



Kurt.Herman@gradientcorp.com

(617) 395-5568

Kurt Herman, M.Eng., P.G.

Principal

Mr. Herman is a principal at Gradient with more than 25 years of academic and professional experience in the environmental field. He advises clients on complex environmental issues that draw upon his multidisciplinary background in economics, environmental engineering, and geology. He has led site characterization, remediation, and/or decommissioning efforts at dozens of sites in the US and abroad. He has provided expert testimony regarding environmental response actions, environmental response costs, contaminant fate and transport, and historical state of knowledge, including industrial operations and waste disposal practices.

Mr. Herman has experience with a wide range of chemicals in the environment, including PCBs, PFAS, chlorinated solvents, TENORM, petroleum hydrocarbons, and NAPLs. He has provided consulting and expert support at more than 100 former manufactured gas plant (MGP) and related sites.

Areas of Expertise

- Contaminant Fate & Transport
- Environmental Forensics
- Environmental Cost Analysis
- Site Characterization & Remediation Strategy
- Historical Operations & Waste Practices

Services

- Chemical Fate & Transport
- Remedial Strategies
- Cost Estimation & Analysis
- Insurance Claims
- PRP Cost Recovery/Allocation
- NCP Consistency
- Historical Site Analysis
- Spatial & Imagery Analyses

Education

- M.Eng., Civil and Environmental Engineering, Massachusetts Institute of Technology
- B.A., Economics and Geology, Miami University (Ohio)
- Registered Geologist in Oregon
- Professional Geologist in Washington State

Selected Projects

Superfund Site Remedial Investigation: Directed an extensive multimedia (soil, groundwater, soil gas) investigation of chlorinated solvents released in a downtown residential/commercial area. Report accepted by agencies (US EPA, DNREC) without comment.

Environmental Liability Cost Estimation: Developed environmental liability cost estimates for a portfolio of sites using probabilistic modeling techniques, including stochastic (Monte Carlo) methods, and incorporated cash-flow modeling. Estimates were prepared for regulatory disclosure and used for a settlement valuation.

Superfund Site Cost Allocation: Developed PRP cost allocation involving former MGP and wood treating operations. Performed a forensic evaluation of polycyclic aromatic hydrocarbon (PAH)/NAPL contaminant releases to sediment, which included a source-mixing model used for source apportionment.

Risk-Based Remediation Strategy: Developed a conceptual risk-based remedy (dual-phase extraction) for soil and groundwater contamination at a former pharmaceutical manufacturing facility. Coordinated the plant's decommissioning and demolition.

NCP Consistency Evaluation: Evaluated the NCP consistency of response actions performed at one of the nation's largest groundwater NPL sites.

Reasonable & Necessary Cost Determination: Provided expert testimony on the appropriateness of response costs allegedly incurred at a waste oil recycling site.

Remedy Cost Evaluation: Evaluated the need for and environmental liability costs associated with a US EPA-led, time-critical removal action for a former MGP site. Used probabilistic cost modeling techniques to develop a range of cost estimates for the proposed remedial actions in support of settlement negotiations.

Selected Publications and Presentations

Herman, K; Flewelling, SA; Bittner, AB; Tymchak, MP; Swamy, M. 2015. "Alternate Endpoints for Remediating NAPL-Impacted Sites." Presented at EPRI/AWMA Env-Vision Conference, Crystal City, VA, May 14.

Lewis, A; Bittner, AB; **Herman, K;** Dubé, E; Long, C; Hensel, B; Ladwig, K. 2015. "Framework for Evaluating Relative Impacts for Surface Impoundment Closure Options." Presented at the 2015 World of Coal Ash Conference, Nashville, TN, May 8.

Herman, K; Wannamaker, EJ; Jegadeesan, GB. 2012. "Sediment PAH allocation using parent PAH proportions and a least root mean squares mixing model." *Environ. Forensics*. 13(3):225-237.

Herman, K. 2012. "Environmental Liability Cost Estimation (ELCE) at MGP Sites." Presented to the MGP Consortium, Savannah, GA, January 25.