James R. Taylor, P.G.

RÉSUMÉ

Principal Geologist/Hydrogeologist

FIELDS OF EXPERTISE

Environmental Geology, Hydrogeology, Water Supply, Water Resource Planning, Soil & Groundwater Remediation, Environmental Site Assessments, Groundwater Nitrates, Geological Features Mapping

HIGHLIGHTS OF EXPERIENCE

Mr. Taylor is a geologist with over 25 years of professional experience, project management and problem solving in hydrogeologic studies, water resources, brownfield redevelopment, environmental site assessments, remedial actions, soil & groundwater contamination studies, geological mapping, stormwater management, geotechnical investigations, water supply permitting, land use planning, and heavy metal remediation. He has worked with clientele ranging from fortune 500 companies to townships to private individuals. Below is a sampling of Mr. Taylor's key project experience.

- Hydrogeological Investigations for Environmental Corrective Actions: Project manager, technical reviewer and field geologist for numerous hydrogeological investigations related to gasoline service stations, landfills, commercial properties, and industrial facilities. Responsibilities have included preparation of work plans, scheduling, coordinating field activities, sampling, monitoring well installation observation, hydrogeologic interpretations, groundwater flow and contaminant transport, groundwater pumping tests, borehole testing and geophysics, fate and transport modeling, data and trend analysis, hydrogeological interpretation and conceptual model design, review and selection of remediation alternatives, report preparation and budgeting. Sites conditions range from bedrock and unconsolidated aquifers, saturated and unsaturated conditions, and under static and pumping groundwater conditions. Characterizations have established the baseline model for remedy evaluation and effective closure.
- Hydrogeology in Glacial Till Geology: Project manager and field geologist at former gasoline station located with the glacial till region. The characterization and remedial investigation involved hydrogeological conditions associated with glacial till and fracture sedimentary bedrock, and a complicated groundwater flow regime having a strong vertical groundwater flow component and induced flow from residential potable wells.
- Hydrogeology in Coal Mining Region: Task manager for hydrogeologic investigation at RCRA facility in northeastern Pennsylvania coal region. Project responsibilities included monitoring well design and installation observation, rock core analysis, down-hole video, packer testing, preparation of geologic cross-sections and hydrogeologic interpretation. The investigation was conducted within the overburden and unsaturated bedrock rock aquifer above the saturated mine pool.
- Public Water Supply Well Permitting: Water resource studies and permitting for public water supplies, pre-development planning, evaluating potential on-site water supply well locations, characterizing hydrogeologic conditions, supply well installation oversight, evaluating pumping test data, preparing water balances of proposed water usage.
- Spring Water Permitting: Hydrogeological study and feasibility analysis on springs to determine source, flow regime, catchment area, water quality, susceptibility, and potential impacts, related to both planned and existing spring water bulk transport and bottling facilities.
- Water Resource Planning: Hydrogeologic studies to evaluate water budgets for proposed developments, required yields, optimal recharge area, potential impacts from surface water infiltration.
- Groundwater Nitrate Modeling: Hydrogeologic studies and modeling of nitrate dilution and migration for subdivisions proposing to use on-site septic and water supply wells.
- Phase I and II Environmental Site Assessments: Environmental Site Assessments (ESAs) performed to evaluate potential concerns associated with industrial, commercial, agricultural and undeveloped properties. Work scopes include site reconnaissance, historical records review, aerial photograph interpretation regulatory agency reviews, exploratory test pits, fracture trace analysis, geophysical surveys, soil and groundwater sampling, and cursory evaluations for asbestos, lead paint and mold.

- Special Industrial Area: Obtained release of liability at a former heating oil distribution terminal and gasoline service station under Pennsylvania's Act 2 Special Industrial Area (SIA). In accordance with the Act, a Baseline Remedial Investigation was conducted, and using risk-based, brownfield redevelopment incentives encouraged within the SIA, soil and groundwater impact could remain on site through the use of engineering controls and suitable land re-use.
- Manufactured Gas Plant Contamination: Developed sampling program to distinguish whether groundwater contamination originated from historic manufactured gas production or current gasoline service station usage.
- Characterization at Lead Battery Facilities: Sampling coordinator for EPA Emergency Response lead battery site, overseeing multi-year field investigation including soil, surface water and groundwater sampling, and landfill characterization. Developed and implemented soil sampling of metals using x-ray fluorescence for hazardous waste characterization and expedited remediation. Other responsibilities included management, interpretation, statistical evaluation and presentation of data and findings.
- Statistical Evaluation & Data Validation: Prepared RCRA groundwater monitoring statistical program and computer model to evaluate quarterly groundwater quality compliance data for a large steel manufacturing plant. Used non-parametric statistical methodology to evaluate and compare soil lead concentrations associated with smelter and residential sources. Developed statistical methods to establish appropriate soil cleanup levels.
- Soil and Groundwater Remediation: Remedy evaluation, pilot testing, design and implementation of remediation systems for impacted soil and groundwater. Treatment technologies have included soil excavation, soil stabilization, soil vapor extraction, sparging, enhanced bioremediation, bioaugmentation, chemical oxidation, monitored natural attenuation, groundwater pump and treatment, groundwater trench collection, and residential water filtration. Employed various techniques to achieve contact with contaminant zones including interceptor trenches, direct contact, and direct push injections.
- Geological Mapping: Mapping bedrock outcrops and subcrops, and surficial materials, in the Piedmont, Ridge and Valley, and Atlantic Coastal Plain Physiographic Provinces of Pennsylvania, Delaware and New Jersey.
- Soil Mapping: Delineated alluvial soils from residual soils along streams to comply with local ordinances.
- Aerial Photography Interpretation: Aerial photograph stereo pair mapping and fracture trace analysis to identify geologic contacts, previously existing drainageways & wetlands, fractured bedrock zones and sinkhole areas.
- Fracture Trace Analysis: The use of stereoscopic aerial photograph pairs, field observations and geophysical surveys to identify fractured bedrock zones that provide preferential contaminant migration pathways and/or high yielding groundwater monitoring wells.
- Sinkhole Identification & Mitigation: Geophysical surveys and subsurface investigations to identify potential sinkholes in carbonate regions. Optimization of exploratory test boring locations using geophysics. Field oversight of compaction grouting to stabilize sinkhole activity in stormwater management basins and parking lots along public roadway and commercial developments.
- Stormwater Management & Mitigation: Resolved water infiltration problem (groundwater versus surface water) into sub floor of large research center and developed mitigation plan. Assist municipalities and local organizations with stormwater management, infiltration BMPs, and regulation compliance.
- Surveying: Topographic, property and planimetric surveying.
- Geotechnical Investigations: Subsurface investigations associated with geotechnical engineering projects, including exploratory test borings and test pits, hand auger borings, piezometer installations, dynamic cone penetration tests, soil classification, laboratory testing and geophysics.

EDUCATION

Master of Environmental Pollution Control, Pennsylvania State University (2003)
Emphasis in nitrates in groundwater, bioremediation, watershed management, environmental law and hazardous materials management.

Bachelor of Science – GeoSciences, Pennsylvania State University (1991)

Continuing Education Classes: Analysis and Design of Aquifer Tests; Brownfield and PA Act 2 Workshops; Assessment, Control and Remediation of LNAPL Contaminated Sites; Groundwater Flow through Fractured Media; Agricultural Chemicals and Ground Water; Biotechnical Slope Protection and Erosion Control; Slope Protection and Restoration with Geosynthetics; Total Quality Management; Business Management; MTBE Characterization and Remediation; Hydrogeology of Fractured Rock.

REGISTRATIONS/CERTIFICATIONS/AFFILIATIONS

Professional Geologist - Pennsylvania, Delaware
The American Institute of Professional Geologists (2001 PA Section President, 2000 PA Section Vice-President, 2004 – 2012 PA Section Treasurer)
The National Ground Water Association
Health and Safety Training: 40 hrs. & 8 hr. refresher, Hazardous Waste Operations (OSHA 1910.120)
Health and Safety Supervisor Training: 8 hrs Hazardous Waste Operations (OSHA 1910.120)
Borough of Swarthmore Environmental Advisory Council (1998 to 2005, Chairman 2001 - 2003)

PUBLICATIONS

Hagerty, Paul A. and Taylor, James R. 2005. Nitrate Removal for On-Lot Sewage Treatment Systems: The POINT™ System. Technical White Paper.

Taylor, James R. 2003. Evaluating Groundwater Nitrates from On-Lot Septic Systems, a Guidance Model for Land Planning in Pennsylvania. Penn State Great Valley, School of Graduate Professional Studies. Malvern, Pennsylvania.

Taylor, Jim and Tymchenko, Nick. 1999. Draft Watershed Management Plan for the Borough of Swarthmore & Crum Creek Watershed.

Taylor, J. and Forslund, B. 1997. Results of a Soil Lead Study Conducted in a Residential Area. 12th Annual Conference on Contaminated Soils. University of Massachusetts.

Taylor, J. and O'Brien, T. 1993. Evaluating Residential Water Supply Wells in a Fractured Bedrock Aquifer Contaminated with MTBE: A Case Study. Focus Conference on Eastern Regional Ground Water Issues.

Taylor, J. and Forslund, B. 1991. Environmental Impacts on Blood Lead Levels in the Vicinity of a Former Battery Recycling Plant. 25th Annual Conference on Trace Substances in Environmental Health.

Taylor, J. Acid Mine Drainage.

Taylor, J. and Hitchens, D. Interceptor Trenches Enhance In-Situ Bioremediation within a Shallow Water Table Aquifer. (abstract)

Andrew J. Sokol, P.G., CPG

RESUMÉ

Senior Geologist

FIELDS OF EXPERTISE

Landfills, Spill Assessment and Remediation, Environmental Geology, and Hydrogeology.

HIGHLIGHTS OF EXPERIENCE

Mr. Andrew J. Sokol, P.G., CPG, is a geologist with over 19 years of consulting experience in geologic, hydrogeologic, geotechnical, and environmental related projects. Mr. Sokol currently provides project management and technical oversight on projects. He has been responsible for planning and conducting detailed geologic and hydrogeologic investigations as they pertain to the siting, design, permitting, construction and operation of municipal, residual and hazardous waste landfills. Additionally, he has supervised and conducted site characterization and assessment projects on petroleum and hazardous material contaminated sites throughout portions of the United States and Europe. Mr. Sokol also has detailed experience with Pennsylvania's Act 2 Land Recycling program and Pennsylvania's Underground Storage Tank Management program (Chapter 245) and has overseen the characterization of several sites across Pennsylvania using the regulations set forth within Act 2 and Chapter 245. He has attended the PaDEP Act 2 training seminars and is well versed in the application of the remediation standards available under Act 2. He has practical application experience with Act 2/Chapter 245 sites ranging from large scale petroleum releases to small residential petroleum spills, as well as the characterization of impacted industrial sites.

Project Management

- Provides technical and project supervision for environmental investigation projects.
- Responsibilities have included client and regulatory contact, scheduling of personnel and direction of resources, financial tracking, coordination of daily business and office activities and business development.
- Developed bid and specification packages for numerous investigative drilling and well installation projects.
- Provided experienced technical supervision on numerous geologic and hydrogeologic investigations related to landfill permitting, landfill compliance, environmental assessments and for petroleum and hazardous material contaminated site characterization projects.
- Assisted with the development and coordination of teaming agreements between various technical support suppliers, government agencies and independent consultants.
- Previously served as a technical project manager and operations manager for an environmental group at Fortune 500 Company that provided in-situ site characterization services for petroleum-impacted sites. The group developed and utilized an innovative laser induced fluorescence technology that was deployed from a cone penetrometer. Provided project management for over 50 projects conducted throughout the United States and Europe.

Geology/Hydrogeology

- Developed, implemented, and coordinated various field investigative programs, which have included multiple phase exploratory drilling projects, well, and piezometer installations and remedial actions for numerous types of landfill facilities and hazardous waste sites.
- Conducted multiple as well as single well pump and drawdown tests for the determination of site-specific aquifer characteristics.
- Experienced with the analyses of pump test, step test, and slug test hydrologic data.
- Developed groundwater and surface water sampling and analysis plans for various waste disposal

facilities and hazardous waste contaminated sites.
- Developed groundwater, potentiometric surface, and contaminant plume contour maps, and hydrogeologic cross section diagrams.
- Designed and installed public water supply wells.
- Developed groundwater and surface water sample collection and handling protocols.
- Conducted groundwater and surface water sampling at numerous hazardous waste sites and disposal facilities.
- Developed detailed geological investigative plans for the permitting of proposed municipal, residual, and construction/demolition waste disposal facilities.
- Experienced with the applied use of down hole geophysical well logging techniques.
- Experienced with direct push technologies such as Geoprobe and Cone Penetrometer Test (CPT) methods and the facets of their environmental and geotechnical applications.
- Conducted soil profile logging and characterization from shallow soil test pit excavations and deep soil borings.

EDUCATION

B.S., Earth Science/Geology, The Pennsylvania State University, University Park, PA, 1989.
Graduate Courses towards M.S., Engineering Geology, Drexel University, Philadelphia, PA.
40-Hour Hazardous Waste Operations and Safety Training, 1991 (OSHA 29 CFR 1910.120).
8-Hour Hazardous Waste Operations Supervisor Training, 1995 (OSHA 29 CFR 1910.120).
Current Hazardous Waste Operations Refresher Course (OSHA 29 CFR 1910.120).
New Jersey State Regulatory Training in Underground Storage Tanks, New Brunswick, NJ, 1995.
Laser Safety Supervisor Training, Eagan, MN, 1994.
Nuclear Testing Equipment Training Course, 1990.

REGISTRATIONS

Registered Professional Geologist, Pennsylvania (PG-003760-E)
Registered Professional Geologist Delaware (S4-0000974).
Certified Professional Geologist, American Institute of Professional Geologists (CPG #9738).

CONFERENCES AND SEMINARS

"Hydrogeology of Fractured Rock: Characterization, Monitoring, Assessment and Remediation"
Fractured Rock Educational Services, Niagara Falls, NY December 2002

"Act 2 Land Recycling Program Client Workshop"
Department of Environmental Protection, Valley Forge, PA, May 2004

"A Client Workshop," Application of Pennsylvania's Land Recycling Program, Technical Manual,
Pennsylvania Department of Environmental Protection, Valley Forge, PA, October 1998

"Professional Geologist Review Course"
Pennsylvania Council of Professional Geologist, Harrisburg, PA April 1998

Assistant Presenter, Application of the Rapid Optical Screening Tool (ROST®) for Petroleum Contaminated Site Characterization, Air and Waste Management Association, Field Screening Methods for Hazardous and Toxic Chemicals Conference, Las Vegas, Nevada, 1995

Mike Napolitan, P.G.

RÉSUMÉ

Project Geologist

FIELDS OF EXPERTISE

Geographical Information Systems, Environmental Geology, Superfund Sites and Hydrogeology.

HIGHLIGHTS OF EXPERIENCE

Mr. Michael Napolitan, P.G., is a geologist with over 9 years of consulting experience in geologic, hydrogeologic, geotechnical, and environmental related projects. Mr. Napolitan currently provides Geographical Information System (GIS) expertise, hydrogeologic modeling, project management and technical oversight on projects. Mr. Napolitan specializes in the utilization of technology to enhance project performance, visualize data, and foster project team understanding.

Mr. Napolitan started his career conducting seismic surveys along Louisiana's Gulf Coast. His responsibilities included management of subcontractors and field crew, data recording, quality control, and equipment management. Returning to Pennsylvania, Mr. Napolitan has worked for both a small engineering and environmental consulting firm and a large, multinational consulting firm. His primary duties have included well installation, sampling, database management, geotechnical field work, and landfill construction inspection. Working on EPA Region III RAC contracts, Mr. Napolitan was responsible for the geologic and hydrogeologic portions of site investigations and remedial activities. He prepared work plans, wrote geologic and hydrogeologic reports, developed subcontract documentation and scopes of work, and supervised all geologic field work.

Project Management

- Provides technical and project supervision for environmental investigation projects.
- Client and regulatory contact, scheduling of personnel and direction of resources.
- Developed bid and specification packages for numerous site investigation projects.

Geology/Hydrogeology

- Developed, implemented, and coordinated various field investigative programs, which have included multiple phase exploratory drilling projects, well, and piezometer installations and remedial actions for numerous types of landfill facilities and hazardous waste sites.
- Conducted well pump and drawdown tests for the determination of site-specific aquifer characteristics.
- Experienced with the analyses of pump test, step test, and slug test hydrologic data.
- Developed groundwater and surface water sampling and analysis plans for hazardous waste contaminated sites.
- Developed groundwater, potentiometric surface, and contaminant plume contour maps, and hydrogeologic cross section diagrams.
- Developed groundwater and surface water sample collection and handling protocols.
- Conducted groundwater and surface water sampling at hazardous waste sites and disposal facilities.
- Experienced with the applied use of down-hole geophysical well logging techniques.
- Experienced with direct push technologies such as Geoprobe and Cone Penetrometer Test (CPT) methods and the facets of their environmental and geotechnical applications.

Geographic Information Systems

- Developed and implemented a GIS to store, query and display waste disposal data for a 200 acre landfill in southeastern Pennsylvania.
- Prepared and implemented a GIS to display and track sampling efforts for PA MS4 outfall monitoring programs in southeastern Pennsylvania.
- Developed a proprietary multi-county GIS for use in land development and water feasibility consulting projects.

EDUCATION

(In progress) M.S., Applied Geoloscience, University of Pennsylvania, Philadelphia, PA.
B.S., Earth Science/Geology, The Pennsylvania State University, University Park, PA, 1997.
40-Hour Hazardous Waste Operations and Safety Training, (OSHA 29 CFR 1910.120).
8-Hour Hazardous Waste Operations Supervisor Training, 2003 (OSHA 29 CFR 1910.120).
Current Hazardous Waste Operations Refresher Course (OSHA 29 CFR 1910.120).

REGISTRATIONS

Registered Professional Geologist, Pennsylvania (PG-003975)
Registered Professional Geologist, Delaware (S4-0001199)

Dennis Fisher

RÉSUMÉ

Senior Staff Scientist

FIELDS OF EXPERTISE

Environmental Site Assessments, Environmental Geology, Building Materials Inspection, Field Services, Soil & Groundwater Remediation, Landfill Services

HIGHLIGHTS OF EXPERIENCE

Mr. Fisher has over 16 years of experience in the management of a wide variety of environmental and land development projects. His primary areas of expertise include property development investigations, brownfield development, inspections for the presence of asbestos containing materials, lead-based paint, mold and indoor air hazards. His experience includes all aspect of data collections, report preparation, client maintenance and government regulatory agency negotiation. He has trained co-workers, prepared reports, tracked budgets and client management and development. His experience includes hollow stem auger, air rotary, mud rotary, rotosonic, vibra-push and direct-push drilling techniques to investigate a wide variety of contaminants in soil and groundwater. Relevant experience includes lithologic logging and aquifer testing, including use of single-point packers, slug and recovery testing and long-term pumping tests to provide data needed to identify water bearing zones and hydraulic properties of aquifers. Below is a sampling of Mr. Fisher's key project experience.

- Multi-Site Due Diligence Assessment: Performed and managed concurrent Phase I ESAs at 25 proposed telecommunications towers as part of a Greater Philadelphia Region Build-out both along the Pennsylvania Turnpike and in Camden, New Jersey. The investigations included raw undeveloped and industrially-developed land. These expedited assessments were completed within approximately three weeks to allow Site Acquisition Specialists time to evaluate lease agreements.
- Telecommunications Due Diligence Assessment: Performed Phase I and Phase ESAs, asbestos and lead-based paint inspections and NEPA compliance studies at raw land and proposed antenna co-location facilities in conformance with the Federal Communication Commission (FCC) National Programmatic Agreement (NPA) as part of the Connecticut and New York Metropolitan build-outs on behalf of AT&T Wireless and their General Contractor. Retained and communicated with ecological and cultural resource contractors to resolve areas where adverse effects were determined by state and federal regulatory agencies.
- Auto Dealership Investigation: Conducted Phase I and Phase 2 ESAs at dealership properties located in Pennsylvania, New Jersey, New York and Connecticut. Follow-up environmental services included UST closure and in-ground hydraulic hoist equipment removal.
- Electric Utility Company Investigation: Performed and managed Phase I and Phase 2 ESAs at approximately 20 electric utility-owned facilities located in Pennsylvania, Delaware, New Jersey and New York. Utility-owned facilities include undeveloped land, substations, service and maintenance facilities, as well as fossil-fuel-fired and decommissioned nuclear power generating stations.
- Asbestos Abatement Monitoring: Performed field observation and third-party air monitoring for asbestos abatement of 180-unit low income housing. Performed on site asbestos fiber analysis and collected samples for off-sit clearance analysis to confirm the abatement contractor was employing proper abatement techniques to remove friable and non-friable asbestos containing materials. Responsible for documenting abatement contractors work practices, discontinuing abatement when work practices were not followed and reporting of abatement activities to the General Contractor and City of Detroit.
- AHERA Asbestos Management Services: Prepared an initial AHERA Management Plan for Germantown Settlement Charter School, located in the Philadelphia Archdiocese jurisdiction. Responsible for client development budgetary management and Management Plan preparation. Performed a three-year AHERA re-inspection and lead-based paint inspection and risk assessment for St. Hedwig School, located in Chester, Pennsylvania.

- Mold Abatement: Field Team Leader for removal of visible mold contaminated building materials from ten senior citizen apartment units in the city of Philadelphia arising from a leaking roof system. Coordinated the relocation of several tenants during a three-week project duration. Responsible for collection of post-removal air and surface microbial sampling.
- DNAPL Investigation at Weapons Manufacturing Facility: Served as a Field Geologist conducting rotosonic drilling contractor oversight to delineate the extent of trichloroethylene and degradation byproducts in groundwater from a former weapons manufacturing facility to a surrounding residential community. Responsibilities included packer testing and assistance with lithologic logging of soil cores to identify the vertical extent of contamination. Evaluated packer test data to determine zones of permeability.
- Environmental Sampling & Analysis for Lead: Responsible for collection and analysis of thousands of soil samples during excavation of soil from industrial and residential properties in suburban Scranton, Pennsylvania that was contaminated from historic smelting operations. Calibrated and operated portable field X-ray Fluorescence atomic absorption (XRF) instrument that was statistically compared with EPA field XRF and fixed-base laboratory results, which allowed for uninterrupted remediation effort. Conducted investigation of household interiors for the presence of lead hazard and ACMs inside households within the affected community. Performed XRF analysis of soil samples and managed the production rate of ex-situ soil stabilization that was selected as the remedial option at a former battery crushing and smelting plant in Savannah, Illinois.
- TCE Groundwater Investigation & Remediation: Performed file reviews and personal interviews with property employees of a former metal fitting manufacturing facility to identify potential source of TCE and degradation byproducts found in offsite wells. Conducted geophysical investigation to identify several potential sources of contamination. Supervised and directed drillers in direct push and auger drilling to identify the extent of contamination. Assisted in the installation of an air sparge system, maintenance of a pump and treat system and monthly reporting of a permitted NPDES discharge from the treatment
- PCE Risk Assessment for PA Act 2 Attainment: Managed the investigation and risk assessment used to obtain Act 2 liability protection for PCE and degradation products in groundwater resulting from a former dry cleaner. Duties included sealing the source, drilling and lithologic logging of soil borings, installation of permanent well network and quarterly sampling.
- PA Act 2 – Site Characterization and Cleanup: Managed soil and groundwater investigations that were conducted to supplement investigations and remediation conducted by three previous consultants. Prepared and submitted a Site Characterization, Risk Assessment, and Final Report to the PADEP demonstrating attainment of Site-Specific Cleanup Standards for metal and volatile organic contamination at a former metal fabrication and casting facility located along the Delaware River Waterfront that allowed for redevelopment by a national real estate development corporation.
- Hydrogeologic Investigation for Community Water Supply: Conducted a Groundwater Resource Study and identified the optimum location for installation of a community supply well serving a proposed 127-home development capable of a 78-gallon per minute yield. Contracted and observed drilling and installation of the well, performed short-term and long-term aquifer testing, to measure and minimize potential drawdown effects on nearby wells. Prepared a hydrogeologic report and permit application to the PADEP Bureau of Water Quality
- Urban Redevelopment of USEPA Brownfield Pilot Program: Performed oversight of demolition of an industrial building in imminent danger of collapse and conducted a geotechnical and environmental investigation of concerns associated with filling of the Site in North Philadelphia with coal ash. Prepared and submitted a remedial investigation, risk assessment and cleanup plan to obtain liability protection under provisions of Act 2 for proposed retail redevelopment as an integral part of Philadelphia's 5th Street Corridor.
- Urban Redevelopment of Commercial Property: Managed the investigation of several environmental concerns identified through Phase I ESA at a commercial zoned property in Ewing, New Jersey,

including leaking ASTs, leaking USTs, a septic leach field, floor drain discharges, ACMs, surface water contamination and municipal waste dump. Provided third-party oversight of remediation being conducted by another consultant under a Memorandum of Agreement (MOA). The investigations and remediation was successful in obtaining a Site-wide No Further Action (NFA) determination from the NJDEP and allowed for redevelopment of the steel fabrication property to a home improvement center.

- Landfill Construction Quality Assurance: Conducted monitoring of ambient air for worker safety and conducted construction quality assurance testing of landfill cap cover soil for the United States Army Corps of Engineers (USACOE) under Level B personal protective equipment. Directed workers and informed the contractor of inconsistencies with USACOE specification.
- Landfill Services: Special waste coordinator, pre-approving generators to accept residual waste, check analytical data, PADEP forms, special waste forms prior to submitting for approval. Daily operating record. Notification and communication with generators for annual update. Leachate flow tracking and sampling of containment system. Process wastewater sampling. Monthly odor letter reports. SARA Title II reporting. Stormwater sampling for NPDES permit compliance. Gas well installation.
- Landfill Expansion: Hydrogeologic investigation for landfill cell expansion; monitoring well installation, pumping tests, groundwater flow characterization.

CERTIFICATIONS

Licensed New Jersey Department of Environmental Protection - Subsurface Evaluator
Licensed Professional Geologist - State of Tennessee
Certified Asbestos Hazard Emergency Response Act (AHERA) Building Inspector/Management Planner
Licensed Building Inspector/Management Planner – PA Department of Labor & Industry
40-hour Hazardous Waste Operations (HAZWOPER) Training
Certified Troxler Nuclear Density Gauge

EDUCATION

Bachelor of Arts–Geography, Geology Minor, Millersville University, Millersville, Pennsylvania, December 1988

CONTINUING EDUCATION/TRAINING

Regulatory Training in Underground Storage Tanks - Rutgers University
Asbestos Occupations Training- Allsafe Environmental, Inc.
Phase Contrast Microscopy Certification - NIOSH 582 Equivalency Training

Bill Gothier

RÉSUMÉ

Staff Scientist

FIELDS OF EXPERTISE

Watershed restoration; Stream channel restoration, assessment and monitoring; Stormwater management and compliance; NPDES & general permitting; Grant preparation.

HIGHLIGHTS OF EXPERIENCE

Mr. Gothier is a staff scientist with over 9 years of experience in watershed and geoenvironmental related projects. His previous work with a County Conservation District has provided extensive experience in management of all facets of watershed based restoration, protection, assessment, monitoring, and educational projects. Mr. Gothier has overseen and directly participated in numerous stream and lake restoration projects. Other project experience includes soil and groundwater sampling, monitoring well installations, preliminary hydrogeological studies, groundwater nitrates modeling, and water supply and feasibility studies.

Bill has over five years experience in providing stream and pond management assistance to homeowners, associations and businesses. He has worked with Aqua Pennsylvania to decrease nutrients on the two largest reservoirs in Delaware County which provide potable water to over 200,000 people. While employed at the County Conservation District he also served as project manager and grantee on a source water assessment for Aqua PA's Springton Reservoir. Bill has provided several pond owners with technical assistance including land management techniques to improve pond and stream quality as well as drainage and volume control.

PROJECT EXPERIENCE

- Oversight and participation in various watershed activities including: PA Act 167 Stormwater Management Plans, PA DCNR River Conservation Plans, PA DEP Source Water Assessment Studies, the National Floodplain Management Program, and NPDES permitting program.
- Formulating and administering County and Municipal NPDES MS4 permits.
- Grant preparation and management including the award winning PA DEP Growing Greener Grant Program.
- Design, oversight and implementation of stream restorations using bioengineering and natural stream channel design methods.
- Investigation and resolution of complaints concerning erosion, stream encroachment, or stormwater.
- Formed, administered, and assisted with local watershed organizations.
- Formulating partnerships with non-profits, government agencies, volunteer groups, and institutions to accomplish watershed based goals.
- Inspecting and permitting both new and failing stormwater inlet, outlet, and conveyance structures.
- Secured funding and provided technical assistance for several schools in Delaware County to install or maintain ponds as outdoor classrooms.
- Collection of background and historical information, site observations, and report preparation.
- Sampling data management.
- Preparation of preliminary hydrogeologic reports and mass balance modeling for nitrate loading due to land development.
- Construction management and oversight.
- GIS and database management.
- Preparation of water supply and feasibility studies for land development and municipal supplies.

EDUCATION

B.S.,GeoEnvironmental Studies, Shippensburg University, Shippensburg, PA, 1999.