
MICHAEL W. MCLAUGHLIN, P.E.

Education

J.D. - Washington and Lee University School of Law, 1979

B.S. - Civil Engineering, Virginia Polytechnic Institute and State University, 1976

Professional Registrations

Virginia State Bar

Professional Engineer – Virginia, New Mexico

Professional Affiliations

Member, American Bar Association, Section on Environment, Energy and Resources

Vice Chair, Waste and Resource Recovery Committee

Member, Virginia State Bar Environmental Law Section

Member, Urban Land Institute

Professional Experience

Mr. McLaughlin is a licensed engineer and attorney with 30 years of professional experience providing advice on environmental matters. Mr. McLaughlin advises developers, contractors, lenders and land development professionals on the technical and regulatory requirements for construction on Brownfields sites nationwide. His combined engineering and legal background provides an unusual perspective on land development where hazardous wastes or other environmental challenges are present. Redevelopment of closed landfills is an area of special interest; he worked on his first such project in 1976.

In addition to his extensive Brownfields redevelopment experience in North America, he has worked at some three dozen Superfund National Priorities List sites in 17 states, and on scores of regulatory compliance, voluntary cleanup, and remediation projects for commercial, industrial, municipal, and military clients.

Voluntary Cleanup (Brownfields) Projects

- Investigation, expert consultation, and design of mitigation measures for large retail complex constructed on landfill in Cobb County, Georgia. Mitigation measures included control of subsurface fire and passive and active systems to mitigate decomposition gas containing methane.
- Investigation, expert consultation, expert testimony, and mitigation design regarding methane gas issues for redevelopment of inert landfill site in Virginia Beach, Virginia.
- Expert consultation and feasibility assessment for redevelopment of former construction and demolition debris landfill for residential land use, Prince William County, Virginia.

- Expert consultation and feasibility assessment for redevelopment of former mixed construction and demolition debris and municipal solid waste landfill, Fairfax County, Virginia.
- Expert consultation and remediation oversight for former rocket test facility, Gainesville, Virginia.
- Expert consultation regarding methane mitigation for residential development constructed adjacent to two closed municipal solid waste landfills in Independence, Missouri
- Investigation, risk assessment, and expert consultation regarding former dry cleaners site in Virginia Beach, Virginia.
- Investigation, risk assessment, and expert consultation regarding solvent release at automobile transmission service facility, Tysons Corner, Virginia.
- Consultation with municipal owner of potential NPL site (former municipal landfill) regarding strategic response (including pro-active investigation) to EPA requests for information, Chesapeake, Virginia.
- Site investigation, risk assessment, and expert consultation regarding urban lead soil contamination and proposed retirement housing, Portsmouth, Virginia.
- Consultation with potential developer of former coal gasification plant and industrial site regarding environmental contamination issues, Vancouver, British Columbia.

Superfund Projects

- Remedial Design (preparation of construction plans and specifications) for Krysovaty Farm Superfund site, Hillsborough Township, New Jersey.
- Evaluation of groundwater remediation technologies for Kin-Buc Landfill Superfund site, New Jersey.
- Conduct of Remedial Investigation and Feasibility Study, interim measures design, construction oversight, and remedial design for Hosier Road Landfill Superfund Site, Suffolk, Virginia.
- Conduct of Remedial Investigation and Endangerment Assessment for Riverfront Landfill, Kansas City, Missouri.
- Conduct of Remedial Investigation and Feasibility Study and remedial design and construction oversight for Fulbright and Sac River Landfill sites, Springfield, Missouri.
- Technical Mediation Consultant to PRP Group for Allocation of Response Costs, Bumpass Cove Landfill and Fowler Incinerator sites, Unicoi County, Tennessee.

- Investigation, Litigation Support, and Expert Testimony Regarding Sources of PCBs at Allied Paper/Portage Creek/Kalamazoo River site, Michigan.
- Consultation and Conduct of Remedial Investigation and Feasibility Study Update for United Chrome Products site, Corvallis, Oregon.
- Consultation with municipal client potentially responsible for Remedial Investigation and Feasibility Study at Obee Road Superfund site, Hutchinson, Kansas.
- Preparation of Remedial Action Plan for lead contamination site, Naval Surface Warfare Center, Dahlgren, Virginia.
- Oversight of EPA contractors performing Preliminary Assessment and Site Inspection; preparation of lagoon closure plans; and preparation of closure reports for carbide tool manufacturing facility, Latrobe, Pennsylvania.
- Expert consultation, review of remediation plans, preparation of comments, site investigation, and risk assessment for municipal owner of site adjacent to Abex Foundry Superfund site, Portsmouth, Virginia.
- Preparation of Feasibility Study for former locomotive maintenance facility, Union Road site (State Superfund list), Cheektowaga, New York.
- Preparation of Feasibility Study for site remediation at Village of Bedford Wells site (State Superfund List), Bedford, New York.
- Assessment of liability for bankrupt potentially responsible party, Chemform Site, Pompano Beach, Florida.
- Third party review of proposed remedial measures for tire retreading facilities in Pennsylvania, South Carolina, and Texas.

Resource Conservation and Recovery Act (RCRA) Projects

- Conduct groundwater contamination investigation and remediation design for underground storage tank and closed surface impoundment facilities, electronics component manufacturer, Morris Plains, New Jersey.
- Conduct of hazardous waste audit and minimization plan for tool steel manufacturing plant, preparation of RCRA Closure Plan and construction oversight for former surface impoundment contaminated with pentachlorophenol, and RCRA Facility Investigation involving TCA and PCBs, Bedford, Pennsylvania.
- Preparation of RCRA Closure Plan for former neutralization surface impoundment at nuclear fuel assembly plant, Lynchburg, Virginia.
- Third party review of RCRA Corrective Action for groundwater contamination at motorcycle manufacturing facility, York, Pennsylvania.

- Conduct of RCRA Facility Investigation, Interim Measures Design, and Corrective Measures Study for groundwater contaminated by organic solvents at electric motor manufacturing facility, Murphy, North Carolina.
- Preparation of multi-media RCRA Facility Investigation Workplan for large lead-acid battery reclamation facility, Forrest City, Missouri.
- Work plan for characterization of spent grit blast abrasive generated by Virginia shipyards.
- Preparation of RCRA closure plan for waste pile and tank units at fertilizer manufacturing facility, Chesapeake, Virginia.
- Preparation of RCRA closure plan for steel manufacturing facility (surface impoundment), South Boston, Virginia.
- Preparation of hazardous waste minimization plans, Fort Eustis, Virginia and Fort McClellan, Alabama.
- Preparation of Part A and Part B permit application for hazardous waste storage and open burning and open detonation areas, and remediation plan for indoor firing ranges, Naval Surface Warfare Center, Dahlgren, Virginia.
- Preparation of RCRA Part A and Part B permit applications for six hazardous waste treatment or storage facilities at the Naval Surface Warfare Center, Silver Spring, Maryland.
- Preparation of RCRA Part A and Part B permit applications for two fertilizer manufacturing facilities, Norfolk, Virginia.
- Preparation of RCRA Part A and Part B permit applications for commercial land disposal facility, Buckingham, Virginia.
- Technical Advisor for preparation of RCRA Part A and Part B permit applications for hazardous waste treatment and storage facilities at Ravenna Army Ammunition Plant, Ravenna, Ohio.
- Technical Advisor for review of RCRA ground-water monitoring plan and surface impoundment closure plan for Virginia Department of Waste Management.
- Development of "degree-of-hazard" approach for the Office of Solid Waste, U.S. Environmental Protection Agency, to evaluate waste management alternatives for a comprehensive set of hazardous wastes for representative environmental settings throughout the United States.
- Preparation of used solvent recycling plan for David W. Taylor Naval Ship R&D Center, Annapolis, Maryland; Portsmouth Naval Shipyard, Kittery, Maine; and Naval Undersea Warfare Engineering Station, Keyport, Washington.

- Conduct of two national surveys of underground injection well facilities used by chemical manufacturing industry for Chemical Manufacturers Association.
- Development of hazardous waste manifest tracking systems for six states.
- National Assessment of Hazardous Waste Management Practices for the Leather Tanning and Finishing Industry.

Environmental Due Diligence Assignments

- Conduct of real estate contamination assessments and for commercial developers and industrial concerns throughout United States.
- Conduct of environmental due diligence (desktop assessment), United States portions of an acquisition by a British manufacturer of a large specialty manufacturer that owned facilities in fourteen locations in ten states and leased a number of other facilities.
- Conduct of environmental due diligence and preparation of budgetary cost estimates in connection with the sale of a large aluminum recycler with four plants in northwest Alabama. Several of the facilities were subject to a complex joint operating agreement developed specifically to address environmental liabilities. Report included rough estimates of magnitude of environmental liabilities.
- Preparation of Phase I Environmental Site Assessments relating to prospective sale of a large defense aerospace manufacturer with nine plants in four states. One of the facilities was subject a RCRA corrective action permit issued to a predecessor in interest.
- Preparation of Phase I Environmental Site Assessments for communications and radar manufacturer with 11 active or former plants in four states. One of the facilities was subject to RCRA enforcement order requiring groundwater pump-and-treat for former impoundment.
- Conduct of environmental due diligence and compliance assessment for independent petroleum refinery in Louisiana. The facility was the subject of several allegations in the past of improper dumping, and was subject to RCRA corrective action authority for historical waste management units. Report included rough estimates of magnitude of environmental liabilities.
- Site investigation and voluntary remediation of chlorinated solvents in soil and groundwater at conveyor belt manufacturing facility, Cambridge, Maryland.
- Review of background documents and preparation of opinion letters regarding nature and extent of environmental liabilities in connection with refinancing commercial properties nationwide.
- Conduct of real estate contamination assessment and design of corrective measures for large hotel and office complex, Chicago, Illinois.

- Conduct of environmental contamination assessments for major chemical manufacturer (facilities nationwide).
- Project director for environmental site assessment and subsequent health and safety monitoring program, commercial office building construction at a naturally occurring asbestos site in Fairfax County, Virginia.

Storage Tank Assignments

- Conduct of real estate contamination assessment and removal of aviation fuel storage tank, tool steel manufacturing facility, Lexington, Virginia.
- Underground storage tank investigation and expert consultation, automobile lubrication facility, Seven Corners, Virginia
- Investigation and remediation cost estimate for bulk liquids storage facility, Savannah, Georgia
- Expert consultation and testimony in toxic tort property damage case, former Amoco Sugar Creek Refinery, Sugar Creek, Missouri.
- Expert consultation and testimony in private cost recovery case, former Rock Island Rail Yard, Rock Island, Illinois
- Underground storage tank management program and emergency spill response, Fairfax County Water Authority
- Soil remediation and removal of inactive riveted steel tanks, downtown Washington, D.C.
- Soil and groundwater investigation, and soil remediation of former commercial laundry site near new downtown arena, Washington, D.C.
- Preparation of analysis of remedial costs in support of EPA's new RCRA Subtitle I underground storage tank regulations

Other Environmental Management Projects

- Environmental Compliance Evaluation for Naval Air Station, Oceana, Virginia.
- Environmental Compliance Audit for synthetic rubber manufacturing facility, Bedford, Virginia.
- Industrial wastewater treatment and pretreatment studies to identify corrective measures for manufacturing facilities in Virginia, South Carolina, and Tennessee.
- Rationale for Alternative Air Emissions Standards for high efficiency energy systems.
- Survey of Fate and Effect of Used Oil in Virginia.

- Regulatory Overview for Upgrading Utility Solid and Special Waste Management Facilities.
- Liability Considerations for Management of State-owned PCB Equipment in California.
- Hazardous Substances Spill Prevention, Control and Countermeasure Manual for U.S. Navy.
- Facility and Asbestos Inspections at more than 20 military installations nationwide.
- National Validation of Analytical Methods for Trace Metals, Phenols, and Cyanides at more than 160 industrial plants nationwide.
- Analysis of Water Supply Alternatives for Northern and Tidewater Virginia.
- Evaluation of Legal Constraints on Transfers of Appropriated Water Rights in the Western United States.

Publications

1. "Tracking Toxics By Computer" (w/ Donald Shilesky) Waste Age (1981)
2. "Use of Risk/Cost Model Framework to Evaluate Hazardous Waste Management Alternatives" (w/ Michael Scott) Proceedings of 1983 Triangle Conference on Environmental Technology (1983)
3. "Lessons Learned in Remedial Design and Cleanup of a Federal Superfund Site" (w/ Thomas Maher and Christine Beling) Proceedings of Superfund '87 Conference, Hazardous Materials Control Research Institute (1987)
4. "Environmental Contamination and Real Estate Development" (w/ various co-authors, various publications and dates)
5. "Disposal of Municipal Landfill Gas Condensate" (w/ Jeffrey Briggs) Proceedings of 81st Annual Meeting, Air Pollution Control Association (1988)
6. "Use of Environmental Engineering Consulting Firms to Solve Environmental Problems" Environmental Audits: The Hows and Whys, Robert Merhige Center for Continuing Education (1988)
7. "Environmental Concerns in Commercial Real Estate Development" 20th Annual Advanced Business Law Seminar, Virginia Law Foundation (1989)
8. "Overview of Resource Conservation and Recovery Act" Environmental Regulation Course, Executive Enterprises (various dates)
9. "Hazardous Waste Clean-up: How Does Local Government Fare in the Superfund Game?" (w/ David Roberson) Annual Meeting of the Western Social Sciences Association (1991)

10. "Overview of Compliance Auditing" Environmental Regulation Course, Executive Enterprises (various dates)
11. "Governmental Inspections for Environmental Compliance" (w/ Lisa McDaniel) Environmental Regulation Course, Executive Enterprises (various dates)
12. "Phase I Risk Management Techniques for Lawyers and Consultants," Lawyer and Consultant Environmental Liability: Phase I Assessments and Beyond, State Bar of Arizona (1992)
13. "Private Cost Recovery and Compliance with the National Contingency Plan" Waste Investigation Program Seminar (1993)
14. "EPA's CAMU Rule Offers Flexibility, Strategic Advantages" Environmental Compliance and Litigation Strategy, Leader Publications (1993)
15. "Remedial Investigation and Feasibility Study at the Hosier Road Landfill" (w/ Jeffrey Marshall and Aileen Smith) Proceedings of the Virginia Waste Management Conference, Solid Waste Association of North America (1994)
16. "Superfund Case Study--Old Hosier Road Superfund Site" Environmental Compliance, Environmental Law and Policy Program, The George Washington University (1994)
17. "Technical Case Study--Application of Superfund to Old Town Dump Site, Amity, Make Believe" Environmental Compliance, Environmental Law and Policy Program, The George Washington University (1995)
18. "Strategic and Practical Implications of CAMU Rule" (w/ Jasenka Zbozinek) Proceedings of HAZWASTE '95 Symposium, Arizona HazWaste Society (1995)
19. "Strategic Environmental Management--Gaining a Competitive Advantage through ISO 14000" (w/ Robert J. Shaffer), Virginia Manufacturers Association Focus (Summer/Fall 1996)
20. "Adaptive Reuse of Landfills--Putting Tainted Property to Work" Course Materials, The Fourth Annual Landfill and Landfill Gas Seminar, SCS Engineers (1997)
21. "Compliance Audits: A How-To Guide," Course Materials, Environmental Audits Conference, CLE International (1998)
22. "Property With a Past--Redeveloping Contaminated Real Estate" The Construction Specifier (March 1999)
23. "The Role of Experts - Pitfalls for the Unwary Expert" IBC USA's 3rd Annual Executive Forum on Environmental Forensics (June 2000)
24. "Consultant Liability and Malpractice: Avoiding Malpractice - Suggestions for Consultants" Environmental Permitting 2000, 14th Annual Summer School, Florida Chamber of Commerce (July 2000)

25. "Redevelopment of Old Landfills: Legal and Technical Issues" Virginia Review (Volume 79, No. 5, September/October, 2001)
26. "The Tech Corner – Landfill Gas and New Source Performance Standards under the Clean Air Act," ABA SEER Waste Management Committee Newsletter (August 2004)
27. "Sturdy Foundations—With Sound Engineering, Closed Landfills Can Be Commercial Sites" Waste Age, Primedia, Inc., Vol. 35, No. 9 (September 2004)
28. "The Challenges of Redeveloping Landfills Can Be Overcome" Brownfield News, Envirometrics Communications, Inc., Vol. 8, No. 4, (September/October 2004)
29. "Upscale Courses Grow from Landfills" Golf Course News, GIE Media, (January 20, 2005)
30. "Hidden Dangers? Transportation & Management of Overlooked Waste Streams: Solid and Hazardous Waste Management—Remediation and Demolition in the Modern World" 34th Annual Conference on Environmental Law, American Bar Association Section of Environment, Energy, and Resources, Keystone, Colorado (March 10-13, 2005).
31. "From Brown to Greens" Pollution Engineering BNP Media (April 2005)
32. "Turning Browns into Greens" Waste Age, Primedia, Inc., Vol. 36, No. 12 (December 2005)
33. "Landfill Brownfield Snags are Surmountable" Waste News, Crain Communications, Inc., Vol 11, No. 19 (January 2, 2006).
34. "Methane Mitigation—Monitoring and Mitigation of Methane at Landfill Sites" Waste Management World James & James (Science Publishers) Ltd. (January-February 2006)
35. "Redeveloping Landfills into Golf Courses" Public Management International City/County Management Association (May 2006)
36. "Closed Landfills: Assets in Disguise" Brownfield News National Brownfields Association (February 2007)
37. "Commercial Redevelopment of Closed Landfills" Brownfield News National Brownfields Association (April 2007)
38. "Global Climate Change: Landfills, Friend or Foe?" ABA SEER Waste Management Committee Newsletter (May 2007)
39. "Residential Developments on Closed Landfills," Brownfield News, June 2007, p. 38
40. "Doing the Deal on a Landfill Redevelopment Project," Brownfield News, October 2007 (Volume 11, Issue5), p. 35
41. "Special Waste Survey of States," ABA SEER Waste Management Committee Newsletter (November 2007)

42. "Brownfields Full of Risks and Rewards," Waste News, April 28, 2008, p. 10.
43. "Greenhouse Gas Emission Projects at Smaller Landfills," ABA SEER Waste Management Committee Newsletter (July 2008)
44. "Continuing Obligations and Reasonable Steps Under AAI," by Joe Kesling and Mike McLaughlin, ABA SEER Environmental Transactions and Brownfields Committee Newsletter (February 2009), p. 11
45. "Mandatory Greenhouse Gas Reporting and Municipal Solid Waste Landfills," ABA SEER Waste and Resource Recovery Newsletter (January 2010), p. 6
46. "Coal Ash Warms Up: EPA Issues Long-Awaited Proposed Rules," ABA SEER Waste and Resource Recovery Committee Newsletter (August 2010), p. 1
47. "Sustainable Solid Waste Infrastructure," ABA SEER Waste and Resource Recovery Committee Newsletter (July 2011), p. 10
48. "Universal Waste Regulations Are Anything But," ABA SEER Waste and Resource Recovery Committee Newsletter (January 2012), p. 1
49. "Supreme Court Update: U.S. v. Southern Union Co.," ABA SEER Waste and Resource Recovery Committee Newsletter (January 2012), p. 4
50. "Sustainable Solid Waste Infrastructure," (w/ Lisa McDaniel), Chapter 9 in Infrastructure Sustainability and Design, Edited by Spiro Pollalis, Andreas Georgoulis, Stephen Ramos, and Daniel Schodek (Routledge, 2012), pp. 116-125