

**APPENDIX G**

**QUALIFICATIONS OF  
ENVIRONMENTAL PROFESSIONALS**

| <b><u>NAME</u></b> | <b><u>PROJECT TITLE</u></b>                    | <b><u>PAGE WITHIN<br/>APPENDIX G</u></b> |
|--------------------|--|--|
| Alec Macbeth       | Environmental Professional;<br>Project Manager | 2  |
| Stuart Rixman      | Senior Technical Advisor                       | 5  |
| Terrance Konkin    | Environmental Professional                     | 16                                       |

**Alexander Paul Macbeth, PG**  
**Project Manager and Geologist**

**Education**

MS, Geology, University of Vermont, Burlington, 1989  
BS, Geology, Florida State University, Tallahassee, 1986

**Professional Licenses**

Professional Geologist, Florida, #1933, 1996  
Professional Geologist, Tennessee, #2559, 1992  
Professional Geologist, Georgia, #1027, 1993

**Experience Summary**

Mr. Macbeth's primary role from 2000 to middle 2005 has been the chief project manager for the Total Environmental Restoration Contract (TERC) 3 and ERSC work at Eglin Air Force Base, Florida. He has been working at Eglin since March 1995. Most of the work has been with the Eglin Installation Restoration Program (IRP) and has consisted of assessments and remediation of impacted media (soils, groundwater, sediment, and surface water). Over the past five years, this work has entailed more than 150 sites. Mr. Macbeth joined the Eglin team as the field manager, then managed several projects within specific delivery orders, before being assigned chief project manager in October 1999. Currently, Mr. Macbeth has just finished taking a few months off to teach middle school science. He is supporting several of the DOD and FDEP projects in Florida.

**Project Experience**

**US Army Corps of Engineers - Omaha District, ERSC - Phase I Environmental Site Assessment (LPV 105-111), New Orleans, Louisiana.** Project manager for a Phase I ESA to investigate the potential presence of hazardous, toxic, or radioactive waste (HTRW) in the vicinity of the proposed construction to ensure that suitable and safe fill materials are used for levee rehabilitation and improvement to the flood protection system. [11/2006 - 03/2007]

**US Army Corps of Engineers - Omaha District, TERC 3 Active Delivery Order Nos. 12, 15, 18, 20, 23, 26, 10, 11 Eglin AFB, Florida.** Chief project manager for a greater than \$20 million contract for preliminary assessments and site investigations, risk assessments, interim corrective measures, corrective measures studies, and remediation at more than 150 sites on Eglin Main Base and Reservation. Manages work at oil/water separators, former surface and/or subsurface disposal areas, test ranges, fuel or solvent spill locations, cattle dipping vats, and water towers. Supervises assessments of oil and groundwater quality, as well as sediment and surface water in several drainages on Eglin Main Base. Contaminants addressed include petroleum products, chlorinated solvents, metals (particularly lead and arsenic), dioxin, and depleted uranium. Coordinates with Eglin EOD to clear sites of UXO. Direct excavating and disposing soil off site (soil impacted with arsenic, lead, PAHs, pesticides, or uranium), capping with a soil cover, and improving site habitat by installing erosion control and planting vegetation. Involved with all phases of the work, including the preliminary assessment and investigative field work, remediation field work, data management and interpretation. Senior author on all Eglin reports and work plans. Interacts closely with Eglin, USACE, regulators (EPA, FDEP, FDOH, and NRC), and subcontractors, including Bhate Environmental.

**Florida Department of Environmental Protection, St. Marks Refinery Site Assessment, St. Marks, Florida.** Lead field geologist in performing large-scale site assessment of 80 acre former oil refinery. The investigative work included soil sampling, monitoring well installation, wetland (surface water and sediment) sampling. Played large role in evaluating data and developing report. [07/2004 - present]

**Confidential Client, Ordnance Explosive (OE) Scrap Removal, Camden, Arkansas.** Project Manager for a \$350,000 characterization and removal of UXO/OE scrap at a 10-acre site within the former Shumaker Naval Ammunition Depot (NAD). Directed a visual reconnaissance to determine explosive hazards associated with the site, a characterization of the extent of buried OE Scrap using surface geophysical techniques, and

excavation and off-site disposal of approximately 600 cubic yards of OE scrap, and associated solid waste and construction debris. Also collected soil and groundwater samples to evaluate the presence of residual contamination caused by the OE scrap and solid waste.

**Confidential Client, Phase I and II Investigation, Pensacola, Florida.** Project manager for a Phase I and large Phase II investigation at an electrical generator manufacturing facility that was being sold to a new operator. Phase II was a \$175,000 project and included extensive soil, sediment, surface water, and groundwater sampling. Project included very rapid response times to meet client's needs.

**US Army Corps of Engineers, Site Inspection, Fort Gillem Army Depot, Atlanta, Georgia.** Site manager for a site inspection of unsaturated soil and groundwater contamination near an abandoned sewage treatment plant. Managed field activities, which included a passive soil gas survey, auger and air rotary/air hammer drilling, installation of soil and bedrock monitoring wells, and soil and groundwater sampling. Evaluated, interpreted, and presented hydrogeologic and chemical data for report. Author of work plan and report for project.

**Confidential Client, Groundwater Remediation, Spartanburg, South Carolina.** Site manager for the design and installation of the second phase of a groundwater extraction system at an active fiber-producing plant. Managed design, construction, and installation of overburden and bedrock extraction wells to effectively capture and contain contaminated ground water from migrating off-site. Directed design and installation of observation and monitoring wells to monitor system performance. Author of report for project.

**US Army Corps of Engineers, Supplemental Remedial Investigation/Baseline Risk Assessment, Redstone Arsenal, Huntsville, Alabama.** Site geologist for part of a study conducted at three sites on Redstone Arsenal. Supervised the advancement of soil test boring to collect soil and groundwater samples for laboratory and geotechnical analyses.

**Confidential Client, Groundwater Assessment, Greenville, South Carolina.** Site manager for a groundwater quality assessment as part of a RI/FS at a closed fiber-producing plant. Supervised rock coring and reverse packer tests, groundwater sampling and installing monitoring and extraction wells using auger and coring drill methods. Contributed significantly to interpreting hydrogeological and analytical data and writing the RI/FS report.

#### **Earth Tech Health & Safety Training**

01 - Safety Orientation 02/01/2006  
02 - Hazard Communication (US) /WHMIS (Canada) 12/19/2005  
03 - Defensive Driving Awareness Training 12/16/2005  
04 - Defensive Driving 4-Hour Course 12/22/2004  
14 - Office Ergonomics Training 02/08/2006  
15 - First Aid 08/09/2006  
16 - CPR 08/09/2006  
17 - DOT Level 1 Shipper/(TGD) Canada 02/01/2006  
20 - HAZWOPER 40-Hour 02/02/1990  
21 - HAZWOPER Refresher 8-Hour 01/26/2006  
22 - HAZWOPER Supervisor 8-Hour 02/12/1993  
23 - OSHA 10-Hour Construction Safety 06/01/2006  
30 - Respiratory Protection Training 01/26/2006  
31 - Hearing Protection Training 01/26/2006  
34 - General Excavation Safety Training 01/27/2006  
35 - Trench/Excavation Safety Training 01/27/2006  
36 - Fire Extinguisher Training 01/25/2006  
C1 Fire Protection 12/23/2004  
C2 Bloodborne Pathogens 12/22/2004  
C2 Trenching and Excavation 01/27/2006  
ETUSA Southeast District Safety Metrics 11/01/2006  
Medical Monitoring 05/10/2006

**Training and Certifications**

Environmental Management Coursework, University of Maryland, 2003  
Short Course Introduction to Geochemistry, National Groundwater Association, 1991  
How to Manage Projects, Daniel Management Center, 1994  
Drilling and Boring Fluids Workshop, Baroid Industrial Drilling Products, 1996  
Site Remediation Course, Interactive Remote Instructional System (IRIS), Wright State University, 1996  
Implementing the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) Approach for the Design and Conduct of Radiological Surveys, Oak Ridge Institute for Science and Education, 1999

**Professional Memberships**

Florida Association of Environmental Professionals  
Society of American Military Engineers, Emerald Coast

**Conference Presentations**

DU Program at Eglin AFB, poster presentation, Battelle Range Sustainment Conference, January 2004, New Orleans, Louisiana.

**Publications**

Macbeth, A. and J. Hannah, "Magmatic History of the East Tintic Mountains, Utah," *U.S. Geological Survey* open file report 90-0095, 1990.

**Employment History**

1990 - present, Earth Tech  
1987 - 1989, University of Vermont  
1987 - 1988, US Geological Survey

**Stuart I. Rixman, CHMM, CPEA, REA**  
**Manager, EHS Services**

---

**Education**

MBA, Business Administration, University of Delaware, 1972  
BS, Chemical Engineering, Lehigh University, 1968

**Professional Registrations**

Certified Professional Environmental Auditor, #399821, 1999  
Certified Hazardous Materials Manager, #1514, 1988  
Registered Environmental Assessor, California, #REA-00117, 1987

**Experience Summary**

Mr. Rixman manages and conducts EHS compliance audits, EHS management system assessments, and environmental site/due diligence assessments; helps clients design, improve, and implement EHS management systems; develops compliance, waste reduction, and emergency response plans; prepares environmental reports and permit applications; and recommends cost-effective enhancements. For several years, he was a part-time ISO 14001 and OHSAS 18001 Lead Auditor for a Registrar. He has completed more than 500 EHS compliance audits and EMS assessments, and conducted and managed hundreds of site/due diligence assessments of a wide variety of facilities. A member of ASTM Committee E50 on Environmental Assessment since it was founded, he helped write Standard Practice E1527 for Phase I Environmental Site Assessments, and has provided expert testimony about it. Before becoming a consultant, he worked for 19 years for Fortune 200 chemical companies in plant, laboratory, and TSDF auditing, manufacturing management, engineering, and plant operations. His chemical plant experience includes specialty and agricultural chemicals, chlorine and caustic soda, and soda ash.

**Project Experience**

*Environmental Site/Due Diligence Assessments*

**Confidential Client, Ten States.** Managed environmental due diligence assessments of eight heavy industrial manufacturing plants and four other facilities. [2005]

**Cascades, New York.** Completed Phase I environmental site assessments of six hydroelectric power plants, an office building, and a boxboard manufacturing plant, and a limited-scope Phase II assessment, in support of proposed acquisitions. [2003]

**Schenectady International, Michigan, Pennsylvania, and Tennessee.** Completed environmental due diligence assessments of three chemical manufacturing plants in support of proposed acquisitions. [2003]

**American Securities, United States, Australia, France, Germany, and United Kingdom.** Managed and partially conducted third-party reviews of environmental site assessments and compliance evaluations of 13 manufacturing plants. [2003]

**Beta Capital, Arizona, Arkansas, Georgia, Florida, Montana, Tennessee, Utah, Wisconsin.** Managed environmental site assessment updates of eight motel properties. [2003]

**Mitsubishi Investment Corporation, Due Diligence Assessment, West Virginia.** Conducted an environmental due diligence assessment (Phase I ESA and limited-scope compliance evaluation) of a chemical company, and provided an opinion as to the general suitability of the facility for its intended purpose. Other employees completed a limited Phase II assessment. Based upon the results, advised the client of significant potential concerns regarding the facility.

**GE Capital, Due Diligence Assessments, North Carolina, Oregon and Washington.** Completed environmental due diligence assessments of a large bleached paper mill and associated landfill, an unbleached Kraft paper mill, a recycled corrugated cardboard processing facility, log-chipping operations, and a paper conversion and printing facility.

**Wilsonart, Due Diligence Assessment, Quebec.** Completed a Phase I environmental site assessment, limited-scope Phase II assessment, and compliance evaluation of a 500,000 square foot wallboard manufacturing facility located near Montreal that had been in operation for about 50 years.

**Wright, Robinson, Ostimer & Tatum, ESA Expert Testimony, Virginia.** Provided expert testimony in federal court regarding the meanings of various sections of ASTM Standard E1527 for Phase I Environmental Site Assessments, in conjunction with a lawsuit alleging failure by a consultant to detect a recognized environmental condition.

**GE Capital, Third-Party Due Diligence Assessment Reviews, Multiple States.** Completed third-party reviews of Phase I and II environmental site assessments and compliance evaluations of 25 scrap metal recycling facilities, 30 correctional facilities, 20 motor coach building and repair facilities, and four metal alloys manufacturing plants. Identified errors in, and omissions from, those reports, and estimated the costs to address many of the issues via corrective actions.

**Motels of America, Phase I Environmental Site Assessments, 34 States.** Under the direction of counsel to the client and to financial underwriters and a major bank, managed the completion of environmental site assessments and building inspections at more than 140 locations by coordinating the efforts of more than three dozen assessment personnel from two dozen offices.

**ERGON, Due Diligence Assessments, Pennsylvania and West Virginia.** For a potential purchaser, conducted Phase I environmental due diligence assessments of two crude oil collection terminals, a small oil refinery, and a lubricants blending, packaging, and distribution facility. Identified target areas for subsequent Phase II intrusive investigations that resulted in the identification of significant impacts to subsurface soil and ground water.

**Fleet Bank, Third-Party Due Diligence Assessment Reviews, Four States and England.** Reviewed due diligence assessments of six chemical plants in conjunction with a leveraged buyout of a division of a Fortune 100 corporation. The bank was concerned that the initial studies had not adequately addressed all relevant environmental concerns. All issues identified during the review were resolved in a manner satisfactory to the bank, and the transaction proceeded.

**SC International Services, Site Assessments, Multiple States.** Under the direction of the client's legal counsel, managed environmental due diligence assessments of 17 airline food preparation and distribution facilities serving major airports located in California, Hawaii, Nevada, New Jersey, New York, and Virginia, and 17 other food preparation and distribution facilities located in Connecticut, Georgia, Kentucky, Michigan, Minnesota, New Jersey, New York, and Ohio.

**Maytag Corporation, Due Diligence Assessments, New Hampshire, Pennsylvania, Vermont, and Texas.** Conducted environmental due diligence assessments of five appliances manufacturing facilities, and managed the assessments of two other facilities, in conjunction with proposed acquisitions.

**Coopers & Lybrand, Due Diligence Assessments, Indiana, New Jersey, North Carolina, Pennsylvania.** Evaluated the compliance status and environmental condition of seven current and former glass manufacturing plants. Identified existing and potential impacts to soil and groundwater, the status of permits, and air emissions and wastewater discharge compliance issues.

**GE Supply Company, Phase I & II Site Assessments and Environmental Remediation, Connecticut.** Completed Phase I and II assessments at a facility in which ammunition was manufactured from 1916 through 1937, and managed assessments for mercury, lead-based paint, and asbestos, and a cleanup of soil impacted by a historical release of PCBs.

**OCI Chemical Company, Phase I & II Due Diligence Assessment and Ore Reserves Evaluation, Wyoming.** Under the direction of legal counsel for a prospective purchaser, conducted a comprehensive environmental due diligence assessment and an ore reserves estimate and valuation of a mine and ore refinery in support of a proposed transaction valued at an estimated \$150 million. Also confirmed the availability of recoverable ore reserves, and defined the existing environmental conditions as well as the expected future situation regarding the disposal of tailings from the refinery.

**Mitsubishi Investment Corporation, Due Diligence Assessments, Labrador and Quebec.** Assessed environmental conditions of iron ore mines and ore concentrators, a 300+ kilometer railroad, and a port on the St. Lawrence Seaway. Identified an estimated \$10 million in potential future pollution control, compliance, and remediation costs. Subsequently, the client acquired an ownership interest for \$10 million less than the original asking price.

**Chemical Bank, Due Diligence Assessments, California, Mexico, Spain, and France.** Evaluated the environmental status of diatomaceous earth mines in conjunction with a buy-out transaction valued at more than \$70 million.

**Chemical Bank, Due Diligence Assessment, Michigan.** Evaluated the environmental status of a copper mine and smelter whose owner was seeking a \$10+ million loan. A new compliant smelter was estimated to cost \$150+ million.

**First Boston Corporation, Due Diligence Assessments, Louisiana and Canada.** Evaluated the environmental status of five salt mines in conjunction with a proposed acquisition valued at approximately \$125 million.

**Pyramid Companies, Environmental Assessment and Remediation, New York.** Managed soil and ground water investigations at a 55-acre former scrap yard that became the site of a \$200 million mall. Developed a site history; installed test pits, soil borings, and monitoring wells; obtained and interpreted soil and groundwater analyses and a soil gas survey; developed profiles of fill placed on the site many years earlier and groundwater isopleths; and drafted portions of an Environmental Impact Statement.

### ***Compliance Evaluations***

**Confidential Client, Environmental Audits, Entire United States.** Managed a program to complete environmental audits of more than 300 commercial and light industrial facilities located throughout the United States, and conducted about ten percent of them. Recommended actions to address the findings.  
[2006]

**Confidential Client, EHS Audits, Nationwide, United States.** Managed a program to provide a client with experienced EHS auditors to assist the client in completing comprehensive environmental, health, safety, and DOT compliance audits of more than 50 large and medium-sized manufacturing facilities located throughout the United States. Have participated in audits of almost half of them, and served as audit team leader for several of them. Each audit lasted three to five days, covered all applicable EHS and DOT regulations, and involved a team of four or more experienced auditors. Provided recommended actions to guide the facilities in addressing the identified issues. [2005 - 2006]

**Connecticut Department of Mental Health and Addiction Services, Environmental Audit, Middletown, Connecticut.** Part of a team that conducted an environmental audit of a state-owned psychiatric hospital and its supporting operations, including a maximum-security facility, and made recommendations to address the identified concerns. [2006]

**Confidential Client, Environmental Audits, Alabama and Louisiana.** Conducted environmental audits of two railroad yards using a client-provided protocol, and made recommendations to address the issues that were identified. [2006]

**New York State Office of General Services, New York.** Audited a State-owned hospital and clinical research facility for environmental compliance and good environmental management practices. Areas of inquiry included air emissions permitting and monitoring; asbestos management; water supply and treatment; wastewater collection, discharge and permitting; storm water collection and permitting; hazardous waste status; management of biohazardous, hazardous, universal, and solid wastes; hazardous substances management, including PCBs, mercury-containing equipment, and lead-based paint; aboveground and underground storage tank permitting, monitoring and management; Oil SPCC Plan completeness and compliance; toxic substances release reporting; and pesticide use. Have also provided follow-up compliance assistance and audits. [2003-2006]

**Dormitory Authority of New York / New York State Office of Mental Health, Environmental Audits, New York.** Conducted environmental audits of five State-owned psychiatric hospitals and research facilities, and their supporting operations, including three maximum-security facilities. Defined the applicable requirements, evaluated each facility, recommended actions to address potential concerns, and as necessary educated facility personnel as to the meanings of the various requirements and effective means of assuring compliance. Also conducted limited compliance evaluations at several other State-owned psychiatric hospitals. [2002-2006]

**Surpass Chemical Company, Environmental Compliance Assistance, New York.** Helped this chemical formulator and distributor comply with an Order on Consent by conducting an environmental compliance audit and developing a recommended Best Management Practices plan. Emphasis was on compliance with the Chemical Bulk Storage Regulations. Also helped the facility have its tanks inspected and upgrade its Spill Prevention Report, and with ongoing EHS compliance needs. [1999-2006]

**AVOX/Scott Aviation, Environmental Compliance Assistance, Lancaster, New York.** Provided a compliance audit and form submission assistance related to applicable New York State and federal air emissions, hazardous waste management, and SARA Title III regulations at this manufacturing facility. [2002-2006]

**Confidential Client, Environmental Compliance Reviews, Connecticut, Iowa, New Jersey, and New York.** Conducted environmental compliance reviews of 33 facilities in Connecticut and the New York City metropolitan area ranging in size to more than 2.4 million square feet, to ascertain their status relative to applicable federal, state, and local environmental laws and regulations, and client environmental policies. Also conducted reviews of three facilities in Iowa. [2003-2006]

**Maytag Corporation, Environmental Audits, Multiple States and Mexico.** Trained a team of Maytag environmental compliance employees in environmental auditing techniques, then lead/guided that team in conducting compliance audits of appliance manufacturing plants and distribution facilities in California, Illinois, Iowa, Missouri, New Hampshire, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Vermont, and Juarez, Mexico. After the initial round of compliance audits, trained the team to audit the environmental management systems of facilities, as a means to sustained compliance. [1999-2005]

**Confidential Client, TSD Compliance Audits, Multiple States.** Evaluated the compliance of the following hazardous waste facilities, and developed opinions regarding the risk to which the client might be exposed by virtue of sending its wastes to each: US Filter, Wilmington, Delaware; Lorco Petroleum Services, Elizabeth, New Jersey; and USA Lamp & Ballast Recycling, Milton, New York. [2005]

**Confidential Client, Environmental Compliance Reviews, Nine States.** Managed compliance reviews of nine manufacturing plants and associated facilities, and conducted one of those reviews. [2004]

**Confidential Client, EHS Audits, New England and New York.** Member of a two-person team that completed comprehensive EHS compliance audits of a 1,000-employee medical device R&D complex, a product distribution center, and a medical device manufacturing facility. [2003]

**GE Supply Company, Comprehensive EHS Compliance Assistance, Entire United States and Puerto Rico.** Wrote a concise EHS compliance manual focused on the client's business, created a model injury/illness prevention program, developed a compliance self-assessment program for use by 150+ locations, prepared SARA Title III Tier II reports for some locations, conducted more than 80 health and safety audits, and assisted with a broad range of environmental, health, and safety issues. [1988-2002]

**Mercy College, Environmental Audit, New York.** Evaluated the environmental compliance status of this college with respect to federal and state environmental laws and regulations, and made recommendations for altered practices. Topics included air, water, wastewater, solid and hazardous wastes, and hazardous materials. This audit was conducted in anticipation of a possible audit by USEPA Region II as part of its enforcement initiative that focuses on colleges and universities. [2000]

**New York State Department of Correctional Services, Environmental Audits, New York.** Completed environmental audits of a medium-security correctional facility and a maximum-security correctional facility, one of which contains a health care facility, for compliance with selected environmental regulations, including the "Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and Its Sources".

**Confidential Client, Environmental Audits, Seven States.** Conducted environmental and hazard communication audits of 65 utility company facilities over a five-year period. Major issues included fuel tanks, backup power supplies, solvent usage and disposal, SARA Title III reporting, PCB management, emergency preparedness, and written hazard communication programs.

**Lower Colorado River Authority, Health and Safety Audit, Texas.** Part of a team that conducted a comprehensive health and safety evaluation of this regional electric utility and made recommendations to reduce employee risk exposures.

**Twin Rivers Textile, EHS and OSHA Audit, New York.** Conducted environmental and OSHA audits of a facility that formulates water-based print pastes and does custom color printing on polyester for the garment manufacturing industry.

**Confidential Client, EHS Audit, New York.** Managed a comprehensive environmental, health, safety, and hazardous materials transportation (DOT) audit of this client's 1.25 million square foot corporate research and development facility, and conducted the environmental and DOT portions of the audit. Also directed the activities of a CIH/CSP who conducted the health and safety portions and completed an assessment of the facility's status relative to qualifying for acceptance into OSHA's Voluntary Protection Program. Performed a root-cause analysis of all identified concerns, and developed a recommended approach to address each concern.

**Confidential Client, Environmental and Hazard Communication Audit, New York.** Conducted an environmental and hazard communication assessment of a 250-megawatt cogeneration facility that has gas turbines, a heat recovery steam generator, and a steam turbine. Concerns included NOx and other air emissions, wastewater and storm water discharges, hazardous waste management, and hazardous materials storage and handling.

**Stauffer Chemical Company, EHS Audits, Facilities in 18 States, Japan, and Australia.** Evaluated more than 60 agricultural, specialty, and inorganic chemical manufacturing plants, and research laboratories and pilot plants for compliance with environmental, OSHA, and DOT regulations. Developed cost-effective recommendations to address the identified concerns. Also evaluated an underground Trona mine and the associated soda ash refinery, five chemical plants in Japan and Australia, and five commercial hazardous waste incinerators and landfills (TSDFs).

**McNamee, Lochner, Titus & Williams, EHS Audits, Connecticut and New York.** Evaluated the compliance of this law firm's client, a chemical manufacturer, with applicable environmental and OSHA regulations, and for the use of good management practices to reduce the risk of an uncontrolled release.

**Confidential Client, TSDF Compliance Audits, Multiple States.** Evaluated the compliance of the following hazardous waste facilities, and developed opinions regarding the risk to which the client might be exposed by virtue of sending its wastes to each: Rineco Chemical Industries, Benton, AR; Evergreen Environmental Services, Carson & Newark, California; Romic Environmental Technologies, East Palo Alto, California; Metalworking Lubricants, Indianapolis, Indiana; Heartland Cement, Independence, Kansas; CWM Chemical Services, Model City, New York; and Safety-Kleen in Reedley, California, East Chicago, Indiana, Dolton, Illinois, New Castle, Kentucky, Buffalo, New York, and Denton, Texas.

**J. M. Huber Corporation, Environmental Audits, Colorado, Georgia, and Tennessee.** Conducted comprehensive environmental compliance evaluations of two electronics assembly plants, a printing ink formulation and distribution facility, and a large chipboard manufacturing and distribution facility.

**Confidential Client, TSDF Compliance Audits, California, Connecticut, and Nebraska.** Lead teams of the client's employees in conducting evaluations of hazardous waste management facilities in Richmond, California, Bristol, Connecticut, and Kimball, Nebraska. Also developed a training program in the techniques of auditing commercial TSDR facilities and presented it to the client's personnel.

**Inland Container, Waste Management Audits, Connecticut, Delaware, and Massachusetts.** Evaluated boxboard plants that perform offset lithographic printing, and a recycled paper mill, for compliance with applicable solid and hazardous waste and hazardous materials management regulations.

**The Noteworthy Company, Air Emissions and RCRA Audit, New York.** Assessed the air emissions permitting and hazardous waste compliance status of a facility that makes blow-molded polyethylene film, custom-prints it using offset lithography, and then converts the printed film into plastic bags.

**LeBoeuf, Lamb, Greene & MacRae, Environmental Audit, New York.** Evaluated this law firm's client, an electronics plant, for compliance with applicable air emissions, wastewater discharge, hazardous waste, and PCB management regulations.

**Chesebrough-Ponds Corporation, EHS Audits, Connecticut and Alabama.** Evaluated three cosmetics manufacturing plants for compliance with applicable environmental, health, and safety regulations, and recommended corrective actions.

**Stauffer Wacker Silicones, TSCA Audit, Michigan.** Evaluated a silicone products facility that contains a research and development lab, pilot plant, and manufacturing plant, for compliance with TSCA rules on pre-manufacture notifications, test market exemptions, and notices of commencement of manufacturing.

**Confidential Clients, TSDF Audits, Illinois and South Carolina.** For Potentially Responsible Party (PRP) committees, audited the Peoria Disposal Company facility in Illinois and the Omni/Southeastern facility in South Carolina to determine their acceptability to receive and manage specific types of wastes from mandated environmental remediation activities.

### *Environmental Management Systems*

**Atlas Copco Comptec, EMS Implementation and Support, New York.** Assisted this centrifugal compressor manufacturer with the process of developing and implementing an improved environmental management system (EMS). Also conducted EMS training for employees and internal assessor training for selected employees, developed a register of applicable legal and other requirements, assisted in the selection of a Registrar, and have periodically evaluated the facility's environmental compliance status. The facility was registered to ISO 14001 with no nonconformities identified during its registration audit. [2001-2006]

**DaimlerChrysler, EMS Implementation, Michigan and Ohio.** Over the course of three years, guided and assisted three automotive stamping plants (sequentially) in creating and implementing an EMS that conformed to the requirements of both the ISO 14001 standard and the corporation's own enhanced EMS requirements. This included integrating environmental conformance and improvement into daily operations at all levels, and merging the EMS with the existing ISO 9001 quality management system. Then assisted two parts distribution centers in creating and implementing EMSs so that they also could achieve ISO 14001 registration. Major program components included helping each facility to identify its environmental aspects and impacts, define applicable environmental requirements and means of assuring that they are consistently met, set objectives and targets for environmental improvements, create or enhance existing procedures and forms, and define and conduct training. Toward the end of the process at each location, conducted an assessment to confirm that the facility's EMS was suitable, adequate, and effective. All five facilities were registered to ISO 14001. Separately, conducted pre-assessments at eight other plants to determine their readiness for ISO 14001 registration audits. The EMS project at the first stamping plant was the U.S. pilot of DaimlerChrysler's EMS program. Lessons learned and tools developed during it made EMS implementation more efficient and cost-effective during the subsequent EMS implementation at all DaimlerChrysler locations in the Western Hemisphere. [1999-2005]

**NSF-ISR, ISO 14001 and OHSAS 18001 Registration and Surveillance Audits, Multiple States.** The client, NSF International Strategic Registrations, Inc. (NSF-ISR) is an RAB-accredited ISO 14001 (and ISO 9000) Registrar. On a contract/as-needed basis, conducted a total of 46 ISO 14001 Registration, Surveillance, and Re-Registration audits over a period of seven years. Also conducted 5 OHSAS 18001 Registration and Surveillance audits over a period of 1.5 years. The facilities audited covered a broad range of industries and activities, including manufacturing plants for metal products, chemicals, pharmaceuticals, plastic packaging, and automobile components; a brewery; non-metal mining and ore refining facilities; a chemical products corporate headquarters and R & D center; a large pharmaceutical products R & D center; and four construction companies. Served as the Lead Auditor for a majority of the audits. Responsibilities included planning and scheduling the audits and preparing reports and recommendations, in addition to the on-site activities. [1998-2005]

**Dataram Corporation, Pennsylvania.** Assisted this small assembler of electronic components in developing and implementing an EMS so that it could become registered to ISO 14001. [2004-2005]

**Lafarge Corporation, EMS Assistance, New York.** Assisted a large cement manufacturing plant and quarry with designing and implementing an enhanced environmental management system that meets the requirements of the EPA's National Environmental Achievement Track and the requirements of ISO 14001. Lead the processes of creating an EMS Manual and associated EMS procedures and forms, identifying and ranking hundreds of environmental aspect/impact pairs, and creating general EMS awareness training tools. Then created a Visio drawing for each major process that shows environmental as well as process inputs, flows and outputs, and identifies associated environmental Standard Operating Procedures. [2001-2003]

**Confidential Client, EMS Implementation, New York.** Assisted a manufacturer of explosives with the process of strengthening its EMS, and assuring that it conforms to the requirements of ISO 14001 and the EPA's National Environmental Achievement Track. [2001-2003]

**General Motors, EMS Guidance and Training, Ohio and Wisconsin.** Provided guidance and assistance to an automotive components manufacturing plant during its ISO 14001 registration audit. Also conducted training for internal EMS auditors at another plant, and assisted it in enhancing its procedures to conform to the requirements of ISO 14001. [2001]

**Confidential Client, EMS Enhancement, Virginia.** Assisted a semiconductor fabrication facility in the implementation of an improved environmental management system that conformed to the requirements of ISO 14001. The facility subsequently passed its registration audit with no nonconformances. Also conducted an assessment of part of the facility's EMS in preparation for its initial surveillance audit, and trained internal auditors. [1999 - 2000]

**WMX Technologies/Bio-Gro Division, EMS Gap Analysis, Maryland.** Conducted a baseline assessment of the environmental management system of this operation, which involves applying sludge from 35 municipal wastewater treatment plants to more than 1,000 farm fields, for conformance to the requirements of the GEMI and ISO 14001 standards.

**WMX Technologies, EMS Gap Analysis, Oregon.** Evaluated the environmental management system of a RCRA-permitted hazardous waste treatment and storage facility and Subtitle C landfill for conformance to the requirements of the ISO 14001 standard.

**Confidential Clients, EMS Baseline Assessments, Indiana and Texas.** Completed baseline assessments of the environmental management systems of a non-ferrous metal parts manufacturing plant and a pharmaceuticals manufacturing plant for conformance to the requirements of ISO 14001. The pharmaceuticals plant then addressed the identified gaps promptly, so that it was able to pass a registration audit the following month.

***Compliance Assistance and Risk Reduction***

**Confidential Client, New York.** Assisted a manufacturing facility in complying with the New Source Performance Standards under the Clean Air Act. Also prepared an oil SPCC Plan. [2006]

**US Postal Service, New York City Community Right-to-Know Reporting, New York.** Managed a project to conduct onsite chemical inventories and prepare forms related to the New York City Department of Environmental Protection Community Right-to-Know Law for 32 facilities. [2005]

**ARTCO Chemical, Chemical Bulk Storage Assistance, New York.** Evaluated the environmental compliance status of this chemical distributor and assisted it in complying with New York's Chemical Bulk Storage regulations. [2002]

**American National Can Company, SARA Title III Reporting, Multiple States.** Directed the preparation of more than 300 SARA Title III Form R reports for approximately 50 plants throughout the United States, and provided quality assurance for the completed reports.

**IBM Federal Systems, SARA Title III Reporting, New York.** Prepared a hazardous waste reduction plan (HWRP) for this large aerospace electronics manufacturing facility, prepared the first annual update to the HWRP, and prepared its SARA Title III Tier II and Form R reports for two years.

**Confidential Client, Hazard Risk Assessment, New York.** Evaluated the design and layout of a proposed large cogeneration unit and used dispersion modeling to predict potential impacts to off-site receptors from worst-case vapor release events. As a result, certain aspects of the process and layout were redesigned, and additional safeguards were incorporated.

**New York State Office of General Services, Environmental Compliance, New York.** Evaluated the state prisons located within the New York City watershed for compliance with the City's watershed protection regulations, and identified needed changes and facility upgrades. Prepared a guidance manual to assist them in evaluating the environmental requirements that could become applicable if changes to a facility are planned.

**Confidential Client, PCB and SARA Title III Reporting, New York.** Directed the preparation of PCB annual document logs for three years for a facility with hundreds of PCB-containing transformers and capacitors. The project team gathered all relevant information, entered it into a database, and then created spreadsheets that were cross-linked to the database so the Logs could be produced accurately and in a cost-effective manner. Also directed the preparation of SARA Title III Form R reports for one year.

**NGK Metals, PCB Compliance Audit and Assistance, Pennsylvania.** Evaluated the compliance of a beryllium copper plant with the TSCA PCB regulations, compiled an inventory of its PCB-containing transformers and capacitors, and prepared a comprehensive PCB compliance manual targeted to the rules applicable to the plant.

**Rohm & Haas, RCRA Compliance Assistance, Pennsylvania.** Created detailed, comprehensive Hazardous Waste Procedures Manuals for two chemical manufacturing operations.

***Environmental Permitting***

**Multiple Clients, Air Emissions Permitting, New York.** Prepared air permit applications for 50+ sources of emissions from operations such as power houses flexographic printing; paint spraying and curing; textile printing and processing; stone crushing, screening, storage, and shipping; cement storage and handling; concrete batch mixing; and metal parts cleaning. Assisted some facilities in "capping out" as synthetic minor emission sources under Title V. [1995 - 2004]

**Confidential Client, Title V Permitting, New York.** Managed the preparation of an air emissions inventory and then a Title V permit application for a large R&D facility. Also helped define and implement Reasonably Available Control Technology (RACT) for affected sources of emissions of NOx and VOCs, and evaluated the facility's status relative to compliance with the applicable regulations promulgated by the EPA and the state. [1997 - 2002]

**Training**

ISO 14001 Environmental Management Systems Lead Auditor, 1997  
OSHA 10-hour Construction Safety Training  
OSHA 40-hour Hazardous Waste Operations Training, 1987  
OSHA 8-hour Hazardous Waste Operations Annual Refresher Training  
OSHA 8-hour Hazardous Waste Operations Site Supervisor Training, 1990

**Professional Memberships**

The Auditing Roundtable  
ASTM Committee E50 on Environmental Assessment (founding/voting member)  
Academy of Certified Hazardous Materials Managers  
American Institute of Chemical Engineers

**Conference Presentations**

"All Appropriate Inquiries – What's New and different?," The Auditing Roundtable, Phoenix, Arizona, 2006.

"How an Environmental Management System (EMS) Can Improve Compliance (and Reduce Your Costs)," Risk Management Workshop, New York Construction Materials Association, 2004.

"Audits of Healthcare Facilities - Why, What & How," The Hospital Association of New York State, Albany, New York, 2003.

"Complying With Hazardous Waste Regulations," 1999 Annual Industry-Environment Conference, The Business Council of New York State, Albany, New York, 1999.

"ISO 14001," Sheboygan County Chamber of Commerce, Sheboygan, Wisconsin, 1997.

"Environmental Audits and Confidentiality: An Overview," 1995 Legislative Forum hosted by the Environmental Law Section of the New York State Bar Association, Albany, New York, 1995.

"Balancing Audit Programs and Liability Exposures," 1993 Penn Expo, Hershey, Pennsylvania, 1993.

**Employment History**

1987 - present, Earth Tech  
1974 - 1987, Stauffer Chemical Company  
1968 - 1974, Diamond Shamrock Corporation

**Terrence A. Konkin, PG**  
**Geologist**

**Education**

BS, Geology, University of Western Ontario, London, 1988

**Professional Licenses**

Professional Geologist, Florida, #2207, 2002

**Experience Summary**

Mr. Konkin is a project manager and geologist experienced in conducting environmental assessments and remediation at contaminated sites in Florida, including interpreting and evaluating data obtained and , preparing site assessment reports, and evaluating, developing, and implementing various remedial systems. He has also conducted assisted clients with various environmental compliance issues, including Phase I site assessments for property transfers, spill prevention plan preparation, and obtaining air, water, and waste permits.

**Project Experience**

**ADESA, Inc., Environmental Site Assessments, US and Canada.** Project manager for 42 Phase I environmental site assessments and submitting reports summarizing field activities and recommendations. [10/2006 - 10/2007]

**Florida Department of Environmental Protection, Orange County Sportsmen's Club, Orlando, Florida.** Project manager for soil and groundwater assessment and preparation of a limited contamination assessment report. [08/2006 - 08/2007]

**Hawkins Companies LLC, ICP Reliance, Orlando, Florida.** Project manager for preparation of reliance letters for Phase I EA work previously completed at the International Corporate Park, Lot 1. [09/2006 - 09/2007]

**Sensormatic Electric, Spill Prevention, Control, and Countermeasures Plan, Boca Raton, Florida.** Project manager for preparation of an SPCC plan in accordance with 40 CFR Part 112 Oil Pollution Prevention. [2006]

**Kaf Tech, Site Inspection and Closure Assessment, Largo, Florida.** Project manager for a closure assessment for the tube/conduit manufacturing facility that is relocating and terminating its current lease. Managing a detailed site inspection to identify potential environmental issues and submittal of a final report of the findings. [02/2005 - present]

**The Pantry, Inc., UST Remediation, Various Sites, Florida.** Conducted site assessments and remediation at various petroleum-contaminated sites in Florida due to leaking underground storage tanks. Prepared proposals, supervised field activities, and prepared site assessment reports and remedial action plans.

**Visteon Automotive, Waste Management, Toronto, Ontario.** Managed handling, treatment and disposal of waste streams generated from automotive manufacturing facility. Provided technical and regulatory support to plant environmental engineer and manufacturing personnel.

**Confidential Railway, Former FUCO Chemical Site, Live Oak, Florida.** Provided technical support for assessment of former pesticide manufacturing facility. Consisted of delineation of pesticide constituents in soil and groundwater through field sampling and preparation of site assessment report.

**US Army Corps of Engineers - Omaha District, Technical Support, Avon Park Air Force Range, Florida.** Provided technical support for assessment of sites with various types of contamination (buried

munitions, waste tar, petroleum products). Included field activities and report preparation.

**Florida Department of Environmental Protection, Dry-cleaning Solvent Cleanup Program, Tallahassee, Florida.** Provided technical support for various sites within the FDEP dry cleaner program. Consisted of delineation of chlorinated solvent contamination in soil and groundwater through field sampling and preparation of site assessment reports.

**Various Clients, Phase I ESA Preparation, Various Sites, Florida.** Project manager for Phase I ESAs at a number of industrial facilities in Florida. Scope of the assessments included ground reconnaissance, record review, regulatory agency communications, and report preparation.

**Various Clients, SPCC Plan Preparation, Various Sites, Florida.** Developed spill prevention control and countermeasures (SPCC) plans at a number of industrial and commercial facilities in Florida.

**ANR Pipeline Company, Hazardous Waste Cleanup, Detroit, Michigan.** Managed environmental soil and groundwater assessments and remediation. Developed offshore oil spill response plans and integrated contingency plans. Managed industrial wastewater retention ponds deactivation and closure. Conducted oil and hazardous material spills notification, reporting, cleanup activities. Conducted Phase I site assessments for potential property transactions. Provided underground storage tank management. Interacted with environmental regulatory agencies. Conducted budget tracking and allocation of capital expenses. Provided technical support to facility environmental coordinators. Investigated and developed pollution prevention and environmental stewardship opportunities at company facilities.

**Chrysler Corporation Environmental Department, Technical Support, Auburn Hills, Michigan.** Provided technical support, including Toxic Substances Control Act compliance, storage tank management, PCB elimination and compliance, and used oil and oily scrap metal management. Conducted facility environmental audits. Provided technical assistance in implementing environmental design into new facility construction projects.

### **Earth Tech Health & Safety Training**

01 - Safety Orientation 03/30/2006  
02 - Hazard Communication (US) /WHMIS (Canada) 11/07/2005  
03 - Defensive Driving Awareness Training 07/24/2006  
14 - Office Ergonomics Training 05/12/2006  
15 - First Aid 11/07/2005  
16 - CPR 11/07/2005  
17 - DOT Level 1 Shipper/(TGD) Canada 05/05/2005  
20 - HAZWOPER 40-Hour 05/01/1991  
21 - HAZWOPER Refresher 8-Hour 09/11/2006  
22 - HAZWOPER Supervisor 8-Hour 05/02/2005  
30 - Respiratory Protection Training 09/11/2006  
31 - Hearing Protection Training 09/11/2006  
34 - General Excavation Safety Training 03/20/2006  
35 - Trench/Excavation Safety Training 03/20/2006  
36 - Fire Extinguisher Training 04/07/2006  
C2 Trenching and Excavation 03/20/2006  
ETUSA Southeast District Safety Metrics 11/01/2006  
Medical Monitoring 11/17/2006

### **Training and Certifications**

Assessment and Remediation of Non-Aqueous Phase Liquids, 2003

### **Publications**

### **Employment History**

05/2000 - present, Earth Tech

07/1998 - 09/1999, ANR Pipeline Company, Detroit, Michigan, Project Manager

02/1994 - 07/1998, CEI Environmental Consultants, Brighton, Michigan, Project Manager

05/1992 - 10/1993, IT Corporation, Farmington Hills, Michigan, Project Geologist

05/1991 - 05/1992, EnecoTech Midwest, Inc., Farmington Hills, Michigan, Staff Geologist