SHILOH L. BEEMAN, RG, EIT

Education

MS Geological Engineering (Hydrogeology), Colorado School of Mines, Golden, Colorado, 2001 BS Geological Engineering, Missouri University of Science and Technology, Rolla, Missouri, 1999

Professional Certifications

Registered Geologist, State of Missouri Registration No 2004005425 Engineer-in-Training, State of Missouri Registration No. 045707 Registered Water Tracer, State of Missouri Registration No. 500 Missouri Well Drilling Contractor, Restricted Permit No. 003734-M

Professional Experience

Ms. Beeman is a Project Manager with over 20 years of experience in hydrogeologic and environmental investigations and environmental compliance for industrial, mining, transportation, municipal, and natural resources clients. She has specialized experience in groundwater tracing investigations in karst landscapes as well as fractured rock, porous media, and industrial settings.

Magmont Mine Site, Bixby, Missouri – Lead site geologist for historical mine waste site in eastern Missouri. Project manager for routine groundwater monitoring site support, including field evaluations of cap integrity, groundwater sample collection, and statistical groundwater data analysis for quarterly groundwater reports. Managed schedule, budget, field team, and health and safety for the overall project team as well as client and agency coordination.

Cave Springs Area Karst Conservation Study, Northwest Arkansas - Project manager and field team leader for a multifaceted karst investigation to identify existing geologic, biologic and hydrologic information for the Cave Springs Cave Recharge Area, identify data gaps, implement scientific studies to generate data to fill gaps, create vulnerability and hazard area assessment of current and potential uses, and develop karst best management practices (BMPs) resulting in municipal ordnances to implement study results. Stakeholder management throughout the study was a key component for study acceptance. Project funded through FWHA.

Arkwood Superfund Site, Omaha, AR - Groundwater tracing investigations for dioxin reassessment at former wood treating facility under USEPA Superfund program; design of geophysical surveys and well installations.

Jet Fuel Tanker Release Investigation, Southwest Missouri – Aquifer investigation with fluorescent tracer dye to determine potential karst discharge locations and potential endangered species impact from a jet fuel release at a national airport in Missouri. Field team leader for an extended groundwater and surface water monitoring program in cooperation with USEPA, U.S. Fish & Wildlife Service, and Missouri DNR.

Union Pacific Railroad Site, Wichita, Kansas - Aquifer pumping test and tracer dye investigation in an unconsolidated alluvial aquifer to determine the design parameters for remedial design of hydraulic containment system of a 2-mile TCE plume, Wichita, Kansas. Managed field staff and

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subcontractors over multiple phases of soil and groundwater investigation as well as source area pilot study remedial design.

Natural Resources Assessments and Investigations

Threatened and Endangered Species Investigations - Hydrogeologic hazard area mapping and vulnerability assessments for the protection of rare and endangered species; karst inventory and hydrogeological habitat assessment, field reconnaissance, tracer dye introductions and sampling. Projects performed for the U.S. Fish & Wildlife Service, U.S. Forest Service, Missouri Department of Conservation, and The Nature Conservancy.

National Natural Landmark Evaluations – Team member for the evaluation of the natural features of a landmark related to type of geological features and biological community in relation to its biophysiographic province for designation as a national natural landmark.

Environmental and Geological Investigations

Environmental Site Characterization – Sites included railroad yards and fueling facilities, underground storage tank (UST) sites, former manufactured gas plant (MGP), and pesticide and chemical warehouse facilities conducted as part under both CERCLA and RCRA, as well as Phase II environmental site assessments.

- Investigation methods include direct push hollow-stem auger monitoring drilling methods to support soil and groundwater sampling and monitoring well installations
- Sampling included surface water, groundwater, soil, indoor air and vapor intrusion with summa cannisters
- Contaminants included chlorinated solvents, petroleum constituents, pesticides, and coal tar.
- Duties included project management, leading field teams including subcontractors, data collection and analysis, report writing, and research, and development of feasibility study alternatives.

Geophysical Surveys including electrical resistivity tomography (ERT), seismic refraction tomography (SRT), and self-potential (SP) experience in the field as well as geological site interpretation

Environmental Compliance and Due Diligence

Phase I Environmental Site Assessments (ESA) and Transaction Screen Assessments (TSA) performed according to ASTM standards in support of over 50 property transactions including light manufacturing, petroleum sites, healthcare, scrap metal, a limestone quarry, agricultural land, and railroad properties.

NPDES permitting - Assisted multiple clients under Missouri storm water regulations, CAFO regulations, and point source discharge regulations for both general and site-specific permits, including preparation of Stormwater Pollution Prevention Plans (SWPPP) and zero-discharge stormwater facility designs.

Electric Cooperative SPCC Plan Development – Spill Prevention Control and Countermeasures (SPCC) plan development for multiple facilities in large rural electric cooperatives in Oklahoma and Nevada.

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UST Closures – Removal of two former USTs at a fueling facility in St. Robert, MO. Performed confirmation soil sampling and completed closure report under Missouri Risk-Based Corrective Action (MRBCA)

Confidential College Environmental Management System – Campus-wide EPCRA/HazCom chemical inventory, development of SDS management system, and Tier II reporting at a small college in southern MO.

Site-wide environmental audit (Stormwater, Air, Solid waste, Hazardous waste) of a roofing products manufacturing facility in Maryland.