BRENT DIELEMAN, S.C.

Education

B.A. - Environmental Studies: Biotic/Physical World, Dordt College, 2003

Professional Affiliations

Solid Waste Association of North America (SWANA), member
SWANA Sustainable Materials Management Division, Program Committee Member

Professional Experience

Mr. Dieleman is a Project Manager with SCS Engineer's Sustainable Materials Management Division. He has nearly 20 years of solid waste planning experience, including managing and directing waste characterization studies. He has worked with municipal clients throughout the country and all over the world to design and implement waste characterization studies that provide reliable data for solid waste planning activities. Additional experience includes audits targeting multiple waste generators including single-family residential, multi-family residential, and commercial/institutional as well as multiple material streams including solid waste, source-separated recyclable materials, source-separated organics, and construction/demolition debris. Mr. Dieleman also conducts waste audits with varying levels of scope and complexity that range from large statewide studies to studies for local jurisdictions to smaller business-specific studies.

Mr. Dieleman's additional solid waste planning experience includes collection program evaluation, stakeholder engagement and consensus building, recycling technical assistance, resource development, data analysis, recycling contamination measurement, industry research, solid waste planning, and database management. Select examples of Brent's project experience follow:

Waste Audit Studies

Wisconsin Department of Natural Resources (DNR), Statewide Waste Characterization Study.
Technical project manager to complete the State of Wisconsin's 2020-2021 Statewide Waste Characterization Study. This study characterized over 600 random samples of disposed municipal solid waste and construction/demolition debris at 15 solid waste facilities throughout the state of Wisconsin. Worked closely with DNR staff to design the study to obtain random and representative waste samples from haulers delivering waste loads to solid waste facilities. Served as onsite project manager for over five weeks directing staff to complete the fieldwork. This included training staff on the sorting process and procedure, quality control of the sorted material categories, and accurate data recording and compilation. Upon conclusion of the fieldwork, led the data analysis and development of the final report that provided overall, commercial, residential, and construction/demolition debris waste profiles for the State of Wisconsin.

George Washington (GW) University, Two-Season Material Audit of Multiple Campus Facilities.
Project manager for two-season audit of the trash and recycling materials streams on the GW campus. Oversaw study design and field operations. The study focused on characterizing materials in the trash and source-separated recyclable materials streams from three different types of campus facilities: academic buildings, residence halls, and administrative/support facilities. Managed a team of SCS professionals in the field who collected waste and recycling samples from the various buildings on campus, sorted the materials into 20 different material categories, and recorded data

on sample-specific data forms. Used the data obtained from the fieldwork to calculate the composition of each material stream with particular attention to the types and quantities recyclable materials being disposed as trash and the types and quantities of trash placed in the recycling stream.

Orange County Solid Waste Division, FL, Source Separated Recyclable Material Contamination Study. Worked with Orange County Solid Waste Division staff to characterize random samples of source-separated residential recyclable materials delivered to their material recovery facility. At the time of this study, the County anticipated procuring a service provider for the processing and marketing the recyclable materials collected curbside from residents in the unincorporated areas of Orange County. The project's goal was to quantify the types and quantities of recyclable materials and contamination collected. Served as the onsite project manager and trained and oversaw the work of six staff members sorting the materials. Also responsible for quality control of the sorted materials and the accurate recording of the data on field forms. This study sorted 50 samples of residential recyclable materials into 27 different material types.

Montgomery County, MD, Four Season Waste Characterization Study. Led the design, planning, and execution of Montgomery County's four-season waste characterization study at the Shady Grove Transfer Station in Derwood. This study included the collection and sorting of 300 waste samples over four seasons (spring, summer, fall, and winter). Waste was sorted into 64 material categories to quantify the types and quantities of materials in the disposed waste stream. Waste samples from the single-family residential, multi-family residential, and commercial/ institutional were obtained and sorted. Worked onsite during all field activities and managed a crew of eight people sorting waste samples. A key component of the onsite sort management was quality control of sample acquisition, sorting process, and accurate data recording.

Additional Material Characterization/Diversion Studies

Served as project manager for over 25 waste characterization studies to assess recycling and waste diversion opportunities, evaluate the feasibility of waste-to-energy facilities, and assist in solid waste management planning activities. Assists in developing the sampling plan, planning and coordinating the logistics with the client or host facility contacts, overseeing health and safety training, onsite oversight and management of field activities, quality assurance review of data, data analysis, and report writing and presentation. Conducted solid waste composition studies for local and state governments, institutions, and private corporations all over the world, including the 2017 Iowa Statewide Waste Characterization. Conducted solid waste composition studies for the following clients:

Municipalities

- City of Gurugram, India – supported through U.S. EPA (2019)
- Iowa Department of Natural Resources (2017)
- City of Naucalpan, Mexico - supported through U.S. EPA (2017)
- City of Chula Vista, CA (2015)
- Prince George's County, MD (2015)
- Santo Domingo, Dominican Republic (2014)
- Prince William County, VA (2014)
- Anne Arundel County, MD (2014, 2010)
- City of Sausalito, CA (2013)
- City of Huntsville, AL (2013)
- Montgomery County, MD (2013, 2009)
- Wake County, NC (2011)

Institutions	
• University of Maryland (2015, 2013, 2014, 2009) • Mother of God Elementary School (2015)	• The Tower Companies, Washington, DC and Rockville, MD (2009)

Businesses	
• Pizza Hut (2015) • Gold's Gym (2015)	• Arcola Health & Rehabilitation (2015) • Fitzgerald Auto Mall (2015)

Select Solid Waste Planning Studies

Recycling Assessment Studies, Frederick County, VA; Northern Shenandoah Valley Planning Commission. Current recycling markets have strained municipal and private entity recycling programs. Work with clients to explore options for modifying current recycling programs in order to improve program resiliency and facilitate long-term sustainability. This work includes assessing contaminants in recycling program streams in an effort to inform public education activities and negotiate fair contracts with recycling processors. This work often includes engaging with processors and others to understand contamination issues prior to working with a client and evaluating a specific program.

Solid Waste Collection Study, City of College Park, MD. Completed solid waste collection program evaluations analyzing aspects of the City's bulky refuse, brush, and regular refuse and recycling collection programs. Many of these programs were inefficient and program costs had increased significantly over the last several years. Led a team of staff to complete field observations and ride-alongs with collection personnel to understand the day-to-day challenges with the programs. With an understand of the issues, facilitated meetings with City staff to discuss potential program updates and changes, which included requiring containerized refuse and recyclable materials, limiting bulky item collections, and charging fees for excess amounts of materials. Presentedthe results and recommendations to the City Council where all recommendations were adopted.

Recycling Technical Assistance, Pennsylvania Department of Environmental Protection (PADEP), PA. Recycling technical assistance to nearly 35 local governments to help overcome challenges to waste diversion and program inefficiencies. Projects include evaluating pay-as-you-throw systems, commercial recycling improvements, curbside collection of food waste, curbside collection of yard waste, and modernizing local recycling ordinances. A major focus of the work for PADEP has been to help local governments evaluate existing curbside and drop-off recycling programs and make recommendations for how the programs can improved. Recommendations about scope of services, materials accepted, collection frequency and schedule, and material preparation guidelines are developed.

Solid Waste Collection Studies – City of Waynesboro, VA and City of Lynchburg, VA. Led the collection system evaluation component of these projects for both the cities of Waynesboro and Lynchburg. Project work focused on how existing programs for recycling, trash, bulky refuse, and yard waste could be improved. Project activities included multiple days of field observations to identify challenges and talk with city staff on the front lines of collection. Led additional stakeholder meetings to receive input on the problems with existing programs and how potential solutions could be implemented. Solutions identified included upgrading drop-off recycling containers, not collecting bulky refuse and brush that has not been properly prepared, and stronger enforcement activities.

U.S. EPA Landfill Methane Outreach Program/Global Methane Initiative/Climate and Clean Air Coalition. Supports the work of U.S. EPA to assist national and local governments in the U.S. and around the world to improve waste management practices that reduce emissions. Recently led the development of training program and guidance document on how waste characterization studies can be used as an important tool for solid waste planning. Leads training events for waste professionals, conducts energy feasibility studies, and facilitates partnerships with private and public entities to advance waste projects.

Zero Waste Strategic Plan, Prince George's County, MD. Developed and documented the County's strategy to reduce the quantity and toxicity of waste generated and increase the proportions of waste diverted to recycling and composting programs. A key objective of this project was to engage with stakeholders in the County to receive their feedback and ideas for what the County could prioritize in their plan.

Waste Diversion Initiatives, Montgomery County, MD. Supports the County's efforts to evaluate programs and increase the amount of material diverted from disposal. Projects include multi-family and commercial recycling distance surveys, identifying undocumented recycling activities, and waste characterization.

Mid-America Regional Council Solid Waste Management District (MARC SWMD). Supported development of a benchmarking tool to assess each member community's progress in meeting the adopted waste diversion goals. Participated in meetings with MARC's Executive Board and Management Council to identify parameters to include in the tool, options for assessing current recycling and diversion activities, a point structure for measuring diversion activities, and a rating system.

Mandatory Commercial Organics Recycling Compliance Study, Los Angeles County Department of Public Works, CA. Researched the requirements of California's AB 1826 that requires businesses and multi-family properties to recycle organic materials from their waste stream. Developed a summary report that included recommendations for Los Angeles County to consider implementing the requirements of this law within the County's existing franchised hauler agreements.

Recycling Markets Research Study (Santo Domingo, Dominican Republic), Deltaway Energy, CA. Researched available markets for recyclable commodities disposed at the Duquesa Landfill in the Dominican Republic. Conducted internet research on market pricing for recyclable materials. Identified commodity brokers that have done business in the Dominican Republic and interviewed them on the logistics and costs for brokering commodities.

Residential Composting Program Research, University of Maryland. Identified similar institutions and researched their residential campus composting programs. Additional information needs were developed and representatives from selected institutions were interviewed to obtain desired information.