

Principal Hydrogeologist

FIELDS OF EXPERTISE

Environmental Compliance, Groundwater Modeling, Geographical Information Systems, and Hydrogeology.

HIGHLIGHTS OF EXPERIENCE

Mr. Michael Napolitan, P.G., is a geologist with over 20 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 small and large multinational engineering and environmental consulting firms. 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 fieldwork.

Project Management

- Provides technical and project supervision for environmental investigation projects.
- Client and regulatory contact, scheduling of personnel and direction of resources.
- Develops 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 and analyzed numerous aquifer tests for the determination of site-specific aquifer characteristics.
- Skilled in the development of analytical and numerical groundwater models
- Developed groundwater and surface water sampling and analysis plans for various waste disposal facilities and hazardous waste contaminated sites.
- 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 downhole 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.

Public Water Supply

- 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.
- Municipal Hydrogeologist; Provides technical consulting and oversight for municipality water system. Permitting for new and existing groundwater supply wells, hydrogeologic studies, water budgets, well yields, wellhead protection areas.
- Reporting and regulatory understanding of Susquehanna and Delaware River Basin Commissions

Geographic Information Systems

- Prepared 3 dimensional geologic models.
- Developed and implemented a GIS and database 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.

Software

- USGS MODFLOW
- USGS ModelMUSE
- Waterloo Hydrogeologic Visual MODFLOW
- AQTESOLV Pro
- Surfer
- ArcGIS, QGIS and Manifold GIS
- EQuIS
- Rockware Rockworks and LogPlot
- Pix4D Mapper, Drone Deploy aerial mapping

EDUCATION

M.S., Applied Geoscience, University of Pennsylvania, Philadelphia, PA, 2010.
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)
FAA Remote Pilot Airman Certificate – Small Unmanned Aircraft Systems