

Christopher E. Koerner, P.E.

Principal Environmental Engineer/ Manager

Education

Executive MBA Program—
completed coursework - George
Mason University, 1998
Valedictorian

International Political Economy,
Technology, and Industry, Oxford
University, U.K 1997

B.S. – Civil Engineering
(Hydrology), University of
Connecticut, 1980

B.A. – Chemistry/Biology Minor,
Colby College, 1976

Registration

Professional Engineer:

Active: CA, VA

Inactive: NV, WY, ID, MS, AK, NJ,
PA, MD, WV

Diplomat, American Academy of
Environmental Engineers

Class A General Engineering
Contractor License (Qualifying
Individual - Radian) (Inactive)

Hazardous Substance Removal &
Remedial Actions Certification
(Qualifying Individual - Radian)
(Inactive)

Registered Environmental
Assessor, CA (Inactive)

Recognized expert in characterization and restoration of multi-media environmental contamination, corporate environmental planning, process design/optimization/troubleshooting, green and sustainable practices, and value engineering.

Broad, multi-disciplinary experience as licensed professional engineer and engineering contractor, experienced scientist, former regulator and business manager provides unique qualifications to help develop and implement strategies to solve environmental problems.

For over 43 years, championed the practical application of innovative technologies and is an established leader in subsurface/ surface water/ groundwater remediation. Led numerous strategy, investigation, design, and implementation teams, focusing on providing cost-effective, risk-reducing solutions at hundreds of sites and facilities, in most US states and 12 foreign countries.

Managed many multi-million-dollar environmental programs with large project teams for government and private sector clients. Advised Fortune 50 clients, EPA, DOE, the Corps of Engineers, and all branches of DOD in the implementation of cost-effective solutions and have been the senior project manager for numerous high-profile sites.

Employment History

Principal - Environmental Network International, LLC, 1997-2023

Provide cost-effective environmental solutions for industrial and private clients - strategic consultation, optimization of existing systems, engineering design, green/sustainable practices; value engineering; analysis of subsurface groundwater flow pathways in complex hydrogeology; expert witness team member; environmental support to international projects.

Lead Practitioner/Senior Program Manager - CDM Smith, 2001 -2013

Strategic leadership role supporting US EPA at 30 NPL sites. Developed conceptual site models, guided selection of practical remedies, led engineering design, construction supervision, and responsible-party negotiations. Streamlined investigations and remedial measures, providing high-value solutions at reduced cost.

Performed constructability review of complex ARRA Stimulus treatment system design - developed 11 Value Engineering redesign modifications, saving ~\$5 million dollars capital and \$500k annual

O&M costs, increasing system effectiveness, and solving previously unresolved issues. Led preparation of accelerated redesign documents; engineer/manager for all aspects of \$11 million performance-based construction of treatment system.

Senior leader of CDM team to assess effectiveness of chlorine dioxide gas sterilization of anthrax contamination in the Hart Senate Office Building. Led sampling/logistical coordination for placement of spore strips in strictly-controlled contaminated environment. CDM was awarded the American Academy of Environmental Engineers Superior Achievement Award for 2001

Senior Staff Project Manager/Lead Engineer - Radian International, LLC 1985-1997

Responsible for the design, implementation, and review of multi-media waste site investigations, remediation, compliance, waste minimization, and the practical application of innovative treatment technologies. Won and managed many projects valued at more than \$1 million with large multi-disciplinary project teams. Years of experience negotiating with all levels of regulatory agencies.

Lead professional engineer in responsible charge – western US. Liaison to Radian’s international affiliates in Europe and South America, providing expert assistance and training to solve environmental problems worldwide. Manager of Sacramento Waste Management Section, responsible for the technical and administrative direction and training of 70 professionals.

Associate Waste Management Engineer - California Toxic Substances Control Division 1980-1985

First member of the California Superfund Program. Developed in-depth understanding of state and federal regulatory standards and procedures. Assisted in developing and implementing the original California regulations and policies for site remediation. Managed the investigation and remediation of several initial, high-profile NPL sites.

Chemist/Quality Control Supervisor - Lycott Environmental 1977-1978

Responsible for obtaining one of the first EPA water laboratory accreditations under the Safe Drinking Water Act. Supported college expenses as a plumber, electrician, and surveyor.

Selected National Expert Consultation

Vice-chair of two United States Department of Energy national expert advisory panels at Hanford Nuclear Reservation in Richland, Washington. Reviewed and evaluated program to sample and remediate 177 million-gallon, mixed-waste tanks containing a variety of waste materials from the production of weapons-grade plutonium.

Member of review panel for the U.S. Department of Energy Office of Science and Technology’s Technology Development Program. This nationally recognized panel was charged with reviewing the program management and R&D elements of the DOE nuclear waste tanks.

Led and presented Value Engineering analysis of new plant design to treat biocontaminant wastes at US Army Medical Research Institute of Infectious Diseases at Ft Detrick, MD. Recommended significant design changes providing additional design capacity at substantial cost savings.

Selected Surface Water/ Contaminated Sediment Projects

Lead Engineer for the Atlantic Wood Industries NPL site on the Elizabeth River in VA. Designed investigation of heavily-contaminated sediments with free-phase DNAPL using a floating vibracore rig and real-time total PAH immunoassay sampling techniques to create a 3-D conceptual site model illustrating the contaminant distribution and migration pathways. Supervised the preparation and integration of three Feasibility Studies using sub-aqueous capping, dredging, barrier walls, stabilization, and groundwater management. Led public comment discussion of remedy options.

Lead oversight engineer for EPA, coordinating with the Corps of Engineers, for the complex remedial design of the Metal Bank, PA NPL site, involving dredging and capping of PCB-containing sediment on the Delaware River.

CDM lead reviewer of a remedial design for dredging sediments contaminated with heavy metals and PAH's from the 100-year old Roebling Steel NPL site along the Delaware River in NJ.

Instructor

Chaired the advisory board for the Site Assessment and Remediation Program at University of California, Davis. Instructed courses on environmental sampling, engineering, and remediation for over 15 years at both Davis and Washington State University, Tri-Cities.

Coordinated and led education programs for the U.S. EPA, Dept. of Energy, California Department of Water Resources, Pearl Harbor Naval Air Station, Mare Island Naval Shipyard, McClellan Air Force Base, the American Institute of Chemical Engineers, and the New Jersey Department of Environmental Protection. Selected to represent the University of California in Santiago, Chile, helping to create the Chilean Environmental Regulations.

Presented numerous papers/panels on environmental strategy, including the Battelle Remediation of Chlorinated and Recalcitrant Compounds conference, the EPA Green and Sustainable Remediation Conference, the Superfund Conference in Washington, D.C., and at the International Symposium on Environmental Contamination in Central and Eastern Europe, in Budapest, Hungary.

Registrations/Certificates

Registered Professional Engineer CA, VA, MD, WV (Inactive PA, NJ, AK, NV, WY, ID, MS)
Class A General Engineering Contractor License (California- Inactive)
Hazardous Substance Removal & Remedial Actions Certification (California-Inactive)
FEMA Incident Command System
OSHA 40-training and Supervisor
Fairfax County - Master Watershed Steward
Fairfax County - Volunteer Stream Monitor
Fairfax County - Master Naturalist

Community Leadership

Elected Director – Northern Virginia Soil and Water Conservation District
Former Chair – Chesapeake Bay Preservation Ordinance Exemption Review Committee
Sierra Club – Great Falls Group – ExCom Chair and Vice Chair – 2000-2013
Fox Heritage HOA – Vice President 1997-Present

Honors/ Awards

Diplomat, American Academy of Environmental Engineers
Fairfax County Tree Commission 2010 – Friends of Trees Award
Northern Virginia Regional Commission 2007 – Community Appearance Award
Fairfax County 2001 - Environmental Excellence Award
George Mason University 1998 - Outstanding Executive MBA Graduate
Award
Beta Gamma Sigma 1998 - Business Honor Society
University California, Davis 1995 - Excellence in Teaching and Outstanding
Service
Radian Corporation 1992 - Corporate Outstanding Achievement
Award
Chi Epsilon 1980 - Engineering Honor Society
Eagle Scout 1971

Books

Koerner, Christopher E., Chapter Author and Editorial Reviewer. “Principles of Environmental Sampling”. 2nd edition, American Chemical Society, Professional Reference Series, 1995.

Special Interests/Hobbies

Sailing, canoeing, hiking, gardening, birdwatching, woodworking, travel