all waste from a Superfund landfill site and constructing a Subtitle D landfill expansion in the former Superfund landfill footprint.

Led research efforts to evaluate methods of measuring fugitive methane emissions from an a large active municipal waste landfill.

Developed Organic Stability Plans and Research, Design, and Demonstration (RD&D) Plans for landfills to facilitate addition of liquids to promote biodegradation of waste.

Negotiated air quality construction and Title V operation permits for landfills and associated landfill-gas-to-energy projects.

Provided services for NSPS compliance including surface emissions monitoring, Gas Collection and Control System (GCCS) reports, and NMOC emissions calculations.

Prepared annual reports to meet landfill requirements for air emissions, leachate recirculation, organic stability, RD&D, groundwater monitoring, and other reporting requirements.

Prepared permitting documents for several solid waste transfer stations, including one rail transfer station.

Completed Plan of Operation documents for two solid waste processing facilities in Wisconsin.

Prepared plan modification requests for many permit modifications at several solid waste facilities.

Provided peer review for landfill expansion feasibility reports prepared by other firms.

Managed construction documentation projects at municipal solid waste and industrial waste landfills.

Assisted utilities with the management of ash disposal sites in Wisconsin and Iowa, including permitting, design, construction, operation, surveying, and monitoring.

Performed groundwater modeling for contamination investigations and landfill design.

Managed clay borrow source evaluation, permitting, and restoration plan development.

Managed groundwater monitoring programs and/or groundwater contamination investigations at more than 15 landfills.

## **Civil Engineering and Water Resources**

Acted as project manager for a multidisciplinary investigation at a hydroelectric power plant to address various issues raised by the Federal Energy Regulatory Commission as part of their safety inspection process. The project included geotechnical evaluation of an earthen dam, investigation of soil conditions below a concrete spillway, and design of a deicing system to be installed upstream of the dam.

Managed the redesign of stormwater management for the coal yard area at a large coal-fired power plant.

Prepared WPDES applications for short-term and long-term dewatering projects, including estimating flow rates and evaluating potential impacts.

Evaluated potential hydrologic impacts for projects including high capacity well installation, landfill underdrain construction, and cranberry bogs.

#### **Contaminated Site Remediation and Redevelopment**

Evaluated environmental issues associated with the redevelopment of a former coal-fired power plant site as condominium housing. Management of contaminated soil was integrated with the site development plan to minimize the associated costs.

Managed over 30 petroleum storage tank remediation site projects. Remediation techniques have included soil excavation, soil venting, air sparging, groundwater extraction and treatment, and natural attenuation. For several active gas stations, remediation activities were coordinated with station upgrades to minimize downtime.

Acted a project manager for a site investigation and remedial design for a solvent release at a nuclear power plant in Michigan.

Led the site investigation for a large historic creosote release at a former wood treatment plant site in Michigan.

Performed polychlorinated biphenyl (PCB) spill cleanup verification sampling for three PCB spill sites at substations.

Evaluated potential redevelopment options for former municipal solid waste landfill and ash landfill sites.

Developed site-specific cleanup standards for soil contamination to minimize remediation costs.

## **Environmental Management**

Performed environmental compliance assessments for four power plants, focusing on solid waste, wastewater, drinking water, and laboratory practices.

Developed solid waste compliance checklists for a utility client to use as part of their annual compliance certification process for their ash landfills.

Completed environmental compliance assessments for two water utilities, focusing on drinking water and hazardous materials storage requirements.

Prepared a management plan to meet Wisconsin Department of Natural Resources (WDNR) wastewater requirements for four seepage ponds at a coal-fired power plant.

## **Air Quality**

Managed construction and Title V operating permit application projects and negotiated permit conditions and subsequent permit revisions for landfill sites.

Developed air emission inventories for compliance documentation and annual reporting.

#### **Environmental Site Assessments**

Completed Phase 1 Environmental Site Assessments for property transactions at several facilities, including commercial, residential, and agricultural properties.

Performed Phase 2 Environmental Site Assessments to address potential contamination issues including underground storage tanks, potential agrichemical contamination, and potential metals contamination in fill materials.

# Publications and Presentations

Landfill Fugitive Methane Emission Estimates Based on Phased Closure Gas Collection Data, 2011, Wisconsin Integrated Resource Management Conference.

Landfill Fugitive Methane Emission Estimates Based on Phased Closure Gas Collection Data, 2010, Global Waste Management Symposium.

Fugitive Emissions Monitoring at an Active Landfill, 2008, Global Waste Management Symposium.

Stochastic Models of Dispersion in Heterogeneous Aquifers, 1988, UW Madison, Master's Report.

Modeling of Satellite Measured Magnetic Anomalies, 1984, EOS, American Geophysical Union.