

ANDREW P. GOBEIL, L.G., P.G., LSE

Blanchard Road, PO Box 85A, Cumberland, ME 04021 Tel: 207.829.5016 • Fax: 207.829.5692 •smemaine.com

EDUCATION

Boston College – B.S. in Geology, 1998 Boston College – M.S. in Geology and Geophysics, 2005

PROFESSIONAL REGISTRATION

Licensed Geologist – Maine Professional Geologist – Pennsylvania, Florida Licensed Site Evaluator – Maine

EMPLOYMENT HISTORY

2008 to present – Sevee & Maher Engineers, Inc., Hydrogeologist 2003 to 2008 – Sweet Associates, Falmouth, Maine, Hydrogeologist 2001 to 2003 – Geologic Services Corporation, Hudson, Massachusetts, Hydrogeologist

PROFESSIONAL EXPERIENCE

Mr. Gobeil has over 21 years of professional experience in geology and hydrogeology. He specializes in hydrogeologic investigations related to water resources development and groundwater and geologic characterization related to landfill sites, remediation sites, subsurface wastewater disposal leachfields, and quarries and borrow pits. Mr. Gobeil has extensive experience and capability in analytical and numerical groundwater flow modeling and contaminant fate and transport modeling. His experience with hydrogeologic characterizations includes planning, conducting, and analyzing short-term and long-term groundwater pumping tests; classification and logging of subsurface soils and bedrock; and geologic mapping. Mr. Gobeil also has broad experience with analysis and assessment of groundwater quality data for landfill sites and remediation sites.

Examples of assignments and qualifications in his various areas of expertise have included:

- New Jersey Water Supply Development Mr. Gobeil has assisted with the permitting and construction administration for Community Water Supply wells throughout the state for New Jersey's largest water purveyor. His work experience in water supply development includes water supply well design, well drilling supervision, geologic and geophysical subsurface characterization, bedrock fracture trace and lineament analysis, groundwater pumping tests, hydrogeologic analysis and characterization of confined and unconfined aquifers, and preparation of permit applications.
- Assessment of Gasoline (MTBE) Migration Mr. Gobeil has developed groundwater models for numerous
 retail gasoline remediation sites. His experience includes hydrogeologic characterization, water quality
 assessment, and numerical groundwater flow and fate and transport modeling for MTBE plumes in
 extensive sand and gravel aquifers in Long Island, New York and Cape Cod, Massachusetts. Groundwater
 modeling included designing the placement and pumping rates for proposed extraction well networks.
- Quarry and Borrow Pit Permitting Mr. Gobeil has completed hydrogeologic assessments, including
 various groundwater modeling techniques, to determine the hydrogeologic impacts related to excavation
 below the groundwater table at several quarry and borrow sites in Maine.

- Analysis and Design for Groundwater Extraction Wells for a Remediation Site Mr. Gobeil constructed
 an extensively detailed numerical groundwater flow model used for design of a network of groundwater
 extraction wells in a complex geologic setting for a hazardous-waste remediation site in Orrington,
 Maine. The calibrated groundwater model was used to select extraction well locations, screen depths,
 and pumping rates. Mr. Gobeil assisted in design of the extraction wells, oversaw the construction of the
 wells, and completed pumping tests of various durations for analysis of the hydrogeologic characteristics
 of the Site.
- In-Situ Bioremediation Augmentation at Dissolved Chlorinated Solvent Remediation Site Mr. Gobeil has provided hydrogeologic assessment and design for in-situ bioremediation augmentation for a dissolved chlorinated solvent remediation site in Kansas City, Kansas. The assessment included an investigation to provide evidence for existing anaerobic biological activity at the Site to delineate the extent of dissolved chlorinated solvents in groundwater, and to determine the spacing and injection volumes of an emulsified vegetable oil substrate designed to stimulate anaerobic biological activity. The emulsified vegetable oil substrate injections resulted in substantial reduction of dissolved chlorinated solvents in groundwater, and a Closure Report has been prepared for the site.

Landfills and Landfill Permitting

- Hydrogeologic Field Investigations Mr. Gobeil has coordinated and implemented field programs for hydrogeologic investigations and reporting for proposed landfill locations. His contributions have included detailed rock and soil descriptions, field collection and interpretation of geophysical data, identification of highly hydraulically transmissive zones in bedrock and soils, hydrogeologic testing to determine the direction and amount of anisotropy in bedrock groundwater flow, long-term groundwater pumping tests, manual and computer assisted analysis of hydrogeologic investigation data, identification of potential sensitive receptors, and localized and regional groundwater flow modeling. He is experienced with compilation and reporting of hydrogeologic investigation data as exhibits used for landfill permitting applications.
- Groundwater Modeling for Landfills Mr. Gobeil has developed groundwater models for proposed landfill locations. His experience includes compilation and incorporation of hydrogeologic investigation data into three-dimensional numerical groundwater flow models and model calibration to observed groundwater conditions. This process includes incorporating into the model the observed geology and its hydrogeologic characteristics, identified groundwater flow boundaries, groundwater recharge characteristics, and groundwater pumping from surrounding water users. His calibrated groundwater models were used for determining groundwater flow directions away from proposed landfill areas, determining groundwater time-of-travel, and to evaluate for protection of potential sensitive groundwater receptors. He is experienced with assembling and reporting of groundwater model development and groundwater simulation results as exhibits used for landfill permitting applications.
- Groundwater Quality Assessment for Landfills Mr. Gobeil has experience with groundwater quality assessment monitoring for landfills and has developed groundwater quality detection monitoring programs for landfills. He provides annual assessments and reporting of groundwater quality data for landfills with respect to historical data. His assessments include comparison of groundwater quality data to applicable Federal and State regulatory standards, identification of statistically significant groundwater quality trends, and identification of statistical differences between groundwater monitoring locations that are upgradient and downgradient from the landfills.