

## CHAD JENKINS, EIT, CEM

### Education

BS – Environmental Biology and Management, University of California, Davis, 2005

MS – Environmental Engineering, California State University, Fullerton, 2014



### Professional Licenses

Engineer in Training (EIT) – Civil, California

Certified Environmental Manager, Nevada (CEM No. 2419)

### Specialty Certifications

40-Hour Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations  
Emergency Response (HAZWOPER) Training and 8-Hour Annual Refresher

8-Hour OSHA HAZWOPER Supervisor Training

DOT Hazardous Material & Waste Transportation (49 CFR 172.704)

### Professional Affiliations

American Academy of Environmental Engineers

National Society of Professional Engineers (California 60: Southern Chapter Council)

### Professional Experience

Mr. Jenkins is an environmental engineer (EIT) and Certified Environmental Manager (CEM) with more than 16 years of experience in providing consulting services, managing environmental liabilities, and maintaining regulatory compliance for clients. He specializes in the investigation and remediation of soil, soil vapor, and groundwater contamination, and is experienced with the management of project portfolios in various manufacturing and oil/gas sectors. Investigation activities have included planning and workplan preparation, regulatory and right-of-way permitting, soil sampling and geologic classification, drilling oversight, groundwater sampling, well installation, and incorporation of high-resolution investigation technologies, such as cone penetration testing (CPT), and membrane interface probe (MIP) and ultra-violet optical screening tool (UVOST) assessments. On remediation projects, he has implemented technologies that include soil vapor extraction (SVE), groundwater extraction (GWE), air-sparging, dual-phase extraction (DPE), vacuum-enhanced extraction, in-situ chemical oxidation (ISCO), In-situ chemical reduction (ISCR), oxygen releasing compounds (ORC), soil mixing and stabilization, enhanced bioremediation, injection of colloidal carbon amendments, electrical resistance heating (ERH), large-diameter auger excavations, and over-excavation.

Mr. Jenkins is proficient in all aspects of project management, including proposals, budgeting, directing project teams and schedules, completing deliverables, and financial forecasting. He is knowledgeable of and thoroughly understands state and local regulations in California, Arizona, and Nevada.

Project activities and experience have included:

- Management of environmental assessment and remediation projects/portfolios while providing regional support for additional projects, as well as regional health and safety leadership. Responsible for all aspects of project management, including project scoping, fieldwork supervision, health and safety oversight and compliance, technical report writing and review, forecasting, budget tracking, and client development.
- Expertise in directing Phase I and II due diligence assessments; soil, soil vapor, and groundwater sampling and analysis; hydrogeologic investigations; site conceptual modeling, fate and transport, and groundwater plume modeling; corrective action planning, remedial design, installation/operation of remediation systems, and remediation optimization; regulatory compliance and permitting; soil vapor surveys; vapor intrusion; and human health risk assessments.
- Responsibility for managing environmental investigations, remediation activities, and regulatory compliance at industrial facilities contaminated with petroleum hydrocarbons, heavy metals, chlorinated solvents, and other volatile organic compounds and semi-volatile organic compounds (VOCs/SVOCs). Duties included numerous site investigations and subsequent design, installation, and operation of remediation technologies to address subsurface contamination; design, permitting, pilot testing, installation, optimization, reporting, and decommissioning of systems; and completion of reports describing investigation and remediation activities, ranging from the initial work and corrective action plans through case closure requests.
- Performance of due diligence transaction support, including Phase I ASTM E1527 environmental site assessments and reporting at a variety of commercial, industrial, and residential properties. These included defense manufacturers, plating facilities, printing shops, salvage yards, foundries, dry cleaners, apartment complexes, office buildings, shopping centers, and automotive maintenance facilities. Responsibilities included providing an independent professional opinion regarding potential environmental impacts, in addition to recommendations for Phase II site assessments and preparation of human health risk assessments (HHRA) to confirm the condition of the properties, liabilities/risks, and potential corrective actions.
- Experienced in permitting of various remediation technologies, including permitting with Air Quality Management Districts (AQMDs), sewer/sanitation discharge permitting, National Pollutant Discharge Elimination System (NPDES) Permits, and WDR permits.
- Managed a portfolio of 14 environmental liability transfer (ELT) sites located in Arizona, Nevada, and California, negotiating with regulators to achieve closure at 10 of 14 sites within 4 years. Each site required comprehensive site conceptual modeling and implementation of innovative remediation technologies in order to achieve closures within guaranteed budget amounts. Project management activities included biannual cost forecasting, preparation of work plans, soil and groundwater assessments, preparation of assessment reports, routine groundwater monitoring and reporting, site conceptual modeling, corrective action planning, remediation system permitting and installations, remediation system operation and maintenance (O&M), fate and transport modeling, human health risk evaluations, and case closure requests. Maintained an excellent safety record and negotiated project cost savings by leveraging the risk-based closure policies, avoiding unnecessary assessment and remediation costs.

- Managed the quarterly groundwater monitoring, remedial status, WDR, and NPDES reporting for a 63-site ELT portfolio located throughout Southern California. Responsible for managing all aspects of the program, including scheduling, data collection and analysis, remediation system, remediation system O&M reporting, field and laboratory quality control, remediation performance evaluations, and report writing.
- Prepared Spill Prevention, Control and Countermeasure (SPCC) plans for various industrial facilities throughout California, Nevada, and Arizona.

## Environmental Engineering

**Former Coca-Cola Bottling Facility Legacy Remediation Design, Implementation and Case Closure, Yuma, AZ.** Project Manager responsible for the design and implementation of excavation, ISCO soil mixing, and ISCO direct injection activities for the remediation of gasoline-related VOCs in soil and groundwater. The project included high-resolution MIP/CPT investigations, followed by the excavation of approximately 6,700 cubic yards of overburden material across an 18,000-square-foot area, the in-situ ISCO soil mixing of soil and groundwater from approximately 12 feet to 21-feet below ground surface (bgs), and subsequent direct injection of ISCO materials along the perimeter of the excavation area. Project challenges included cement stabilization and certified compaction of the soil mixing zone to accommodate future development. Responsibilities included the engineering design, budgeting, permitting, community planning, coordination, and health and safety oversight during the excavation and remediation activities. Case closure was obtained within 2-years.

**Former ANCO Metal Improvement Company Groundwater Extraction and Injection System installation, Carson, CA.** Project Manager responsible for the design and installation of a groundwater extraction and ISCO re-injection system to address a 3,500-foot-long groundwater plume impacted by chlorinated solvents, in addition to hexavalent chromium, and gasoline-related VOCs. The project consisted of retrofitting an existing groundwater extraction system operating at 10 to 20 million gallons of discharge per year with 39 off-site groundwater extraction, injection, and monitoring wells within the public-right-of-way and adjacent down-gradient properties. Additional infrastructure included the re-design of the groundwater treatment system, upgrade of electrical facilities, alteration of discharge from the sanitary sewer to WDR permitted injection wells, and re-routing of all associated conveyance piping. Project challenges included the installation of the system infrastructure in coordination with the redevelopment of an adjacent 150,000-square-foot warehouse, accommodating aggressive third-party schedules and access constraints. Responsibilities included all project management activities, as well as engineering design and health and safety oversight.

**UNOCAL #4814, Leaking Underground Storage Tank (LUST) Case Remediation Design, Implementation, and Case Closure, Garden Grove, CA.** Project Professional responsible for design and implementation of excavation and ISCO direct injections for the remediation of petroleum contamination at an active retail service station in Garden Grove, CA. The project included high-resolution MIP/CPT investigations, followed by two separate excavations to a depth of 20 feet bgs, approximately 12 feet into groundwater, utilizing pre-engineered slide rail shoring (SRS) systems. Project challenges included stabilization within saturated soils encountered from 8 to 20 feet to allow for compaction and future development, and stockpile and soils management while working on an active service station with limited access. Potential health risks from volatilization of VOCs to adjacent residential neighborhoods were also addressed. Case closure was obtained within 2-years.