

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

## ***REGISTERED SANITARIAN***

As a Maryland Registered Sanitarian (R.S.), a certified Sewage Enforcement Officer (SEO) with the Pennsylvania Department of the Environmental Protection (PADEP) and a Pennsylvania Professional Geologist (P.G.), Ms. Martinez's area of professional specialization is surface and subsurface evaluations in support of wastewater disposal permitting. Ms. Martinez is proficient in the evaluation of soil characteristics and in the design, deployment, and use of field-testing equipment, and the interpretation of data collected from on-site soils. She also excels in performing related hydrogeologic investigations.

Ms. Martinez evaluates and interprets soil suitability data in support of wastewater disposal, including conventional septic discharges via standard, deep or sand mound trenches and land application discharges by both slow- and rapid- rate infiltration (i.e., drip and spray irrigation and rapid infiltration basins). She designs and executes field evaluations of soils, including characterizing soil profiles and testing of the assimilative capacity of soils in accordance with documented regulatory standards.

Ms. Martinez is proficient in the assessment of sanitary wastewater disposal impacts to the groundwater and surface water resources. She has experience in mathematical modeling of groundwater and surface water systems including groundwater mounding, hydraulic and nutrient loading calculations and aquifer parameterization.

When not engaged in soils work, Ms. Martinez assists in the development and permitting of high capacity water supply wells and surface water sources. Ms. Martinez also possesses expertise in ASTM Phase I and Phase II Environmental Site Assessments, karst hydrogeologic investigations and spring flow evaluations.

### **RECENT AUTHORSHIPS AND PRESENTATIONS**

- ❑ "Groundwater Discharge Evaluation, Mount Airy Bible Church, Mt. Airy, Maryland," July 2009.
- ❑ "Do Hydraulic Conductivity Values in Varying Geologic Settings Depend on Selection of Slug Testing Field Methods and Data Evaluation Techniques?" MDE Groundwater Symposium September 2008.
- ❑ "Design Development Report for Joseph Farm Vol II of II Hydrogeological Evaluation, Georgetown, Delaware," September 2007.

### **EDUCATION**

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

### **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 / 2005 - 2008  
MDA / Nutrient Management Consultant / 2004 - 2005

### **PROFESSIONAL TRAINING AND MEMBERSHIPS**

MAPSS / Soil Profile Descriptions / 2009  
PCPG / Prof. Geologist Certification Training / 2009  
PADEP / Soil Profile Descriptions / 2007  
CWEA / Future of Water Reuse in MD / 2007  
PADEP / Soil Profile Descriptions / 2006  
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  
NGWA and PCPG / Member / Current

### **REPRESENTATIVE PROFESSIONAL EXPERIENCE**

- ❑ Designed and executed field evaluations of soil and hydrogeologic regimes, including testing of soils and groundwater aquifers and authoring hydrogeological reports to support sanitary and municipal groundwater discharges.
- ❑ Described physical and infiltration characteristics of soil profiles in excavation pits and boreholes. Selected the appropriate testing depths. Ran percolation tests, single ring tests, double ring infiltrometer tests and Amoozometer tests and interpreted results to assess site-wide soil assimilative capacity.
- ❑ Designed and installed piezometers within auger holes and planned and oversaw the construction of monitoring wells for use in developing hydrogeological aquifer parameters. Logged geologic cuttings and well construction, performed pumping and slug tests and developed aquifer coefficients.
- ❑ Gauged water table elevations, developed seasonal hydrographs, interpreted wet-weather durations, mapped groundwater flow direction, interpreted depth to seasonal high water table elevations and negotiated adjustment to perc test buffers during dry wet seasons.