

Academic Credentials:

B.S. Hydrogeology, 1988
Northern Arizona University, Flagstaff, AZ

Duties:

2016 - Present - Vice President
2010 - Present - Board of Directors
1998 - Present - Secretary

Professional Credentials:

Professional Geologist - NC, SC
Registered Site Manager - NCDEQ's IHSB
Registered Environmental Consultant Program
40 Hour Health and Safety Training (29CFR1910)

Employment Record:

1994 - Present - Smith Gardner, Inc.
1992 - 1994 - ATEC Associates, Incorporated
1989 - 1992 - International Technology Corporation

Principal Areas of Expertise:

Aquifer investigation and characterization
Ground water assessment and remediation

Professional Activities:

Solid Waste Association of North America - PFAS Group
NCDEQ Rule Review Committee - Environmental Monitoring Rules
Appalachian State University - Affiliate Research Faculty, Department of Geological and Environmental Sciences

Selected Publications & Presentations:

"PFAS and the Body"
NC Solid Waste Assoc. of America (SWANA) Conference, 2022

"Non-PFAS Emerging Contaminants"
NC SWANA Conference, 2022

"1,4 Dioxane, What Do We Know?"
Association of Environmental and Engineering Geologists (AEG) Webinar, 2021

"Post-Closure Monitoring Can We Be Done Yet?"
SC SWANA Conference, 2018

"Landfills and Groundwater - A Case Study of Impact in North Carolina", (Smyth, J.A. and German, M. M.), Association of Environmental and Engineering Geologists, 2016

"Passive Aquifer Mining for Landfill Expansion", (Smyth, J.A. and Smith, S.A.), Wessex Institute of Technology, Waste Management and the Environment IV, WIT Press, ISBN 978-1-84564-113-9, 2008

JOAN A. SMYTH, P.G., RSM

Senior Hydrogeologist - Raleigh, NC



Ms. Smyth oversees hydrogeological investigations for a variety of clients in the region which include subsurface investigations for solid waste facility siting and permitting. Her water quality assessment experience extends from underground storage tank removal to contaminant delineation at pre-regulatory landfill facilities. Her remediation experience includes monitored natural attenuation, in-situ remediation, source removal, and groundwater extraction and ex-situ remediation. Her current focus is on emerging contaminants.

Ms. Smyth has extensive experience in geological and hydrogeological site evaluations for facility permitting and design. This experience includes design of subsurface investigations to understand complex hydrogeology and design and installation of groundwater monitoring networks. These investigations have included various drilling and sample collection techniques, both surface and "downhole" geophysical studies, evaluation of geologic data, collection and evaluation of groundwater flow data, and groundwater quality evaluation.

Ms. Smyth's assessment experience includes collection and evaluation of background and downgradient water quality data, design, performance and evaluation of aquifer pumping tests, design of sentinel monitoring systems, the use of statistics and public data sources to establish naturally occurring conditions within aquifers, and assessment of corrective measures. Due to her experience with waste facilities and superfund, she is a Registered Site Manager (RSM) under the North Carolina Dept. of Environmental Quality's (NCDEQ) Registered Environmental Consultant (REC) program.

Her soil and groundwater remediation expertise include preparation of feasibility studies, design of groundwater recovery and remediation systems and design passive landfill gas recovery systems. She has also designed air sparging remediation systems coupled with vapor recovery for the remediation of volatile organic compounds from groundwater and soil.

Ms. Smyth's recent projects include identification, determination of waste limits, and evaluation of impact from pre-regulatory landfills, emergency response to landfill gas off-site migration, and evaluation of emerging contaminants including 1,4 Dioxane and PFAS at a variety of sites.

Ms. Smyth is a founding member of the Solid Waste Association Landfill Liquids PFAS group which focuses on PFAS and other emerging contaminants, and the impact of these constituents on the solid waste industry. She is currently focused on assisting clients in evaluating remedial strategies to lessen the impacts these recalcitrant constituents create.