

AMY C. MARTINEZ, P.G., R.S.

PROJECT HYDROGEOLOGIST

As a Professional Geologist (P.G.) and a Maryland Registered Sanitarian (R.S.), Ms. Amy C. Martinez's area of professional specialization is in hydrologic and hydrogeologic evaluations to support permitting high capacity groundwater and surface water withdrawals. She has over seven years of water resource evaluation and permitting experience as a Project Hydrogeologist serving private and public sector clients.

Ms. Martinez understands the intricacies of water rights law and appropriation regulations and policies. Her project involvement helps ALWI clients maximize water rights and defend against the usurpation of those rights. As a Project Hydrogeologist, she designs and executes field evaluations of hydrogeologic conditions, including characterizing watersheds, quantifying associated groundwater recharge, identifying existing or potential contamination sources and targeting ground or surface water development areas.

Ms. Martinez is proficient in the assessment of water withdrawal impacts to the natural groundwater and surface water resources. She has experience in mathematical modeling of groundwater and surface water systems including drawdown modeling, watershed discharge and recharge modeling, aquifer parameterization, groundwater mounding, hydraulic and nutrient loading calculations. When not engaged in water resources work, Ms. Martinez assists in the development and permitting of small and high capacity wastewater disposal systems, ASTM Phase I and Phase II Environmental Site Assessments, karst hydrogeologic investigations and spring flow evaluations.

RECENT AUTHORSHIPS AND PRESENTATIONS

- ❑ "Hydrogeologic Evaluation of Irrigation Plans at Ashby Ponds, Ashburn, Loudoun County, Virginia," February 2009.
- ❑ "Hydrogeological Impact Evaluation; Harrison Farm and Ridgewood Subdivisions," Carroll County, Maryland, 2005.
- ❑ "The Role of Hydrogeology and the Well Water Industry", orally presented at the Maryland Delaware Water Well Association Annual Convention, Baltimore, MD 2004.

LICENSES AND CERTIFICATIONS

PA / Professional Geologist / Current
MD / Registered Sanitarian / Current
PA / Sewage Enforcement Officer / Current
MDE / Potable Water Sampler / Current
DNREC / Class A Percolation Tester / Current
MDA / Nutrient Management Consultant / 2004 - 2005

EDUCATION

B.S. Susquehanna University 2002
Geological and Environmental Science
Magna Cum Laude and Departmental Honors

PROFESSIONAL TRAINING AND MEMBERSHIPS

PCPG and NGWA / Member / Current
MAPSS / Soil Profile Descriptions / 2009
PCPG / Prof. Geologist Certification Training / 2009
MAFSM / Stormwater & Floodplain Mgmt / 2007
PADEP / Soil Profile Descriptions / 2007
CWEA / Future of Water Reuse in MD / 2007
PADEP / Soil Profile Descriptions / 2006
MOWPA / President / 2004-2005
PADEP / SEO Pre-Certification Academy / 2005
MOWPA / Onsite Wastewater Treatment / 2005
PAPSS / Soil Testing for Stormwater Mgmt / 2004
MDA / Nutrient Management Training / 2004
ASTM / Phase I ESA Short Course / 2003

REPRESENTATIVE PROFESSIONAL EXPERIENCE

- ❑ Performed fracture-trace analysis, located well sites using hydrogeologic criteria, designed drilling and testing programs, geologically logged wells, coordinated with off-site well owners, and completed well capacity and permitting analyses for community water systems in Pennsylvania and Maryland.
- ❑ Assessed the effectiveness of hydrofracturing a municipal supply well; performed pumping tests to evaluate efficacy; executed groundwater models; authored hydrogeologic report and coordinated for MDE water appropriation permit.
- ❑ Evaluated flowmeter data for use in water demand estimates for churches, camps, schools, age-restricted communities, restaurants, offices and more.
- ❑ Investigated cause for decline in efficiency and performance of wellfield; designed and executed program for well rehabilitation; performed pumping tests to evaluate success of rehabilitation measures; developed and implemented long-term operational plans to limit risk of reoccurrence.
- ❑ Measured streamflow and stage conditions and assessed impact to surface water owing to a proposed increase in groundwater withdrawal.