

Brian A. Rakvica, P.E., C.E.M.

Senior Engineer

Over Eight Years Experience on the BMI Complex and Common Areas Project

Professional Experience

Mr. Rakvica is a Senior Engineer with 14 years of professional experience in multi-disciplinary engineering projects. Mr. Rakvica's areas of expertise include: environmental site assessment and remediation projects; detailed engineering design projects; litigation support; regulatory compliance and project management. Mr. Rakvica's experience includes the serving the public and private sectors with services to governmental, industrial, and academic clients. Mr. Rakvica has demonstrated success on a variety of engineering projects, has superb project management skills, and is highly regarded throughout the Western States.

Project Experience

Select Environmental Site Assessment and Remediation Projects

- **BMI Complex and Common Areas, Henderson, NV** – Project Manager and Senior Engineer responsible for providing detailed technical reviews for the remediation of the state's most complex remediation project. In addition, providing third-party technical oversight and project management assistance for the Nevada Division of Environmental Protection (NDEP).

Technical reviews and third party technical oversight includes reviewing documents from Phase I environmental site assessments (ESAs), feasibility study (FS) documentation, detailed engineering designs for remedial systems; and closure requests. This includes the oversight of the design and construction of a RCRA Part G Corrective Action Management Unit (CAMU).

Highlights of the projects include the excavation and disposal of over four million cubic yards of contaminated materials. This includes Resource Conservation and Recovery Act (RCRA) hazardous, non-hazardous, radioactive and Toxic Substances Control Act (TSCA) wastes. The projects include the world's largest perchlorate destruction system (fluidized bed reactor); the world's largest fully operational *in-situ* perchlorate destruction system; dense non-aqueous phase liquid (DNAPL) plumes; remediation of pyrophoric materials; and remediation of broad suites of chemicals (nearly 500 individual chemicals required assessment). Additionally, Mr. Rakvica provided extensive litigation support for the NDEP.

- **Confidential Corporate Client, numerous sites within MA, NH and NY** – Project Engineer responsible for developing detailed engineering designs for the remediation of polychlorinated biphenyls (PCBs) and related co-contaminants. Provided litigation support for highly sensitive, public projects under State and federal oversight. Acted as a project manager to facilitate reporting to regulatory agencies and to clients as well as to coordinate efforts within the firm.
- **Confidential Corporate Client, numerous sites within LA and MA** - Project Engineer responsible for developing detailed engineering designs for the remediation of pesticides and polychlorinated biphenyls (PCBs) and related co-contaminants. Provided litigation support for



Qualifications Resume

highly sensitive, public projects under State and federal oversight. Acted as a project manager to facilitate reporting to regulatory agencies and to clients as well as to coordinate efforts within the firm.

- **Confidential Academic Institution, Hamilton, NY** – Project Engineer responsible for the design and upgrade of campus-wide underground storage tank (UST) systems upgrade to comply with NY State Department of Environmental Conservation (DEC) regulations. This included the evaluation of approximately 80 UST systems and the design of the remedial plans, as applicable.

Regulatory Compliance

- **BMI Complex and Common Areas, Henderson, NV** – Supervisor of regulatory agency (NDEP) and Senior Engineer for completing technical reviews and managing the regulatory oversight for the state's most complex remediation project. Regulatory oversight involved a variety of state and federal regulations including: Nevada Administrative Code, RCRA, TSCA, and the Clean Water Act. This oversight included direct interaction with USEPA regional and national personnel to insure regulatory compliance. Additionally, provided extensive litigation support.
- **NV Energy, multiple sites, Southern NV** – Supervisor of regulatory agency (NDEP) for various projects within southern Nevada including the Reid Gardner station in Moapa, NV. Projects included groundwater modeling; evaluation and remediation of impacts to early man sites, surface water bodies, soils and groundwater; landfill permitting; and extensive community outreach.
- **American Pacific Corporation (AMPAC), Henderson, NV** – Supervisor of regulatory agency (NDEP) for the evaluation and remediation of a major perchlorate source to the Las Vegas Wash, Lake Mead and the Colorado River. Oversight of detailed analytical groundwater modeling, investigation and remedial design.
- **Western Area Power Authority (WAPA), Henderson, NV** – Supervisor of regulatory agency (NDEP) for the evaluation and remediation of a World War II era legacy polychlorinated biphenyls (PCB) contamination site. Complications of the site included investigation and remediation of PCB-impacted soils in and around a live high voltage power corridor.

Select Engineering Design Projects

- **Confidential Academic Institution, Hamilton, NY** – Project Engineer responsible for the design of numerous projects including: complete design of heating, ventilating, and air conditioning (HVAC) systems for a new academic building including a number of specialized ventilation systems design to comply with ASHRAE and ACGIH guidance; and design of specialized ventilation systems campus-wide. These specialized systems included: perchloric acid fume hood exhaust; nitric acid fume hood exhaust; and chemical storage facility ventilation and exhaust.
- **Confidential Academic Institution, Syracuse, NY** – Project Engineer responsible for the design of numerous projects designed to comply with ASHRAE and ACGIH guidance; and design of specialized ventilation systems campus-wide. These specialized systems included:

research animal facility HVAC systems; science research facility dehumidification system; HVAC system designed to comply with ASHRAE standard 90 for life safety concerns.

Publications and Presentations

Perchlorate: Overview of Issues, Status, and Remedial Options, Interstate Technology Regulatory Council, September 2005 (Remediation Technologies Section technical editor and team leader).

Education

M.S., Environmental Engineering, Syracuse University, 2000.

B.S., Environmental Engineering, Syracuse University, 1996.

Certifications and Registrations

Nevada Professional Engineer, Mechanical, #16094.

Nevada Certified Environmental Manager, #2260

New York Professional Engineer, #080570.

California Professional Engineer, Mechanical, 35540.

Arizona Professional Engineer, Mechanical, 52329.

Utah Professional Engineer, Mechanical, #7957702-2202.

American Red Cross, First Aid, CPR and AED, Annual Refresher.

Clark County Department of Air Quality and Environmental Management, Dust Observer, DC0610212.

National Safety Council, Defensive Driving Course.

OSHA, 29 CFR 1910 8-Hour, Annual Refresher, Hazardous Waste Operations and Emergency Response (HAZWOPER).

OSHA, 29 CFR 1910 24 Hour, Supervisor, Hazardous Waste Operations and Emergency Response (HAZWOPER).

OSHA, 29 CFR 1910 40-Hour, Hazardous Waste Operations and Emergency Response (HAZWOPER).

OSHA, 29 CFR 1926.1101, Class II Asbestos Training

Affiliations and Training

National Society of Professional Engineers (Member).

Theta Tau National Professional Engineering Fraternity (Member, Past President).

Conference on Remediation of Chlorinated and Recalcitrant Compounds, Battelle Chlorcon.

How to Manage People, Fred Pryor.

Long Course in Fluid Dynamics, S.A. Armstrong Limited.

Project Manger's Bootcamp, PSMJ Resources.



Qualifications Resume

Technical Development Program, Carrier Corporation.

Remediation Course, Princeton Groundwater, Inc.