

Credere Associates LLC

PROFESSIONAL LICENSES

 Professional Geologist #263 NH

TRAINING

- 40-Hour OSHA 29 CFR 1910.120 HAZWOPER
- 8-hour Annual HAZWOPER Refresher
- First Aid CPR/AED 2024
- A RCRA Hazardous Waste
- DOT Hazardous Materials Transportation

EDUCATION

- B.S. Geology, Boston University, College of Arts and Sciences, Boston, MA
- M.S.T. Geology, Boston College, Chestnut Hill, MA
- Certificate Hazardous Waste Management, Northeastern University, Boston, MA

PROFESSIONAL

ORGANIZATIONS

- Geological Society of New Hampshire
- LSPA Massachusetts, Associate Member

Bettina E. Eames, PG Senior Project Manager MCP/LSP Support Services

HIGHLIGHTS OF EXPERIENCE

Ms. Eames is a Senior Project Manager with Credere Associates, LLC with 30+ years of experience of technical expertise and project management in environmental consulting working on numerous complex multi-media contaminated sites in both urban and rural environments. She is considered an Environmental Professional per the ASTM E 1527.

Her key practice areas include environmental due diligence, comprehensive site investigations, human health risk assessment, remedial planning and post-remedial compliance and site closure. Her other area of expertise includes implementation of institutional controls (ICs) under various states and federal (CERCLA, RCRA, NPL and TSCA) regulatory cleanup programs.

In Massachusetts, Bettina's experience includes planning, implementing, and reporting on all levels of response actions under the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000, including immediate response actions, limited removal actions, release abatement measures/utility-related abatement measures, imminent hazard evaluations, Phase I/Tier Classification, Phase II comprehensive site assessments, human health risk assessments, Phase III/IV remedial evaluations and implementation plans, closure reports, and activity and use limitations.

SPECIFIC MCP/LSP SERVICES PROJECT EXPERIENCE

Merrimack Valley Planning Commission, MA, MCP/LSP Support Services – Various Sites: Concurrent with the MVPC's EPA brownfields assessment and RLF cleanup grant program, providing senior technical review of MCP regulatory submittals and providing LSP support for two active MCP sites: a CVOC/vapor intrusion site in Haverhill, a petroleum/gasoline UST site in Lawrence and a brownfields site in Phase II of the MCP undergoing cleanup planning for hazardous building materials abatement and demolition based upon a presumptive remedy.

Clean Harbors Environmental, LSP Services Phase V Remedial Systems

Reporting, North Andover, MA: Project manager for Phase V Remedy Operation Status reporting for two active remedial systems (groundwater vapor treatment and subslab vapor treatment) for a CVOC release at an active commercial/industrial facility. Managed all client communications, internal field staff, data compilation and presentation. Prepared semi-annual status reports on remedial system operation under the MCP for submittal to MassDEP.

USPS Main Post Office Great Barrington, MA, MCP Response and LSP Services, Indoor Air Quality Investigation, Vapor Intrusion Mitigation: Served as project manager for task order for LSP support services for on-going vapor intrusion condition at post office impacted by a chlorinated solvent release from an abutting closed former dry cleaner/EPA brownfields site. Coordinated and advocated with state regulators and town officials on behalf of client. Provided technical planning and prepared various MCP regulatory reports for existing and new IRA release conditions. Prepared IRA Plan(s) and managed implementation of IRA activities, including sump dye trace test and treatment system installation. Managed and reported on indoor air quality monitoring program and prepared facts sheets with health and safety updates for employee service talks.

USPS Fall River, MA, Vehicle Maintenance Facility, MCP Petroleum Investigation, Site Closure and AUL: Provided LSP support services for a petroleum/LNAPL release to soil and groundwater associated with use of a former UST on a USPS leased property. Prepared all MCP submittal including Phase I ISI/Tier Classification, IRA Completion Reports, Permanent Solution with Conditions Statement. Prepared and successfully negotiated recordation of the AUL for MCP site closure in coordination with property owner on behalf of USPS.





USPS AUL Reviews, Various Properties, MA: Managed and implemented seven separate Task Orders under USPS ECRM Contract for petroleum properties in Chelsea/Everett, Adams, Brockton, Worcester, South Boston and North Attleborough. Reviews included multiple services: LSP opinions, reviews of environmental and various MCP regulatory submittals, human health risk assessments reviews, and review of recorded AULs and related recorded survey plans. Initial review included performance of field inspections to review site conditions for compliance with AUL which was followed by a second phase of comprehensive technical reviews of recorded instruments. Review resulted in filing of Amendment AUL (for some sites) to address substantive or non-substantive errors. One AUL was terminated based upon a revised risk assessment and LSP Opinion.

Commercial Property, Auburn, MA, Former DuPont MCP Site Oil Release: Provided senior technical writing and regulatory support to LSP-of-record for oil release from a former oil-water-separator (OWS) which was closed out under a Permanent Solution with Conditions based upon an AUL. Assisted with post-audit response activities: including management of supplemental field activities, compilation of supplemental soil and groundwater data, and revisions to the Permanent Solution and recorded AUL.

Capstone Communities, Brockton, MA, Brownfields Mill Redevelopment and MCP/LSP Services: Provided senior level MCP/LSP support services for multiple releases and a potential IH condition of hazardous materials at a former mill property undergoing renovation into residential apartments (Station Lofts). Managed field activities and MCP phased reports (Phase I/TC/Phase II, IH Evaluation, IRA, RAM and OMM Plan) concurrently with a risk-based soil removal/cleanup for PCBs under TSCA for EPA Region I. Project partially funded by a MassDevelopment grant.

Verizon, Needham, MA, LSP Services UST Petroleum Release: Served as senior technical support to LSP for a petroleum release to soil and groundwater associated with use of a former UST on leased property. Prepared Permanent Solution with Conditions Statement and prepared and successfully negotiated recordation of AUL for MCP site closure in coordination with property owner on behalf of Verizon.

Manufacturing Site, Hanover, MA, MCP Site Investigation/Remedial Planning Groundwater Release: Provided senior project support to the LSP-of-record to address a 120-day reportable condition for a phthalate (SVOC) release to soil and groundwater at an active manufacturing facility located within a GW-1 category resource area. Coordinated field activities, evaluated human health risk assessment, prepared Class C response action outcome (RAO) documents and post-RAO status reports.

DCAM, MCP Compliance and LSP Services, Task Order Contract: Prior to work at Credere, served as project geologist for various sites under a multi-year task order contract with the Massachusetts Division of Capital Asset and Management (Formerly DCPO). Responsibilities included field work support, work scope development and technical report preparation under the MCP for assessment and remediation projects. Specific projects included: performance of an ASTM Phase I ESA and subsurface investigation for 16 commercial/industrial properties proposed new county courthouse in Taunton, a Phase I/TC, Closure Report and RAO for three 20,000-gallon #6 heating oil USTs and one 1,000-gallond #2 heating oil UST at the former Lakeville Hospital site and a Phase II/III for two former state hospitals in central Massachusetts.

MassHighway, MCP Human Health Risk Characterization, Taunton and Ipswich Maintenance Facilities, MA: Served as the Senior Project Geologist and provided MCP support to the LSP/Project Manager for MassHighway Maintenance Facilities and conducted a Method 3 human health risk characterization in support of the Phase II/III. For the Taunton Site, assessed risk due to lead and PAHs in surface and shallow subsurface soils and sediment in an on-site stream related to illegal vehicular wash-down activities. Calculated site-specific cleanup levels for soil/sediment excavation activities under a RAM. For the Ipswich Site, assessed risk due to petroleum in soil and groundwater from a LUST.

MBTA, MCP Human Health Risk Characterization, Former Railroad Yard, Readville, MA (PIP Site): Assisted lead risk assessor with completion off a Method 3 risk assessment of a 37-acre former railroad yard site located in a residential suburban neighborhood planned for redevelopment. Primary COCs included arsenic and lead in surface soils. Evaluated risk to potential future receptors for four different possible end-use scenarios: construction, recreational, commercial and residential. Developed risk-based concentrations/allowable threshold values for each end use.



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MWRA, MCP Compliance and LSP Support, Shaft 7C Site, Dorchester, MA: Served as lead geologist for subsurface investigations at the Shaft 7C tunnel shaft property from 1993 through closure in 1998. The vacant lot/former tunnel construction site was filled in with "tunnel muck" and contaminated with petroleum hydrocarbons, PAHs and heavy metals. Responsibilities included development of, implementation and oversight and reporting including a Phase I/Tier Classification, Phase II/III, a Method 3 risk characterization, including a Stage 1 environmental screening and preparation of the RAO and AUL.

MBTA Task Order Contract, MCP Compliance and LSP Support, Multiple Sites: Provided senior project support to the LSP for a multi-year environmental assessment and cleanup contract for the MBTA for various sites in eastern Massachusetts, including an active commuter rail line, former train/rail yards, active bus facility and bus maintenance garages, electrical generation power plant property, a former foundry site and a site contaminated with MGP waste. Developed work scopes, plans and budgets, implemented, oversaw and reported on of all levels of MCP assessments (Phase I, Tier Classification, Phase I/TC, Phase II, III and IV), remedial response actions (IRA, LRA, RAM), and prepared and filed RAOs, AULs and legal notices.

Massachusetts Department Conservation & Recreation, MCP Imminent Hazard Evaluation, Recreational Park Sites, Boston and Woburn, MA: Performed an Imminent Hazard (IH) Evaluation to assess risk to human health under the MCP in response to findings of a Phase I. The IH at the Union Park Pumping Station evaluated exposure to lead and PAHs in surface and shallow subsurface soils encountered during prior to development of a city-owned property into an urban playground. Assessed potential risk to a trespasser and construction worker under current use conditions and to a future young child based on actual playground construction and design plans. The IH at the Woburn Site was performed as part of a Phase I of a park along a recreational lake, a portion of which was part of a former Manufactured Gas Plant (MGP) to evaluate potential exposure to MGP-related wastes (i.e., petroleum, cyanide and metals) in sediment and surface water for a recreational lake user while wading, boating and swimming.