EDUCATION

B.S. The Pennsylvania State University. 1993. Earth Science/Geology.

<u>Senior Thesis</u>: "Lithology, Stratigraphy, and Structure of Roaring Spring, Pennsylvania." Field study comprised of local geologic mapping, detailed mapping within quarry, a fault and fracture analysis, and drill core analysis.

Continuing Education:

- ASTM Technical & Professional Training. 1997. "Environmental Statistics." West Conshohocken, Pennsylvania.
- PA Department of Environmental Protection. 1998, 2002 "Workshop on Pennsylvania's Land Recycling Program, Act 2."
- Pennsylvania Department of Environmental Protection. January 28, 2004. Vapor Intrusion Guidance Training. Harrisburg, Pennsylvania.
- National Ground Water Association. October 2004. "Low-Cost Remediation Strategies for Contaminated Soil and Ground Water." Dublin, Ohio.
- National Ground Water Association. September 2011. "Focus Conference on Fractured Rock and Eastern Groundwater Regional Issues." Burlington, Vermont.
- Completed continuing education requirements to maintain Professional Geologist license.

Certification:

- 40-Hour Training for Hazardous Waste Operations and Emergency Response. January 1995. NTH Consultants Ltd., Exton, Pennsylvania.
- Waste Site Worker Supervisory Training in Accordance with 29CFR 1910.120(e)(4). April 27, 2001.
- Hazardous Waste Site Worker Refresher Training (8 hours annually) in accordance with 29CFR 1910.120(e)(8), State College, PA.
- Mine Safety Training in Accordance with MSHA 30CFR Part 46, Training/Retraining of Miners. May 31, 2002, plus annual Miner Refresher Course.
- Mine Safety Training in Accordance with MSHA 30CFR Part 48 (surface only), Training. April 2, 2015.
- American Safety and Health Institute Approved Basic First Aid and Adult CPR Certification, plus annual re-certification.

TODD A. LOWREY, P.G.

• Permit-Required Confined Space Training, Including Entrant, Attendant and Supervisor Non-Entry Rescue. August 2, 2004.

EXPERIENCE

<u>December 2020 to Present</u>: *Vice President, Meiser & Earl, Inc., State College, Pennsylvania.* Same responsibilities as Project Hydrogeologist, plus additional management duties.

<u>February 2001 to Present</u>: *Project Hydrogeologist, Meiser & Earl, Inc., State College, Pennsylvania.* Responsibilities include preparing proposals and technical documents, and supervising geologists. Completed projects, including:

- Prepared geologic and hydrogeologic work plans and permit applications for municipal waste landfills and construction/demolition waste landfills. Provided review, evaluation, and compilation of monitoring data from waste disposal sites for regulatory submission. Prepared statistical evaluations of water monitoring data. Prepared sampling and analysis plans.
- Managed, supervised, and conducted exploratory drilling and hydrogeologic investigations for landfill permitting projects. Managed and supervised well decommissioning projects and groundwater assessments. Designed and supervised the installation of groundwater monitoring programs for waste disposal and mining sites. Conducted quarterly sampling events.
- Prepared pre-drilling and aquifer testing plans, and hydrogeologic reports for submittal to PA Department of Environmental Protection for public water supply well permitting.
- Prepared aquifer testing plans and groundwater withdrawal applications for submittal to the Susquehanna River Basin Commission (SRBC).
- Supervised drilling, well construction, and aquifer testing, and evaluated pumping test data for the permitting of public water supplies by the PA Department of Environmental Protection and for groundwater withdrawals permitted through the SRBC.
- Conducted pumping test for the development of a well head protection area for a municipal water supply.
- Characterized sediment in accordance with Pennsylvania's Management of Fill Policy for pond dredging projects.
- Investigated background levels and the leaching potential of arsenic in soil for use as clean fill or regulated fill.
- Managed and conducted stream and spring temperature monitoring to evaluate an industrial discharge to a stream.

TODD A. LOWREY, P.G.

- Managed and conducted outfall sampling and reporting for NPDES general and industrial permits. Prepared site inspections and annual reports.
- Conducted Phase I Environmental Site Assessments and Transaction Screen Processes for real estate transactions.
- Managed and conducted soil, geologic, and hydrogeologic investigations for contamination projects under Pennsylvania's Land Recycling (Act 2) and Storage Tank Programs.
- Performed site characterization, supervised contaminated soil excavation, completed groundwater investigation to obtain Act 2 Release of Liability using the Statewide Health Standard.
- Conducted soil gas sampling to address Pennsylvania's Vapor Intrusion Policy for the closure of contamination projects.

June 1994 to February 2001: Geologist, Blazosky Associates, State College, Pennsylvania.

- Provided technical and project supervision for geologic and hydrogeologic investigations related to landfill permitting projects. Prepared geologic and hydrogeologic permit forms for municipal, construction/demolition, and residual waste disposal sites in Pennsylvania and Ohio. Developed surface geology and structure maps, geologic crosssections and isopach maps using lithologic, core boring and geophysical data. Developed groundwater and potentiometric surface maps.
- Prepared site characterization and remediation plans and final reports for the cleanup of contaminated sites under Pennsylvania's Land Recycling and Storage Tank Programs. Completed Phase I Environmental Site Assessments for real estate transactions, including historical reviews, field investigations and report preparation.
- Prepared and implemented groundwater monitoring plans, sampling and analysis plans and well abandonment plans for waste disposal and contaminated sites. Managed groundwater monitoring programs for municipal waste landfills and industrial facilities, and contaminated site characterizations. Conducted groundwater and surface water sampling. Reviewed sampling data for regulatory submission.
- Supervised exploratory work using air rotary, diamond core, and hollow-stem auger drilling and direct-push methodologies. Supervised the installation of monitoring wells, piezometers, methane gas probes and active landfill gas wells.
- Performed single well and multiple well drawdown and pumping tests and slug tests. Analyzed and interpreted pumping test and slug test data using groundwater modeling software to determine site specific hydrologic characteristics of aquifers.

TODD A. LOWREY, P.G.

- Utilized packer testing to determine groundwater producing zones and to perform discrete interval groundwater sampling. Applied information obtained from down-hole geophysical methods to groundwater projects.
- Performed in-situ hydraulic conductivity testing of compacted clay liners using the two stages of infiltration from a borehole.

PROFESSIONAL AFFILIATIONS

• National Ground Water Association, Association of Ground Water Scientists and Engineers.

PROFESSIONAL REGISTRATION

• Commonwealth of Pennsylvania Registered Professional Geologist, No. PG-003803-E.