



CONTACT INFORMATION

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209 Shafter Street Islandia, NY 11749

EDUCATION

BSc, Environmental Science, State University of New York College of Environmental Science and Forestry, 1988 MS, Environmental Science, Hunter College, expected

PROFESSIONAL PROFILE

Mark Elmendorf

Principal Scientist

EXPERIENCE SUMMARY

Thirty-five years of experience in environmental consulting: Principal Scientist at Roux; Principal-in-Charge at ERM, Inc.

TECHNICAL SPECIALTIES

Over thirty-five years of experience in environmental consulting with an emphasis on regulatory analysis, vapor intrusion issues, risk management programs, and hazardous material storage and releases. Expert Witness services to clients throughout the United States on both environmental litigation and environmental insurance coverage related matters involving issues that include regulatory negotiation and litigation support. Experience has included multiple class action cases. Having litigated cases from inception through verdict, Mark takes a pragmatic approach in understanding his client's business interest and works to develop strategies to achieve favorable outcomes. He works with clients to resolve disputes in ways that work best for them and their businesses, whether it is through mediation, arbitration, or litigation.

His diverse project experience includes working under CERCLA, RCRA, TSCA, NEPA, SEQRA, NJDEP Site Remediation Program, NJPDES, NYSDEC Voluntary Cleanup Program, NYSDEC State Superfund Program, and NYSDEC Oil Spill Program.

Review and assessment of cost related to investigation and remediation of contaminated sites, including classification of costs incurred, projection of future costs and allocation of costs based on date, source and/or responsible party. Management and oversight of remediation projects involving soil and ground-water contamination; remediation of chemical, petroleum, asbestos, and PCB contamination at factories, refineries, gas stations, hospitals, and commercial properties; performance of field activities, and selection/oversight of contractors.

Mr. Elmendorf has presented training programs on behalf of state agencies on various engineering and compliance requirements. He has extensive experience in process hazard analysis and root cause studies focusing on the chemical industry use, storage, and processing of hazardous materials.

REPRESENTATIVE PROJECTS

Contaminant Assessment

- Principal-in-Charge for client assuming ownership of several NPL sites in Northeast. Sites
 included Circuitron Corp., Goldisc, Nation Heatset, John Street, Li Tungsten Corp, Liberty
 Industrial and General Instruments. Activities included review and evaluation of RI Work Plan,
 Sampling and Analysis Plan (SAP), Quality Assurance Project Plan (QAPP) and Health and
 Safety Contingency Plan (HASCP) for each site. Coordinated technical and administrative
 activities with the independent Project Coordinator, the PRP Technical Committee, and EPA
 representatives. Also assisted with community relations activities and property access
 negotiations.
- Principal-in-Charge managing major USEPA Toxic Substances Control Act (TSCA) PCB
 remediation projects. Projects included major building releases, occupied area remediation
 and various self-implementing cleanup provisions. Determined Applicable or relevant and
 appropriate requirements (ARARs) for PCBs at complex sites addressing TSCA, RCRA (and in
 some cases, state regulations).



- Principal-in-Charge for major Contaminant cleanup at World
 Trade Center impact area. Contaminants included mold, bird
 excrement, dust, metals, and asbestos. Represented insurance
 interest in the cleanup of Contaminants at residential
 properties. Developed state-of-the-art remediation methods to
 decontaminate occupied buildings within an expedited time
 frame. Tasks included investigation, risk evaluation, designing
 control systems and the development of "first of the kind"
 preventive measures. Restoration activities included
 mechanical systems, common areas, and elevator shafts and
 occupied residential space.
- Principal-in-Charge providing expert services for a major class action certification motion. The case involved school age children seeking damages against a large school district. The client was several third-party contractors, which were involved in construction of the school buildings. Provided expert services and deposition on key scientific issues associated with microbial levels within the schools.
- Principal-in-Charge for a several multi-million-dollar mold claims involving large commercial hotels. The cases concerned a series of complex water intrusion investigations and associated damages. Expert services included evaluation of intrusion pathways to determine the root-case of water damage claims. Assisted in determining the age of water damage and appraisal of appropriate remedy for final cure of remediation.
- Principal-in-Charge for completion of an extensive mold investigation and remedial program. Assisted client in assessment of mold contamination at an 800-apartment complex impacted by storm flooding. Tasks include sampling various media, risk determination and designing remedy.
 Represented owner at hearings with local agencies.
- Principal-in-Charge for major Contaminant cleanup at Brookhaven National Laboratory in New York State.
 Responsible for the development and implementation of procedures during the excavation and processing of radiological, chemical, biological, and high hazard materials.
 This project included the oversight of ten safety professionals and sixty remediation workers.

Environmental Impact

 Principal-in-Charge for a project to prepare EAS for Ocean Breeze Park for the NYC Department of Parks. The project included redevelopment of a 110-acre park and research of potential issues associated with the proposed action. Tasks included contacting local agencies, field surveys and engineering studies to document compliance. EAS sections included air quality, community impacts, hazardous material management, natural resources, water issues, drainage, and

- wetlands. Roux then prepared a comprehensive report, which detailed the findings of the evaluation.
- Principal-in-Charge for a project to prepare a formal determination of applicability of the National Environmental Protection Act (NEPA) to the proposed removal of Buildings at the Amtrak Sunnyside Yard location. This included research of potential issues associated with the proposed action. This included contacting local agencies, field surveys and engineering studies to document compliance. Also, a full of a line-of-sight photographic survey was performed. Roux then prepared a comprehensive report, which detailed the findings of the evaluation. The report provided applicable justification and a record of compliance with the NEPA criteria. Based on the submission, a "Finding of No Impact" was issued within 30 days.
- Principal-in-Charge for a project to prepare EIS for a 80 acre truck engine plant. This included research of potential issues associated with the proposed action. Tasks included contacting local agencies, field surveys and engineering studies to document compliance. EIS sections included hazardous material management, natural resources, water issues, drainage, and wetlands. Roux Associates then prepared a comprehensive report, which detailed the findings of the evaluation.
- Principal-in-Charge for over 500 siting studies for major telecommunication companies including Omni Point, Sprint, and Nextel. Studies followed federal and state NEPA requirements. Prepared impact mitigation reports, visual impact studies, sensitive area evaluations, and wetland permits. Assisted site development engineers with zoning applications.
- Principal-in-Charge for a project to prepare multiple sections of a SEQRA EIS for a 100-acre mixed use development in Yonkers, New York. This included research of potential issues associated with the proposed action. Tasks included contacting local agencies, field surveys, and engineering studies to document compliance. EIS sections included hazardous material management, natural resources, water issues, drainage, and wetlands. Prepared a comprehensive report, which detailed the findings of the evaluation.
- Principal-in-Charge for a project to prepare a SEQRA EIS for a large power generation unit in the New York Hudson Valley. EIS sections included air quality analysis/modeling, hazardous material management, natural resources, water issues, drainage, and wetlands. Prepared a comprehensive report, which detailed the findings of the evaluation.
- Principal-in-Charge for a project to prepare multiple sections of a SEQRA EIS for a 100-acre mixed use development in Yonkers,



New York. This included research of potential issues associated with the proposed action. Tasks included contacting local agencies, field surveys and engineering studies to document compliance. EIS sections included hazardous material management, natural resources, water issues, drainage, and wetlands. Roux also prepared a comprehensive report, which detailed the findings of the evaluation.

• Principal-in-Charge for a project to prepare a formal determination of applicability of the National Environmental Protection Act (NEPA) to the proposed removal of Buildings at the Amtrak Sunnyside Yard location. This included research of potential issues associated with the proposed action. This included contacting local agencies, field surveys and engineering studies to document compliance. Also, a full line-of-sight photographic survey was performed. Roux then prepared a comprehensive report, which detailed the findings of the evaluation and provided applicable justification and a record of compliance with the NEPA criteria. Based on the submission, a "Finding of No Impact" was issued within 30 days.

Environmental Risk Assessment Surveys

- Principal-in-Charge for major private purchase of a former aircraft engine plant on 250 acres in New Jersey. Assisted legal team in developing indemnification agreement and access agreements, which allowed purchase of property with no set-aside funding required. The indemnification agreement covered site related as well as third party coverage.
- Principal-in-Charge for various projects supporting EH&S and legal teams defining claims of environmental damages.
 Provided expert reports addressing impact and cost issues associated with contamination of media at industrial and commercial sites. Clients have included major law firms, corporate managers, and international clients.
- Principal-in-Charge for various DOD property assessments throughout the US. Evaluated military installations following detailed DOD protocols to access environmental conditions.
- Principal-in-Charge for over 125 environmental compliance audits in 26 states. Audited industries have included aerospace, electronics, medical, cosmetics, metal working, painting, ceramics, transformers, pulp and paper, petroleum, and TSDFs.
- Principal-in-Charge for completion of a wide range of environmental permits. Expert at agency negotiating and providing state-of-the-art regulatory interpretation.
- Principal-in-Charge for over 300 siting studies for major telecommunication companies including Omni Point, Sprint, and Nextel. Studies followed federal and state NEPA requirements. Prepared impact mitigation reports, visual impact studies, sensitive area evaluations, and wetland

- permits. Assisted site development engineers with zoning applications.
- Principal-in-Charge for completion of solid waste characterization study for a major pharmaceutical operation.
 Obtained unique Beneficial Use Determination (BUD) for solid wastes generated at the plant, saving substantial disposal costs.
- Authored detailed "How-To" books on Process Safety
 Management, Pollution Prevention, and CAA issues. End-users
 included clients such as Stanley Tools, Pfizer, USPS, NMMA,
 Revlon, and Coleman Company.
- Principal-in-Charge responsible for plan development and compliance including field investigative techniques and accuracy of sampling methodology, equipment calibration, and quality control procedures during the performance of remedial investigations and corrective actions conducted at hazardous waste sites and various manufacturing and industrial facilities.
- Principal-in-Charge for facility specific compliance and pollution prevention programs for Fortune 50 manufacturing companies. Programs included production systems focus and management systems for life cycle analysis and continuous improvement.

Clean Air Act

- Principal-in-Charge for completion of a Title V Operating permit at a major pharmaceutical R&D facility. The project included over 400-point sources including pilot plant batch operations involving a variety of unit operations. Process equipment included filtration units, centrifuges, reaction and evaporation vessels, dryers, and heat exchangers as well as specialized organic synthesis processing equipment.
- Principal-in-Charge for the preparation of an OSHA Process
 Safety Plan for a complex toll batch production chemical plant.
 Applicable processes at the facility included high-pressure high heat reactors, distillation reactors and vacuum systems.
 Developed PHA, SOP, change management and BMP components for plant management.
- Principal-in-Charge for MACT standard applicability determinations and developed compliance strategies for various manufacturing facilities. Assisted manufacturing associations in developing MACT determination documents for EPA submission.
- Principal-in-Charge for VOC and NOx compliance plans for RACT regulations at manufacturing plants. Projects included presumptive RACT applicability analysis; process evaluations; available control technology identification, technological feasibility, and economic reasonableness determinations.



- Principal-in-Charge for numerous air dispersion and receptor modeling studies, using EPA models, such as ISC2, PUFF, DEGADIS, SCREEN, and specialized air toxics and combustion models. In a key project for a major industrial corporation with nationwide facilities, conducted accidental release modeling for assessments under EPA's 112(r) rule.
- Principal-in-Charge for p-MACT and MACT development effort for major trade associations. Assisted associations in writing and negotiating MACT standards for boat manufacturing and composite fabricators. In addition, prepared a critical review of EPA AP-42 emission factor development data to negotiate modifying factors for association interests.
- Principal-in-Charge for numerous HAZOP risk studies at chemical plants in the US. Developed corrective action plans, RMP and 112r programs.
- Principal-in-Charge for numerous stack testing programs in the US. Developed testing protocols and implemented complex stack testing programs.

REPRESENTATIVE EXPERT RETENTIONS/APPEARANCES

Recent Cases

- Emhart Industries, Inc. et al. v. New England Container Company, et al., C.A. Nos. 06-2018-S and 11-0023-S. Case involving cost allocation and source determination of PCB usage at multiple locations. The expert services were in connection with certain claims clients in the Litigation related to contamination at the Centredale Manor Superfund Site in North Providence, Rhode Island Prepared two separate Expert reports. Deposition taken on October 17, 2023.
- United States District Court Middle District of Pennsylvania, United States of America V. First Capital Insulation, Inc., Francis Richard Yingling, Jr., Lobar, Inc., D Nnis Lee Charles, Jr., M & J Excavation, Inc., John August Sidari, Jr., And Ty Allen Barnett, CRIM.NO. 1:20 -CR-020, Criminal Case involving six counts of the National Emission Standards for Hazardous Air Pollutants {"NESHAP") 42 U.S.C. § 7412. Expert Services, Trial Consultant during trial, Trial Testimony June 1, 2022. Jury verdict of not guilty on all six counts.
- Civil District Court for the Parish of Orleans, Sheila Guidry, Individually and On Behalf of All Others Similarly Situated Vs. Dow Chemical Company, ET AL, No. 09-7832, Division "K". Class action involving hazardous material exposure from catastrophic release. Developed expert reports and presented technical opinions during mediation that resulted in favorable settlement. (2018-19)
- Hendricks vs. Trade-Winds, State of New York, County of New York, Index No. 15335/05. Developed opinions regarding source apportionment and associated remediation costs. Prepared expert report that resulted in favorable settlement after first day of testimony. Expert Report, Trial Testimony December 12,

- 2008. Hazardous material exposure and property damage related to contractor actions. (2008)
- Zizzo vs. Pender County Board of Education, State of North Carolina, County of Pender, File No.: 02CVS1064. Expert Report, Deposition on October 28, 2004, Case Consultation. Class action involving hazardous material and microbial exposure to school age children. Prepared Expert reports. Deposition taken on October 17, 2005 (2005)
- Hicksville Water District V. Philips Electronics North America Corp, et al., United States District Court for the Eastern District of New York, Civil Action No. 2:17-cv-04442-ADS-ARL. Emergent contaminate case involving legacy operations. The complaint alleges groundwater contamination and impact to the water supply aquifer. Case Consultation. (2017-2022)
- Board Of Land and Natural Resources State of Hawaii in The Matter of Healy Tibbitts Builders, Inc. Barge Anchoring Outside the Honolulu Harbor Entrance Channel, Island of Oahu. Settlement Agreement Negotiation support, expert services for multimillion-dollar claim related to extensive coral damage and restoration. (2023)
- Morgan City Land and Fur Company, L.L.C. Versus Tennessee Gas Pipeline Company, L.L.C., Et Al, 25th Judicial District Court for The Parish of Plaquemines, State of Louisiana, Docket No. 64-754. Case consultation, Expert Report. Property damage related to pipeline damages of marsh areas. (2022)
- Velimir Zic And Marilyn Zic Vs. Citnalta Construction Corp.,
 Metropolitan Transportation Authority, New York City Transit
 Authority and Judlau Contracting, Inc., Third-Party Index No.:
 590041/14. Expert Report. Hazardous material exposure during construction of public projects. (2022)
- Ace American Insurance Company Vs. First Call Environmental, LLC. United States District Court for The Eastern District of Pennsylvania. Civil No. 5:21-Cv-02331-JMG. Expert Report. Hazardous material exposure and property damage related to catastrophic nitric acid release and fire. (2022)
- Circuit Court for The County of Fairfax, Case No. 202103301. Lexington Insurance Company, V. Covanta Fairfax, Inc. Case consultation, Expert Report. Economic damages to municipality due to shut down of waste to energy plant. (2022)
- Ivy Callowhill Property, LLC vs. Bowler Lewis Thrower Architects, mediation ongoing. Case involving major apartment building construction. Expert report, case consultation of construction defects and hazardous material issues. (2023)
- Richard and Nefatiti Anderson V. Gold Medal Service, Costco, And Costco Wholesale Corporation, Superior Court Of New Jersey Law Division, Hunterdon County Docket No.: Hnt-L-192-19. Case Consultation, Expert Report. Property Damage Related to Microbial Impacts Due To Water Damage And Fuel Oil. (2023)
- Giorgio Paterno And Susan Cattermole V. Narragansett Bay Insurance Et Al, Superior Court Of New Jersey Law Division



- Monmouth County, Docket: Mon L -002151 20. Case consultation, Expert Report. Property damage related to microbial impacts due to water damage. (2023)
- Sudesh Realty, LLC, v. JDT Petroleum, Inc., v. Fine Enterprises, Inc., OM Traders, Inc. and ABC Contractors 1-100 (fictitious contractors/fuel carriers), Superior Court Of New Jersey Camden County Law Division Docket No. L-4057-18 Civil Action. Case consultation, Expert Report. Property damage related to major gasoline release. (2021-23)
- Garrison Property and Casualty Insurance Company, a/s/o Martin A.

 Domacasse v. Region Energy Docket No.: WRN-L-274-20.

 Superior Court of New Jersey Law Division Warren County.

 Case consultation, Expert Report. Hazardous material exposure and property damage related to fuel oil release. (2022)
- Stuart v. Al's Oil; 430/6449; 1413978, prelitigation claim related to Hazardous material exposure and property damage related to fuel oil release. Developed field investigation reports, expert reports and presented technical opinions during mediation that resulted in favorable settlement. (2021)
- Betty Iacono v. Barbary Coast Fuel Corp. and Philadelphia Indemnity Insurance Co (MA) Case consultation, Expert Report. Hazardous material exposure and property damage related to fuel oil release. Principal for remediation of release (2020)
- Joel Philip Knoblauch vs Penn Hill Condominium Association and Mazur & Miller Realty, Inc. D/B/A Top Flite Realty, The Court of Common Pleas, Berks County, Pennsylvania, NO. 14-18900. Expert Report. Hazardous material exposure and property damage related to contractor actions. (2021)
- Choikov Vs. Lineman Management, Inc., D/B/A Cenco Heating Oil, Superior Court Of New Jersey Law Division, Burlington County Docket No.: L-002187 -17. Case consultation, Expert Report. Hazardous material exposure and property damage related to fuel oil release. (2019)
- Archstone-Smith, et al. v. Travelers Indemnity Co. of Illinois, et al., Fairfax City Circuit Court, File No. 279110.01530. Case Consultation, Expert Report. Multi-location high value case for various water intrusion, engineering, and mold issues. (2009)
- Holland vs. W. M. Reality, Supreme Court of the State of New York, Kings County, Index No. 28601/05. Case consultation, Expert Report. Hazardous material exposure and property damage related to fuel oil release. (2005)
- Zincke vs. Pacific Energy Corp., State of New York, County of Kings, Index No. 3892/08. Case consultation, Expert Report. Hazardous material exposure and property damage related to fuel oil release. (2016)

Additional Cases

Holland vs. W. M. Reality, Supreme Court of the State of New York, Kings County, Index No. 28601/05 Case consultation, expert report

- Frame vs. Total Restoration, Supreme Court of the State of New York, New York County, Index No. 105995/06 Case consultation, expert report
- Ultimate Precision vs. GSM, LLC, Supreme Court of the State of New York, Suffolk County, Index No. 13529/2010 Case consultation, expert report
- Lucy Kung vs. Jimmy Zheng, Supreme Court of the State of New York, Queens County, Index No. 4647/07 Case consultation, expert report
- TAG, LLC. Vs. Crompco, Supreme Court of the State of New York, Queens County, Index No. 2990/2302 Case consultation, expert report
- McMahon vs. Suburban Water, Supreme Court of the State of New Jersey, Docket ssx-l-188-04 Case consultation, expert report

PROFESSIONAL TRAININGS

Certified Microbial Consultant, AIAQC, 2000

- Air Pollution Training Institute Control of Particulate Emissions, Control of Gaseous Emissions, Atmospheric Dispersion Modeling, 1991-1992
- Hazard Analysis Training Certification, Four-Elements Institute, 1991
- Massachusetts Institute of Technology-Negotiating Environmental Agreements, 1994

PUBLICATIONS

- "The Clean Air Act Amendments of 1990: Operating Permit Program." Environmental Law and Practice, Sept./Oct. 1994.
- "Planning and Evaluating Emission Control Projects." Environment Today, Nov. 1994.
- "Emission Inventories and the CAA." The Metropolitan Corporate Counsel, Nov. 1994.
- "MACT 112 Program Should Not Be Forgotten." New Jersey Environmental Law, May 1995.
- Process Safety Management Manual for Unsaturated Polyester Resin Manufacturing. Washington DC: NMMA Publications, May 1996.
- "Strategic Planning for Title V Programs" Key environmental issues in US EPA Region II. Chicago: American Bar Association. June 1996.
- "A Primer on Process Safety Analysis." Environmental Law and Practice, July/Aug. 1996.
- "Implementing Process Safety Management Systems." Chemical Engineering Process, accepted for publication.
- New York State's Title V Operating Permit Program. Presented at five locations throughout New York State for the New York State Business Council
- Strategic Planning for Title V Programs. Presented as invented guest speaker at the American Bar Association annual environmental meeting.



112r Accident Release Prevention Program. Presented at five locations throughout New York State for the New York State Business Council.

Chemical Bulk Storage Transfer System management. Presented as invented guest speaker at the New York State Department of Environmental Conservation CBS seminar series.