

## APPENDIX B

### PROJECT PERSONNEL RESUMES



### CAREER SUMMARY

Mr. King is a Principal Engineer based in New England who focuses on the integration of environmental regulations and policies with his clients' industrial, institutional, and commercial business objectives, sometimes balancing the competing interests of a wide range of project stakeholders. He has almost 30 years of engineering experience with expertise in water supply and treatment, site assessment, and remediation of soil and groundwater. He has particular expertise regarding in situ biochemical treatment of metals in groundwater through his experience on dozens of sites in North America. He has designed groundwater and non-aqueous phase liquid (NAPL) treatment systems ranging from nominal gallons per minute (gpm) to 17 million gallons per day. He is the principal design engineer for per- and polyfluoroalkyl substances (PFAS) treatment in municipal drinking water systems up to 700 gpm. His hands-on experience laid the foundation for his pragmatic approach to designing "operator- and maintenance-friendly" treatment systems.

Mr. King has a strong track record of serving as an effective advocate for his clients under various state and federal programs. He has developed financial estimates for environmental compliance, remediation, and asset retirement, a valuable benefit for clients who desire environmental compliance within the structure of their business model. He is known as an effective communicator in a variety of settings from project teams to public involvement groups.

With a resume of successful international projects, Mr. King now focuses on serving his northeast-based projects and clients. As president of the American Council of Engineering Companies of New Hampshire and past president of the New Hampshire Society of Professional Engineers, Mr. King aggressively promotes engineering ethics. He also actively participates in legislative and agency rulemaking as a committee member of the New Hampshire Business and Industry Association and the Environmental Business Council of New England. A Registered Professional Engineer, he is a Licensed Site Professional in Massachusetts and a Licensed Environmental Professional in Connecticut, allowing him to issue site remediation opinions for site activities and closure in those states on behalf of his clients.

**Practice Areas:** Contaminated Site Assessment and Cleanup, Water Treatment

**Disciplines:** Construction Management, Environmental Engineering, Water Resources Engineering

### Education:

B.S., Marine Engineering,  
Massachusetts Maritime  
Academy, 1982

### Professional Registration:

Licensed Professional  
Engineer New Jersey  
No.35734;  
Massachusetts No.  
36603; Connecticut No.  
19797; Maine No. 9920;  
New Hampshire No.  
11120

Licensed Site Professional,  
Massachusetts, No.  
7413

Licensed Environmental  
Professional,  
Connecticut, No. 344



### CAREER SUMMARY

Ms. Lamb's career includes military service, professional geology, and client advocacy which have all demonstrated her leadership, organization, and commitment to excellence. She has 12 years of technical experience as a professional geologist working on hazardous waste sites, asbestos disposal sites, petroleum release sites, and hydrogeologic projects ranging from small site assessments to remedial investigations at large industrial facilities.

As the Vice President of Public Policy for the Business & Industry Association (BIA) of New Hampshire, Ms. Lamb advocated on behalf of BIA and its membership in areas relating to the environment, energy, and telecommunications. She identified and tracked legislation that impacted the business community. She testified on behalf of BIA membership, reviewed state regulations and policies, participated in meetings with legislators and state agencies, and provided legislative updates to BIA's Policy Advisory Subcommittee and Board of Directors. She organized and facilitated technical committees such as the PFAS Workgroup, which organized the expertise of some of the region's leading PFAS practitioners in order to provide sound, science-based guidance to the NHDES and legislators. She met with BIA membership to gain a thorough understanding their regulatory concerns in order to communicate these to key legislators and regulators.

Ms. Lamb is well respected for her breadth of technical expertise, developing strong client relationships, and familiarity with the New Hampshire regulatory process and legislature.

**Geology/Hydrogeology/Geochemistry.** Ms. Lamb's professional experience included evaluating site hydrogeologic conditions and preparing and implementing milestone documents including but not limited to site investigation plans, remedial action plans, asbestos disposal plans, Quality Assurance Project Plans (QAPP), Sampling and Analysis Plans (SAP), and Quality Control Management Plans (QCMP). She has also performed aquifer testing/analysis, water supply exploration, state regulatory compliance, and redevelopment of remediated industrial/commercial properties. She has presented technical papers at nationally recognized professional meetings, attended trade shows promoting company services and products, and served as the health and safety coordinator for multiple offices.

**Public Policy.** Ms. Lamb has a proven track record of working with stakeholders, regulators, legislators, and the regulated community on a variety of environmental issues, including land development, air, water, and waste programs. She has extensive experience with organizing and facilitating workgroups that reach successful endpoints to support her clients' needs. She has earned credibility with regulators and legislators through her experience and professional relationships and has demonstrated a reputation for excellence.



## CAREER SUMMARY

Dr. Wertz is a Senior Consultant based in Albany, New York with more than 35 years of experience in investigation and remediation of contaminated groundwater, soil and vapor intrusion sites. From 1982 to 2010, he worked for the New York State Department of Environmental Conservation (NYSDEC) on many of the largest and most complex remedial sites in the State. From 2003 to 2010, he served as a Section Chief in the NYSDEC State Superfund program. Since joining Geosyntec in 2011, his primary focus has been on the assessment and mitigation of vapor intrusion and, recently, on PFAS investigation and remediation.

### Current Focus

**PFAS Remedial Investigation.** Dr. Wertz is responsible for oversight of the focused field investigation at Plattsburgh Air Force Base targeting the pathway of PFAS to drinking water. His responsibilities include development of the conceptual site model, reporting, and communication with the NYSDEC and NYSDOH.

Co-principal investigator on two Department of Defense **Environmental Security Technology Certification Program (ESTCP)** technology demonstration programs: **Demonstration/Validation of More Cost-Effective Methods for Mitigating Radon and VOC** (ESTCP Project 13 EB-ER1-015), and **Mass Flux Characterization for Vapor Intrusion Assessment** (ESTCP Project 15 EB-ER1-008). The goal of these programs is to develop more effective and efficient methods for characterizing vapor intrusion risks and optimizing mitigation systems.

### Applied Research

**Temporal and Spatial Variability in the Distribution of VOCs in Sub-slab and Indoor Air.** Principal NYSDEC investigator on a New York statewide project to characterize the distribution of VOCs at residential structures and the factors that influence it.

**Evaluation of Passive Samplers for Vapor Intrusion Assessment, NYSDEC, NY.** Principal Investigator for a study comparing quantitative passive samplers/TO-17 and Summa canister /TO-15 analyses for use in vapor intrusion assessments at residential structures.

**Mass Flux Characterization for Vapor Intrusion Assessment.** Co-principal investigator ESTCP Project 15 EB-ER1-008. Three independent techniques for measuring flux from the subsurface into a building are being tested. The first method is based on measuring vertical soil concentration gradients and soil moisture and calculating the flux using a form of Fick's Law. The second method is based on measuring the building air exchange rate and indoor air concentrations. The third is based on capturing the contaminant vapor from below the building using a sub-slab venting system and measuring the flow rate and corresponding vapor concentrations. The expected benefits of this research are the development of a more effective, more efficient and less expensive process for assessment and mitigation of vapor intrusion related risks.



### CAREER SUMMARY

Ms. Kellogg is an expert on PFAS with over 25 years of experience characterizing and remediating complex contaminant hydrogeology and groundwater-surface water interactions. As PFAS has emerged as a concern, she has advanced the use of best practices and the industry's understanding of this class of chemicals. She has been recognized by the National Ground Water Association (NGWA) as a PFAS expert for her contributions to "Groundwater and PFAS: State of Knowledge and Practice" (NGWA 2018), PFAS fact sheets for residential well owners, and for developing NGWA's "PFAS in Groundwater Workshop" (August 2018). She also represented NGWA at the USEPA's National Leadership Summit on PFAS in May of last year and the USEPA PFAS public meeting in July.

***Environmental Due Diligence, Confidential Client, New York.*** Ms. Kellogg evaluated the extent of PFAS contamination, potential receptors, remediation costs, and the regulatory drivers for a property transfer in New York.

***Remedial Alternatives Analysis for PFAS Treatment, Atlantic City Municipal Utilities Authority, Atlantic City, New Jersey.*** Ms. Kellogg is leading a team evaluating potential PFOA and PFOS remedial alternatives for an existing facility. Considerations include effectiveness of technologies; scalability; mix of water sources; and capital, operations, and maintenance costs. Following technology selection, bench scale or pilot testing will be conducted.

***Litigation Support Services, Confidential Client, New Hampshire.*** Ms. Kellogg reviewed PFAS concentrations from documents, data, and reports to evaluate challenges to a permit application approval. This work aided an expert witness in developing their professional opinions.

***Litigation Support Services, Confidential Client, Canada.*** Ms. Kellogg reviewed documents, data, and reports to evaluate the potential fate and transport of PFAS contamination. This included an evaluation of the hydrogeology, potential flow pathways, PFAS fingerprinting, and potential receptors. This work aided an expert witness in developing their professional opinions.

***Environmental Due Diligence, Confidential Client, Colorado.*** Ms. Kellogg advised on appropriate sampling protocols, evaluated PFAS results, and evaluated potential risks of PFAS contamination from various formulations of aqueous film forming foams (AFFF).



### CAREER SUMMARY

Dr. Eberle has developed an expertise in site characterization, emerging contaminants, litigation support, and innovative remediation technologies. His experience with emerging contaminants includes working on sites contaminated with PFAS and 1,4-dioxane, along with lead authorship on publications in *Chemosphere* and *Environmental Science and Technology*. Dr. Eberle's PFAS experience has included leading site investigations, development and evaluation of conceptual site models, forensics, litigation support, and research into destructive remediation technologies. He also has experience with the characterization and remediation of soil and groundwater contaminated with both priority pollutants and emerging contaminants.

**PFAS Remedial Investigation.** As part of a focused Remedial Investigation at Plattsburgh Air Force Base targeting the pathway of PFAS to drinking water, Dr. Eberle conducted a review of the current conceptual site model and helped develop a work plan to address data gaps and delineate PFAS contamination. He also provided oversight of bedrock well installation and groundwater and soil sampling to confirm that best practices were being followed to prevent cross-contamination of PFAS and ensure data quality for these highly sensitive samples.

**PFAS Groundwater Sampling.** Dr. Eberle trained field staff in low-flow groundwater sampling protocols for PFAS and oversaw the collection of groundwater samples in compliance with the requirements of the New Hampshire Department of Environmental Services.

**Environmental Analysis of PFAS.** Dr. Eberle applied his expertise in PFAS to evaluate possible connection between a coatings facility and detections of PFAS in the local water supply. His analysis included environmental forensic work to identify other local PFAS sources potentially responsible for the detections. He also assisted in the construction of the conceptual site model and identified potential contaminant migration pathways. He helped develop standard operating procedures to avoid cross-contamination when sampling for PFAS and worked with several analytical laboratories to coordinate analysis of PFAS in soil, groundwater, finished drinking water, and non-traditional matrixes such as industrial products.

**Litigation Support Services.** Dr. Eberle reviewed plaintiff and expert witness opinions in a class action law-suit in which plaintiffs are seeking damages for exposure to PFAS-contaminated drinking water from multiple defendants. He assisted in evaluating contaminant migration pathways, drinking water distribution networks, exposure concentrations, and durations of exposure.

**Environmental Review Services and Risk Assessment.** Dr. Eberle provided due diligence and risk assessment services for a client with multiple facilities where PFAS-containing materials may have been stored and/or used. He reviewed historical documents, analytical results, and reports to evaluate possible migration pathways of PFAS to nearby receptors as well as potential risks associated with the ongoing use of conventional remediation technologies designed for the treatment of conventional contaminants, but not necessarily PFAS.

### Specialties:

- ✓ innovative remediation technologies
- ✓ environmental hydrogeology
- ✓ emerging contaminants
- ✓ litigation support

### Education:

Ph.D., Environmental & Earth Sciences, University of Rhode Island, Kingston, Rhode Island, 2015

M.S., Environmental & Earth Sciences, University of Rhode Island, Kingston, Rhode Island, 2012

B.A., Geology, Bates College, Lewiston, Maine, 2008



### **CAREER SUMMARY**

Julia Caprio is a senior practitioner in quality assurance and an Associate of the firm based in Tennessee with more than 25 years of experience in the environmental engineering sector.

During the past decade, Julia has built a niche practice for Geosyntec focused on data validation services and quality management. She specializes in project quality management, the preparation and review of quality assurance project plans (QAPPs), and the development of quality assurance management plans (QMPs). She also conducts data verification, data evaluation, data validation, and QA audits, including laboratory and on-site field audits.

To date, Julia has been the QA manager or provided QA oversight for more than 180 projects and has authored more than 100 QAPPs. She has developed an expertise that intersects all of Geosyntec's diverse practices, and her data validation experience includes chemical, radiological, and geotechnical parameters for sediments, soil, groundwater, and surface water, among other media. Julia has contributed her QA expertise to many proposals and business development efforts across the firm. She has also been a key contributor to some of Geosyntec's largest, most complex projects, such as the Berry's Creek Study Area RI/FS and the Asia Rare Earth LTSF D&D project. She also was a major contributor in the development of the Geosyntec QMP as well as the firm's U.S. EPA QMP and a recently completed Nuclear Quality Assurance-1 (NQA-1) QMP for nuclear facility projects.

Julia continues to advance the state of the practice by giving regular presentations on quality management at various professional meetings, including regional EPA meetings.

### **Specialties:**

- ✓ Risk Assessment and Applied Toxicology
- ✓ Environmental Management Assessment and Systems
- ✓ Data Management, Visualization, and Analysis

### **Education:**

B.S., Biology, Lock Haven University, 1980

M.A., Organizational Management, Tusculum College, 2002

M.B.A., Upper Iowa University, 2009



### CAREER SUMMARY

**NYSDEC EDD Submission, MCI Utica.** Mr. Knowles used the Earthsoft EQUiS Data Processor to convert laboratory EDDs into a format accepted by the NYSDEC. This included additional steps for initial setup as this submission was the first to NYSDEC for this site. Mr. Knowles worked directly with NYSDEC support to correct discrepancies between the laboratory's export and the NYSDEC requirements.

**Database Migration, Anniston, Casper, CCAD.** Mr. Knowles performed the complete data migration between the source files of a previous consultant into a standardized format. This procedure involves identifying the source files containing analytical data and converting them to a consistent format suitable for database import, performing the import while normalizing the data and preventing duplication of records.

**Automated XML Generation and File Management, MetroPCS.** Mr. Knowles developed a system that takes a set of tables in Excel and converts their content into individual XML files to be accepted into another system. The system also combines these XMLs with related documents in PDF form and zips them into one package per facility for ease of upload. This system was developed to perform these actions on a large scale in a short period of time.

### Specialties:

- ✓ data management
- ✓ web interface implementation and design
- ✓ custom software application extensions

### Education:

B.S., Computer Science,  
Wentworth Institute of  
Technology, Boston,  
Massachusetts, 2005





**Specialties:**

- ✓ Health and Safety Coordinator and Site Supervisor
- ✓ Site investigation and Remediation
- ✓ Vapor Intrusion
- ✓ Construction Quality Assurance
- ✓ Project Controls (Financial project management and Schedule Development)

**Education:**

BS, Biology, James Madison University, Harrisonburg, Virginia, 2011

**CAREER SUMMARY**

Mr. Mraw is a Scientist in the Blue Bell, Pennsylvania office with eight years of experience in environmental site assessment and remediation. He has broad field experience in planning, organizing, and leading various field sampling events. Mr. Mraw has also managed several vapor intrusion assessment and design projects under New Jersey Department of Environmental Protection (NJDEP) oversight, and his other areas of specialization include, bioremediation, construction quality assurance, sediment dredging and sampling, financial management (project controls), and Health and Safety (H&S) management.

**Health and Safety Coordinator (HSC) and Manager,** Mr. Mraw has served as the HSC for the Geosyntec New Jersey Branch where he helped to implement a behavior safety program which focused on health and safety communication through reporting of good catches/near misses. Mr. Mraw is also responsible for assisting field staff in reporting incidents, conducting root cause of analyses, and implementing adjusted procedures regarding lessons learned. He has also conducted safety orientations and developed learning materials in the form of routine monthly presentations to support OSHA HAZWOPER training. He is also qualified to fit test employees for wearing full-face and half face respirators. Mr. Mraw has severed has the primary health and safety manager of large projects and has prepared workplans and health and safety documents.

**Remedial Investigation of Superfund Sites,** Mr. Mraw participated in the implementation of the remedial investigation field campaigns, feasibility studies, and pre-design field investigations for USEPA Superfund sediment mega-sites. Mr. Mraw's involvement in the large-scale complex remedial investigations included implementing a sediment investigation via waterway and marsh coring, sediment capping construction and health and safety oversight, geotechnical sampling, groundwater sampling, UVOST, TarGOST, and CPT investigations, vibrating wire piezometers installation and monitoring, debris removal and ISS oversight, biota sampling, and surface water sampling. Mr. Mraw was also responsible for contractor oversight and served as the primary field team lead.

**Project Controls Specialist of a Superfund Site,** Mr. Mraw has served as the primary project controls specialists and was responsible for tracking budgets, conducting earned value analyses, and maintaining the project schedule of a \$32 million project. He has experience with schedule development using Microsoft Project and Oracle P6 including cost loading schedules to evaluate cash flow requirements and expected invoice amounts, evaluating critical paths, and understanding schedule slack.

**Groundwater Remediation,** Mr. Mraw has managed and implemented the design of two pilot soil vapor extraction and air sparge remediation systems. He oversaw the field installation and construction of the system, managed routine monitoring, and reviewed data collected from the system. Based on data review and analysis he implemented several strategies to optimize system mass removal. Mr. Mraw has also conducted pull-push bio remediation with injection of KB1 bacteria culture for reductive de-chlorination of chlorinated, and coordinated field efforts.

**Vapor Intrusion,** Mr. Mraw has conducted construction oversight for installation of an active vapor mitigation system and implemented routine inspection and monitoring of vapor mitigation systems. He has installed and sampled traditional soil gas probes and sub-slab probes, implemented high volume sampling technical to investigate large buildings, and developed investigation methods to evaluate diffusive mass flux of TCE through concrete slabs.



### CAREER SUMMARY

Ms. Tyler is Scientist/Quality Assurance Specialist, located at the Geosyntec Knoxville office. She holds a B.A. degree in biology from Indiana University and a Masters Degree in Environmental Health Engineering from the University of Notre Dame. Ms. Tyler has over 35 years of experience in the environmental analytical field. Currently she specializes in data verification and validation, data evaluation, and QA audits including data and laboratory audits. Her data validation and evaluation experiences include both organic and inorganic parameters. She has extensive experience in environmental laboratories including laboratory project management, data management, quality control/quality assurance, and analysis of environmental samples for wet chemistry and gas chromatography methods.

### Representative Experience

- Data validation for numerous projects. Responsible for Stage 2A, Stage 2B and Stage 4 data validation of organic and inorganic chemical analyses of soil, water and air samples. Methods evaluated include both CLP and non-CLP methods. Responsible for requesting additional information as needed from the laboratories to ensure appropriate data deliverables are reported. Also responsible for summarizing the data quality issues encountered in data usability reports.
- QA Auditor for various projects. Responsible for auditing organic and inorganic analyses in support of projects using quality assurance project plan requirements, EPA methods and ensuring laboratories are following good laboratory practices (GLP). Also responsible for the preparation of audit reports and evaluating laboratory audit responses.
- QA Auditor for the Berry's Creek Study Area (BCSA) RI/FS project, located in New Jersey, with oversight by EPA Region 2. Responsible for auditing organic and inorganic analyses of one of the participating laboratories.
- QA Auditor for the Honeywell International Moundsville site located in Moundsville, West Virginia. Responsible for working with the on-site laboratory to improve data quality. Responsible for on-going data validation and verification

### Specialties:

- ✓ Professional Level Scientist
- ✓ Analytical Data Evaluation
- ✓ Data Verification and Validation
- ✓ QA Auditing

### Education:

M.S., Environmental Health Engineering, University of Notre Dame, Notre Dame, Indiana; 1984

B.A., Biology, Indiana University, Bloomington, Indiana; 1980

### Professional Experience

**Laboratory Quality Assurance Chemist**, STL Knoxville (formerly Quanterra Environmental Services and IT Analytical Services), Knoxville, Tennessee.

**Laboratory Project Manager**, IT Corporation, Knoxville, Tennessee.

**Chemist**, IT Corporation, Knoxville, Tennessee. Responsible for analyzing and

**Engineering Assistant**, City of Elkhart Wastewater Treatment Plant, Elkhart, Indiana.

**Engineering Assistant and Laboratory Technician**, Ten Ech Environmental Engineers, Inc., South Bend, Indiana.

**Laboratory Technician**, Indiana University, Bloomington, Indiana.