

**AMERICAN SOCIETY OF CIVIL ENGINEERS
GEORGIA SECTION GEOTECHNICAL COMMITTEE**

MEETING: Wednesday, November 18, 2009

SPEAKER: Dr. Susan Burns, Georgia Institute of Technology

TOPIC: Performance of Engineered Barriers in Waste Containment Systems

LOCATION: Georgia Power Building
241 Ralph McGill Boulevard
(Located in downtown Atlanta on Ralph McGill Boulevard, adjacent to Piedmont Avenue and the Atlanta Civic Center)

BIO: Susan Burns is an Associate Professor in the School of Civil and Environmental Engineering at Georgia Tech. Dr. Burns joined the faculty at Georgia Tech in 2004, after serving over seven years on the faculty at the University of Virginia. Her research interests include geoenvironmental engineering, engineered materials, physical and chemical behavior of soils, cone penetration testing, and digital image analysis. Dr. Burns has served as the president of the United States Universities Council on Geotechnical Education and Research, as a member of the National Research Council's Committee to Assess the Performance of Engineered Waste Containment Barriers, and as the chair of the ASCE Geoenvironmental Engineering Committee. She is a recipient of the National Science Foundation CAREER award, the Arthur Casagrande Professional Development Award (ASCE), and the Alumni Board of Trustees Teaching Award (University of Virginia).

ABSTRACT: Modern waste containment systems rely on surface and subsurface engineered barriers to contain hazardous and toxic waste, to prevent the offsite flow of contaminants, and/or to render waste less harmful to humans and ecosystems. Such barriers include liner systems, cover systems, and lateral barriers or walls made of natural (e.g., soil, clay) and/or synthetic materials (e.g., geomembranes, geosynthetic clay liners). At the request of the Environmental Protection Agency (EPA), Department of Energy (DOE), National Science Foundation (NSF), and Nuclear Regulatory Commission (USNRC), the National Academies Committee to Assess the Performance of Engineered Barriers was established to provide a technical assessment of the available information on engineered barrier performance over time. Dr. Burns will present the results of this work which focused on engineered barriers designed to contain municipal solid waste, other nonhazardous solid and liquid waste, hazardous and toxic wastes, and low-level radioactive wastes, and will address two primary questions: how well are these engineered barrier systems working and how long are they likely to work effectively?

TIME: 6:30 PM

COST: \$25.00 per person
\$10.00 per full-time student
Make checks payable to: ASCE

MENU: Homemade Meatloaf, Garlic Mashed Potatoes, Green Beans Almandine, Rolls and Butter, Garden Salad, and Apple and Blackberry Cobblers

RESERVATIONS: Reservations required for dinner by noon on Friday, November 13th, 2009. Please specify in your response if you are attending the dinner and the meeting, or the meeting only. Please leave your name and your company name with Jim Daly at jdaly@golder.com. Reservations not cancelled before this deadline will be billed.