
RAY TIERNEY, PG, CEEP

Education

M.S. Water Resources Management, University of Wisconsin-Madison, 1987

B.S. Geology / Geophysics, Boston College, 1984

Professional Licenses/Registrations

Professional Geologist, Wisconsin

Certified Ground Water Professional

Certified Energy Efficiency Professional

Professional Experience

Mr. Tierney has 30 years of experience in environmental remediation, due diligence, and sustainability. Ray has helped manufacturers and other industrial clients control and reduce their legacy environmental liabilities, save money and reduce their risks, obtain grants and permits to expand, and implement cost saving practices. He has served as an expert witness for high-profile toxic tort lawsuits, has lead merger and acquisition due diligence teams, has given talks around the country on Disaster Recovery Planning, and has lead large-scale emergency responses at industrial facilities to both manage the liabilities associated with the disaster and to help businesses recover and thrive. Mr. Tierney has an M.S. from the University of Wisconsin-Madison.

Contamination Investigation and Remediation

Conducted soil, groundwater, sediment, surface water, and waste investigations at over 500 sites, including properties with contamination from solid and hazardous wastes, petroleum products, chlorinated solvents, polychlorinated biphenyls (PCBs), industrial chemicals, agrichemicals, and heavy metals. Remediation activities were often designed and coordinated with redevelopment construction activities to minimize costs and construction delays.

Acted as project manager for over 300 petroleum storage tank, petroleum terminal, petroleum spill, and petroleum pipeline corrective action sites. Remediation techniques have included, among others, soil excavation, soil venting, air sparging, groundwater extraction and treatment, bioremediation, and natural attenuation.

Brownfield Redevelopment

Conducted investigation, remediation, and redevelopment for hundreds of properties with soil and groundwater contamination throughout the United States. These have included, among other things, manufacturing plants, gasoline stations, automotive service shops, landfills, shopping malls, petroleum bulk plants, foundries, dry cleaners, chemical distributors, and hazardous substance spill and emergency response sites.

Acted as project manager for the historic renovation and redevelopment of many schools and industrial buildings into affordable housing projects in Wisconsin.

Analyzed and developed investigation and remediation strategies for industrial brownfield sites ranging from a fraction of an acre to over 50 acres in size.

Served as team leader for a successful \$1,000,000 brownfield grant for a manufacturing property, a \$430,000 brownfield grant for a petroleum distribution property, a brownfield grant for a municipal redevelopment, and many other brownfield and redevelopment projects.

Negotiated a variety of local approvals, development agreements, environmental insurance policies (cost cleanup policies and pollution legal liability policies), and tax incremental financing (TIF) agreements for brownfield redevelopment projects.

Involved with the legal support and/or has been an expert witness for lawsuits involving Superfund sites and petroleum contamination sites involving commercial, industrial, and residential properties.

Environmental Site Assessments and Merger and Acquisitions

Managed hundreds of Environmental Site Assessments (ESAs) ranging from abbreviated property transaction screens, to all manner of Phase 1 and 2 ESAs, to site investigation and remedial services. Performed ESAs in accordance with the American Society for Testing and Materials (ASTM) standards E 1527-00, E 1527-05, and the U.S. Environmental Protection Agency's (USEPA's) All Appropriate Inquiry (AAI) Standard, to meet financial institutions specific standards, various State requirements, and/or to meet client-specific scopes of work.

Performed merger and acquisition due diligence reviews by combining real estate, environmental, and health and safety evaluations of targeted companies. Reviews include real estate evaluations, as well as audits of ongoing operations at active businesses for compliance with U.S. Department of Labor – Occupational Safety and Health Administration (OSHA), USEPA, and state regulations, to quantify potential liabilities for ongoing transaction negotiations, and to plan for post-closing activities to address any future liabilities.

Completed Phase 2 ESAs, including full serve evaluations of soil, water, waste, building materials, and other site-specific potential hurdles to properties and/or re-development.

Conducted all types of site investigations to define the extent of contamination at a property for regulatory and cost liability assessment purposes for real estate developers, municipalities, and commercial and industrial clients.

Developed remediation costs to define liabilities associated with issues discovered in the assessment process, and conducted remediations to address these issues through to final closure.

Solid Waste Management

Managed In-field Conditions Study/Remedial Investigation for Jongetjes Landfill in Palmyra, Wisconsin. The project included the repair, replacement, and expansion of the existing

groundwater and gas monitoring system, monitoring well and gas probe installation and sampling, private well sampling, hydrogeologic conditions evaluation, landfill cap evaluation, and remedial alternative options assessment and implementation.

Performed quality assurance evaluation for an Initial Site Report preparation for waste landfill in southern Wisconsin.

Reviewed plan for many Initial Site Reports, Feasibility Studies, and Plan of Operations for municipal and industrial landfill in Wisconsin.

Evaluated groundwater monitoring networks and data sets, and established groundwater preventive action limits for many landfills in Wisconsin.

Prepared the Wisconsin Department of Natural Resources (WDNR) first Initial Site Report and Feasibility Completeness Checklists for proposed landfills.

Managed numerous Federal Superfund and Wisconsin Environmental Repair Program landfill projects.

Sustainability and Energy

Assists manufacturers with a broad range of services including environmental compliance, equipment upgrades, carbon footprint and greenhouse gas reduction strategies, asset dispositions, health and safety programs, pollution prevention, facility siting, grants and local approvals, disaster planning, and emergency response.

Served previously as supervisor of the remediation program for the State of Wisconsin; and then for the last 20 years at SCS Engineers has helped industry, developers, and municipalities across the country reduce and manage their legacy environmental liabilities in an orderly, cost effective way.

Directed energy savings assessments, life cycle cost return on investment evaluations, and energy use reduction projects at 25 manufacturers, including lighting, HVAC, waste heat recovery, air compressor, instrumentation, alternative energy, building envelope, and motor upgrade projects.

Publications and Presentations

Wisconsin Profitable Sustainability Initiative. American Bar Association Section of Environment, Energy, and Resources Newsletter Vol. 8, No. 2 May 2015

Disaster Recovery Planning: Template Forms and Instructions for Complying With Regulations, for Reducing Your Liabilities, and for Reestablishing Your Critical Business Functions. National Association of Chemical Distributors, 2006.

Buying and Selling Properties That are Contaminated. Wisconsin Banking News, 1998.

Environmental Assessments: The Fundamentals of Quantifying Risk and Performing Due Diligence. Agricultural Environmental Workshops - Wisconsin Bankers Association, 1997.

Wellhead Protection Districts in Wisconsin: An Analysis and Test Application. Wisconsin Geologic and Natural History Survey Special Report No. 10, 1988.

Delavan Lake: A Recovery and Management Study. University of Wisconsin-Madison, 1986.