DAVID L. PALMERTON, JR., PG

Education

BS - Geoscience, SUNY College Buffalo, 1985

Professional Licenses

Professional Geologist - Kentucky, Illinois, Pennsylvania, South Carolina North Carolina, Tennessee

Specialty Certifications

U.S. Army Corps of Engineers Construction Quality Control Manager American Institute of Professional Geologists Certified Professional Geologist

Professional Affiliations

Air and Waste Management Association American Institute of Professional Geologists Engineers' Society of Western Pennsylvania National Groundwater Association Pennsylvania Independent Oil and Gas Association Appalachian Basin Midstream GPA

Professional Experience

Mr. Palmerton is a Project Director for the Environmental Services Practice for SCS offices in the Mid-Atlantic Region. He has managed strategic and technical environmental consulting issues for Fortune 100 companies throughout the United States. Mr. Palmerton provides senior technical oversight, strategic support, and cost control for large multi-component environmental sites. His consulting assignments include environmental science-based investigations, including soil, sediment, groundwater, and dense non-aqueous phase (DNAPL) investigations and remediation at some of the nation's most high-profile sites. Mr. Palmerton also provides litigation support regarding contaminant transport, hydrogeology, geology, geographic information systems, and hazardous waste remediation.

Mr. Palmerton has more than 35 years of experience in environmental consulting in the areas of environmental liability assessment, investigation, remediation, due diligence, and construction quality control. He has extensive experience with the energy industry, specifically oil and gas upstream operations. His adept knowledge of federal and state regulatory requirements has resulted in successful negotiations with regulatory agencies on the behalf of several clients. Mr. Palmerton is a professional geologist in several states and is also a former Certified Hazardous Materials Manager. Notable projects that Mr. Palmerton has been involved in are described below.

Site Investigations and Remediation

EDF Renewables, New York, Solar Farm Development. Managed the initial stages of development for a 25-acre solar farm. Provided Phase I Site Assessment, wetland evaluation, geotechnical studies, tree height survey, and sampling and analysis of waste areas on the site.



Newell, West Virginia, Vesuvius US, Globe Mine NPDES. He managed the redevelopment of a former water treatment system to manage acid mine drainage from a former clay mine. He managed the construction planning and activities for mine water discharge pipes, electrical, pumps, and water management to meet NPDES discharge limits.

Bradford, Pennsylvania, Pittsburgh University, Well Field Evaluation Phase I Assessment. Provided a detailed field analysis of a potential acquisition of property in a former oil well development. Field studies included locating several hundred wells and determining their status.

New York, Pennsylvania, Various Clients, Multiple Site Assessments and Due Diligence. He has performed multiple Phase I, Phase II, due diligence, and environmental site assessments for manufacturing, law firms, universities, and commercial properties.

Fairfield, Connecticut, General Electric Co., General Electric Acquisition Honeywell. For General Electric's planned \$42 billion acquisition of Honeywell International Inc. in 2001, he was a member of the six-person technical team that provided cost analysis of Honeywell's world-wide environmental liabilities. Working with General Electric's outside counsel and legal team, he and the team provided detailed cost analysis for dozens of Honeywell's largest environmental liabilities. He broke down environmental remediation costs for one of the largest liabilities (more than \$100 million).

Rochester, New York, Confidential Client, Chlorinated Solvents. For Harris, Beach and Wilcox, Rochester, New York, Mr. Palmerton provided review and analysis of environmental plans and reports for an enforcement proceeding. The site was a manufacturing facility having chlorinated solvent groundwater contamination. Mr. Palmerton identified deficiencies in a NYSDEC prepared RI/FS and reanalyzed data that was supportive of the law firm's client to provide alternatives for negotiation. Mr. Palmerton provided strategic analysis of hydrogeology and contaminant transport issues and prepared as a potential expert witness. The case was settled out of court.

Nassau, New York, General Electric, Dewey Loeffel Landfill. For a site in eastern New York, he provided groundwater investigation for General Electric to evaluate landowner complaints of trichloroethylene in groundwater adjacent to the Dewey Loeffel Landfill. Groundwater sampling and mapping provided support for additional characterization activities to evaluate potential off-site impacts to adjacent homeowner wells.

New York, National Grid (Formerly Niagara Mohawk), Forensic Investigation. For a utility, he performed groundwater fate and transport analysis to determine potential off-site impacts and the timing of releases of hazardous constituents to groundwater for insurance purposes.

Pennsylvania, Transcontinental Gas Pipe Line Company. Mr. Palmerton provided technical support for regulatory negotiations with the Pennsylvania Department of Environmental Resources that resulted in a successful settlement for Transcontinental Gas Pipe Line Company. Mr. Palmerton was instrumental on the team that designed and implemented the investigation of polychlorinated biphenyl (PCB) and regulated waste and subsequent remedial efforts along a northeastern pipeline segment. He prepared a focused remediation analysis, which became the basis for a complete contract documents package for the remediation of PCBs and regulated contaminants in soils at two facilities in Pennsylvania. He directed the implementation of the remedial program that provided for excavation of PCB-impacted soils and a verification program for restoration of the excavated areas. He helped establish an innovative data management package that linked site data within a computer database with CAD and GIS application packages. He provided client liaison services; managed all daily project operations; and performed all project scheduling, budget control, and quality control.

New York and Pennsylvania, Tennessee Gas Pipeline. Mr. Palmerton directed the hazardous constituent remedial programs for Tennessee Gas Pipeline in New York and Pennsylvania. He provided planning, contract document development, and remediation construction oversight services for a multi-site program, working cooperatively with the client, remediation contractors, and several consulting firms. The project required pre-remediation sampling for PCB, priority pollutant metals, and organic constituents as well as design for remediation and abandonment or replacement of drain lines and other operational facilities.

Worcester, Massachusetts, Worcester Telegram and Gazette, Manufactured Gas Plant. Mr. Palmerton served as Project Manager for a RI/FS for a former manufactured gas plant (MGP) hazardous waste site. Responsible for project scheduling, budget, quality control, client liaison, and daily work operations; aquifer tests; and preparation of the final RI/FS report.

Lubbock, Texas, USEPA Contractor. Performed well installation, aquifer permeability tests, groundwater sampling at Reese Air Force Base.

Former NIKE Missile Bases, US Army Corps of Engineers. Performed site assessment and sampling of soil, groundwater, and transformers for PCBs and other hazardous constituents at several former NIKE missile bases.

New Jersey, Confidential Client, Petroleum Release. For a former oil distribution company, Mr. Palmerton provided project management and strategic support for developing improved remedial systems and cost control. A comparison of well point vacuum extraction and dual pump recovery determined that significant cost savings could be made by converting to the well point vacuum extraction system. The conversion was approved by NJDEP, and the dual pump systems were shut down, providing a significant water treatment cost saving to the client.

Confidential Client, Manufactured Gas Plant. Mr. Palmerton served as Project Manager for a preliminary site assessment (PSA) and RI/FS for a former manufactured gas plant (MGP) hazardous waste site. Assessment and RI activities were designed to provide data to determine additional potentially responsible parties (PRPs). Responsible for project scheduling, budget, quality control, client liaison, and daily work operations; aquifer tests; and preparation of the final RI/FS report. Sufficient data were developed to support preliminary litigation to successfully enjoin a PRP. Additional work for the MGP site was performed following identification of PRPs and completion of additional studies by a PRP. Mr. Palmerton provided a technical review of PRP work on behalf of legal counsel for the client.

Carlisle, Pennsylvania, U.S. Army Corps of Engineers, Navy Ships Parts Control Center. He led a team investigating PCB contamination in groundwater. The investigation included borings, fracture trace analysis, subsurface geophysics (gamma ray and resistivity), bedrock mapping of karst terrain, groundwater studies, and sampling and analysis.

Charlestown, Rhode Island, Naval Auxiliary Landing Field. Developed work plans, safety plans for UXO, and performed groundwater well installation, groundwater sampling, soil sampling, and site reconnaissance.

Helen Mine, Shell Western E&P Inc. Division of Royal Dutch Shell, NPDES Program. For Shell's Helen Coal Mine, managed the operation of a water treatment plant to meet NPDES discharge limitations. Also provided evaluation of mine water levels to determine if seeps of acid mine water was occurring due to outbreaks from mine water levels or naturally occurring seeps.

Boston, Massachusetts, Island End River Confidential Client. He provided strategic support and assisted in the development of interim remedial measures for a large sediment project in the vicinity of the Boston Harbor.

RCRA Investigations

Hersey, Michigan, Beazer, Creosote Plant. Mr. Palmerton provided negotiation and management for the design of an interim remediation of sediments in an unnamed tributary, prior to completing a feasibility study of a former wood treating site and adjacent Hersey River, Michigan. He successfully negotiated on behalf of the client a feasibility study that selected the interim remedies already implemented at the site. For another portion of the River, Mr. Palmerton was selected by the client to assist with negotiations with the Michigan DEQ regarding sediment management issues including issues related to dam removal or reconstruction. He managed an investigation, interim remedial measures, and feasibility study to address sediments containing PAHs in the Hersey River. Developed a site investigation work plan and provided management of the project during implementation. Investigation work included groundwater, DNAPL, sediment, soil and biota sampling and analysis.

Carbondale, Illinois, Beazer, Creosote Plant. Mr. Palmerton managed FS revisions and remedial design for a former creosote wood-treating facility having both RCRA Corrective Action and Illinois Environmental Protection Act requirements. The work involves the re-evaluation of remedial alternatives for eliminating the migration of hazardous constituents to a stream through groundwater, soils, and sediments and technical support for establishing a Corrective Action Management Unit (CAMU).

Buffalo, New York, Bethlehem Steel, RCRA Corrective Measures. Investigated over one hundred solid waste management units (SWMU). Performed groundwater investigation, analysis, and determining factors for delisting.

Litigation Support

Pittsburgh, Pennsylvania, Confidential Client, Intellectual Property Litigation Support. He provided extensive research and support to The Webb Law Firm for a patent infringement case involving coal bed methane drilling methods. He provided research and supporting information regarding the background of the technology, prior art, claim construction, and invalidity issues. The case was settled favorably.

New York, Manufactured Gas Plant. On behalf of First Energy, Mr. Palmerton provided technical review and expert opinion support to Saul Ewing, LLP regarding environmental issues of a former manufactured gas plant. Summary Judgment motions were denied, and the case was settled before argument in part due to Mr. Palmerton's testimony.

New York, Various Locations, Hiscock & Barclay LLP, Environmental Investigation and Litigation Support. On behalf of Hiscock & Barclay, LLP (now Damon Barclay, LLP), he provided strategic and technical support for various environmental cases including petroleum releases, insurance claims, and releases of chlorinated solvents. He has also provided an expert opinion letter with respect to environmental issues for a property transfer case. For a large insurance litigation case, he provided fate and transport analysis determining the timing of a release.

Bangor, Maine and Boston, Massachusetts, Goodwin Procter, LLP, Litigation Support. Working for Goodwin Procter, LLP, in Boston, he provided litigation support for Barrett Asphalt with facilities in

Bangor, Maine. He provided strategic analysis and review of technical documents relating to fate and transport of polycyclic aromatic hydrocarbon (PAH) contaminants in the Penobscot River. He also provided support to Goodwin Proctor representing General Electric during deposition of the plaintiff's environmental expert, providing counterpoints and analysis of the expert's statements regarding PCBs and sediment contamination issues on the Housatonic River. He was also consulted on contaminant fate and transport regarding PCBs in groundwater, DNAPL, and PCBs in river sediments. The case was settled in favor of the client.

International, DOW Chemical Company/Monsanto Company, Agent Orange Environmental Tort Case. For three years he provided litigation research and analysis support to Rivkin Radler and Seyfarth Shaw for an international case in the New York Second Circuit. The case was a product liability case regarding the use of defoliants during the Vietnam War. He provided in-depth research at the National Archives, U.S. Army & Joint Services Records Research Center, and various military facilities. He also managed the development of GIS mapping of thousands of data points for use in the case.

Oil and Gas

Pennsylvania and New York, Shell Western E&P Inc. Division of Royal Dutch Shell, Well Field Due Diligence. For this \$4.7 billion oil-field acquisition, he managed the environmental due diligence for hundreds of oil wells and oil field facilities. He directed a team to evaluate oil field facilities for environmental concerns including ecological, petroleum spills and remediation needs, evaluation of pits, pipelines, and potential asbestos issues. The team managed all environmental data in a relational database with a client-managed dashboard.

Pennsylvania, Confidential Client, Petroleum Release. For an oil industry client, Mr. Palmerton managed the site investigation of oil releases to a stream in Pennsylvania. The project involved comparison of various petroleum hydrocarbon profiles to distinguish oil released from an abandoned pipeline from other sources, resulting in the successful closure of the site without extensive remediation.

Pennsylvania and New York, Shell Western E&P Inc. Division of Royal Dutch Shell, Well Field Risk Analysis. For Shell's oil field in Taylorstown, Pennsylvania, he managed a team of environmental professionals to assemble multiple risk factors and perform a risk analysis for the operation of well field decommissioning. Working with Shell and other consultant's team applied both qualitative and quantitative tools and techniques to identify risks and potential outcomes. Our team developed Technical, Economic, Commercial, Organizational and Political (TECOP) parameters and Opportunity/Risk Register entries to the model elements and quantified these impacts into duration/ cost ranges (including the unknown unknowns). The final assessment established appropriate probability distributions for each element. The model output presentation material was used to explain the results and key schedule risk areas to key decision makers.

New York, Pennsylvania, and West Virginia, Multiple Sites and Clients, Conventional Oil Well Plugging. He has managed well plugging operations for multiple companies in New York, Pennsylvania, and West Virginia. This work included the permitting, regulatory interface, design, and contractor oversight for plugging oil wells.

New York, Confidential Client, Petroleum Release. For a large national oil company Mr. Palmerton has provided litigation support and prepared as an expert witness. The client's legal counsel in New York relied on Mr. Palmerton's experience with oil and gas pipelines and petroleum contamination transport (hydrogeology) for litigation of a petroleum spill.

New York, Pennsylvania, and West Virginia, Shell Western E&P Inc. Division of Royal Dutch Shell, Well Field and Pipeline Decommissioning. For Shell's Lubricants business unit (SOPUS) he successfully managed all aspects of the plugging and abandonment of more than 500 former Quaker State oil wells in McKean County, Pennsylvania; 66 wells in Allegany County, New York, and 30 wells in West Virginia which included landowner relations, regulatory negotiation and interaction, contractor management, financial and technical aspects of the well plugging program. This multiyear, multimillion-dollar project included the closure of upstream oil production facilities, oil wells, oil pipelines, former pipeline stations, tank batteries, and other facilities.

During this time, he also managed the spill response and "tap and drain" program for closure of more than 100 miles of oil pipelines in Pennsylvania (National Transit Pipeline) and 2,000 miles of oil pipeline in West Virginia (Eureka Pipeline). All contractors were managed and subcontracted through Mr. Palmerton's company (The Palmerton Group, LLC). He also directed the management of several environmental studies and reports for oil releases, tank closures, and NPDES permits.

Superfund Projects

Syracuse, New York, Lower Ley Creek Multiple Clients, PCB Sampling and Analysis. Managed multimedia sampling for PCBs, kriging, database management, strategy development for cleanup, congener analysis, and Superfund program.

Syracuse, New York, Honeywell, Onondaga Lake Superfund Site. He served as program manager for a Honeywell's multi-faceted upland source control and sediment management project in New York State. He assisted the client with strategic planning for several interim remedial measures to address mercury, PAHs, and volatile organics in sediments. Provided review of conceptual designs, engineers cost estimates, plans and presentations. He also assisted the client with discussions and presentations to various government agencies including the NYSDEC, NYSAG, USEPA Region II, USACE, and others. Working with a subcontractor, Mr. Palmerton assisted in the development of a unique Natural Resource Damage evaluation program and provided review of all conceptual natural resource damage restoration alternatives and costs.

Kalamazoo, Michigan, Allied Paper, Inc./HM Holding, Superfund Site Remedial

Investigation/Feasibility Study. For the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site, he managed various RI/FS tasks for the river and several operable units. He provided technical assistance and writing and analysis of data during completion of several large technical memoranda produced for the project. He was specifically engaged in the development of various technical reports on sediment, groundwater, air, and ecological impacts related to PCBs at the Allied Paper Operable Unit. He also provided direction and review of engineering controls, remedial alternatives, and engineer's costs estimates for sediment management issues.

Pittsfield, Massachusetts, General Electric, PCB Site Assessment. At a General Electric facility in Pittsfield, Massachusetts, Mr. Palmerton managed the evaluation of PCB NAPL in subsurface and provided design review of soil, sediment and NAPL remediation options for multiple operable units. He also provided technical support and review of groundwater and NAPL issues for litigation. He also assisted with cost analysis and negotiations with USEPA Region 1 for final Consent Agreement for the Housatonic River remediation program.

Winnfield, Louisiana, USEPA Contractor. Performed aquifer permeability tests, supervised piezometer construction, and provided evaluation of creosote impacts to groundwater as part of a site assessment and removal action at the American Creosote facility in Winnfield, Louisiana.

Philadelphia, Pennsylvania, USEPA Contractor. Provided technical oversight of all groundwater and remedial investigation activities at the Havertown PCP site in Havertown, Pennsylvania, including the drilling and construction of nested wells, flow testing, groundwater sampling, collection of bedrock cores, and collection of soil samples.

New York, Confidential Client, Groundwater Studies. Mr. Palmerton was the program manager for a large Superfund site in New York that required analysis, groundwater modeling, and strategic planning for control of DNAPL in a heterogeneous aquifer adjacent to a large water body. The constituents of concern included a variety of dense chlorinated organic compounds. Detailed hydrogeologic information was evaluated and modeled to assist in additional characterization studies and preliminary remedial design. A regional groundwater model was made covering an area of approximately 8,000 acres. Key hydrologic zones were analyzed in smaller "windows." The model provided a mechanism to "design," "construct," and "performance-test" a wide variety of groundwater remedial alternatives without committing to any remedy.

EIS Studies

Ohio, Transco Environmental Impact Statement. He was on a team providing data collection and interpretive review of geology, wetlands, cultural resources, and environmentally sensitive areas for a Federal Energy Regulatory Commission (FERC) filing for new pipeline construction through Ohio.

San Joaquin Valley, California, Environmental Impact Statement for Pipeline. He prepared the geotechnical and geologic sections of an environmental impact statement (EIS) for a 258-mile buried pipeline and ancillary facilities to transmit heated crude oil from the oil fields in the southern part of the San Joaquin Valley to the existing Shell refinery at Martinez in Contra Costa County.

Publications and Presentations

Palmerton, D.L. Jr., P.G., C.S. Koll, and R.G. Kunzel. October 9 - 12, 1994. Comparison of a Wellpoint Vacuum System to Dual Pump Recovery System Effectiveness for the Extraction of Light Non-Aqueous Phase Liquids. 46th Annual National Ground Water Association Convention and Exposition, Las Vegas, Nevada.

Palmerton, D.L., Jr., R. Mohan, and K. Elenbaas, 2002. Contained Aquatic Disposal – A Summary of Case Studies. Western Environmental Dredging Association 22nd Annual Meeting and Texas A&M's 34th Annual Dredging Seminar (Denver); June 13 to 17, 2001.

Palmerton, D.L., Jr., 2003. Contained Aquatic Disposal (CAD) – A Review of Monitoring Programs. 2nd International Symposium on Contaminated Sediments: Characterization, Evaluation, Mitigation/Restoration, Management Strategy Performance (Québec City, Canada); May 26 to 28, 2003.

Palmerton, D.L., Jr., 2023. ESG Best Practices Plugging and Abandonment Overview. American Oil and Gas Reporter, March 2023.

Palmerton, D.L., Jr., 2023. The Science, Funding, and Treatment of acid Mine Drainage. Coal Age, June 2023.