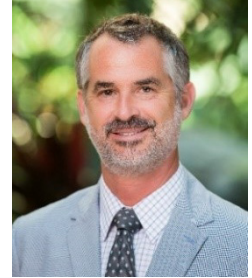


DANIEL E. DIETCH

Education

Certificate – Good Government Initiative, University of Miami, 2011
M.B.A. – Management, University of Miami, School of Business Administration
M.P.S. – Environmental Management, Cornell University, College of Agriculture and Life Sciences
B.A. – Geology, Skidmore College



Professional Registrations

Certified Construction Documents Technologist (Construction Specifications Institute)
Six Sigma Yellow Belt (University of Miami)
Climate Reality Leadership Corps (The Climate Reality Project)

Professional Affiliations

Solid Waste Association of North America, Member, 1999 – Present
Recycle Florida Today, Former Board Member, 2005 – Present

Community Engagement

Clean Energy Coastal Corridor, Vice-Chair, 2013 – Present
The CLEO Institute, Board President, 2015 – Present
American Flood Coalition, Advisory Board Member, 2018 – Present
Miami-Dade County Waterfront Recreation Access Plan Steering Committee, Member, 2019 - 2020
Town of Surfside, Mayor, 2010 - 2020
100 Resilient Cities: Living with Water – Innovative Infrastructure Work Group, Member, 2018

Professional Experience

As a Vice President based in Miami, FL, Mr. Dietch is responsible for developing SCS's Southeast Regions' Sustainable Materials Management Practice and works closely with SCS's national experts to support our regional clients. Since joining SCS in 2018, he has completed a wide range of solid waste and environmental projects for municipal and private clients.

Mr. Dietch has more than 25 years of academic and professional experience in solid waste management. He uses this experience to provide clients with strategic solid waste consulting, including procurement management including solid waste and recycling collection and processing facilities, solid waste and recycling planning, rate structure/alternative financing analyses, ordinance development, contract negotiations, operations monitoring, and litigation support. His responsibilities include program coordination, planning, execution, and client liaison. Work products include procurement documents, master/strategic plans, operations reports, technology reports, rate models and reports, contracts, ordinances, benefit/cost analyses and customized data management systems.

In addition, Mr. Dietch specializes in developing and managing composting projects. His experience includes on-farm composting, where he has assisted with the development and operation of a turned windrow system, and institutional and municipal composting projects, where he has managed the development and operations of a proprietary in-vessel compost system. For composting projects, he has successfully processed a variety of waste streams, including municipal solid waste, sewage sludge, agricultural, paper and yard wastes, and pre- and post-plate food scraps. In addition to development and management, Mr. Dietch has been responsible for equipment assessment, prototype construction, permitting, and onsite operations.

Procurement

Materials Recovery Procurement Assistance Project; Orange County; Orlando, FL. Project Manager responsible for leading a public-private procurement of a new Materials Recovery Facility. Responsibilities include project management, preparing a Request for Information to solicit information related to processing technologies for recyclable materials, market conditions, trends, risk allocation, cost factors, etc., facilitating a Market Sounding Event, preparing and evaluating the request for proposal and recommending a best value option to the County Commission.

Residential Solid Waste and Recycling Collection Services RFP, Osceola County, FL. Project Manager. Responsible for preparing a request for proposals for residential solid waste and recycling services to residential properties within the County. Activities included developing a project management plan, surveying and benchmarking comparable jurisdictions to identify best practices, facilitating industry outreach, drafting the RFP, providing technical input on the draft service agreement, leading Administration and County Commissioner briefings. The new collection contracts are designed to enable the County to achieve the State of Florida's 75% Recycling Goal.

Solid Waste Management Services RFP, City of Atlanta, GA. Task Leader. Responsible for preparing a request for proposals for solid waste management services to residential properties within the City. Activities included developing a project management plan, facilitating industry outreach, drafting the RFP, providing technical input on the draft service agreement, responding to proposer questions, leading Administration briefings. The new solid waste management contracts are designed to enable the City to increase waste diversion consistent with the Materials Management & Recycling Sustainability Impact Area in the City's Power to Change (PtC) Program.

Commercial and Multi-Family Solid Waste Collection Services RFP, City of Glendale, CA. Task Manager. Responsible for conducting technical proposal evaluations of nine proposals, identifying contract exceptions and supporting the City to complete its proposal review and ranking.

Biosolids Management Facility Procurement, Collier County Solid Waste Management Department, Naples, FL. Project Manager responsible for developing a 2-step procurement process. The first step activities included the preparation of a design criteria package for inclusion in a request for qualifications to procure a qualified firm to design, build, own, operate and finance a biosolids management facility. Services also included preparing the front-end procurement document as well as technical input into the draft agreement and proposal evaluations. Currently developing the second procurement step (request for proposals), proposal evaluations and preparing the agenda items and briefing County Commissioners.

Collection Franchise Transition Assistance: Preparation of Implementation Plan, RFQ, RFP sections, Rate Model, and Evaluation Tools, City of Los Angeles, CA. Task Leader. Responsible for preparing a request for proposals to establish an exclusive franchise system that provides solid waste, recycling, organics collection and processing services to all commercial, industrial, institutional, and multi-family buildings within the City. The new franchise system helps to enable the City to reach its Zero Waste Goal by 2025.

Solid Waste Collection Contract Assistance; Collier County Utility Billing and Customer Service Department; Naples, FL. Project Manager. Responsible for negotiating new solid waste collection contracts. Activities included analyzing a single stream recycling pilot study, performing due diligence efforts prior to preparing the RFP that included analysis of districting approach, contract term analysis, regional cost and level of service benchmarking, and developing principles of negotiations. The negotiated agreements resulted in enhancements to the current level of service that included single stream recycling collection and curbside electronics collection and enhanced customer service with enforceable liquidated damages, while achieving a “best value” service for the residents and businesses in the County. Curbside recycling tonnage increased by more than 50 percent in the first years following implementation.

Organics Management Procurement Assistance; Collier County Solid Waste Management Department, Naples, FL. Project Manager responsible for developing a Source-Separated Organic Waste and Biosolids Beneficial Use Request for Proposals. Responsible for strategic planning, delivery method selection, management of a multidisciplinary project team, procurement document development and coordination, proposal period assistance (coordinating preproposal meetings, responding to requests for clarification, etc.), proposal evaluations (issuing requests for clarification/information), project due diligence, client relations, billing, and quality control.

Solid Waste Processing Procurement Assistance; Collier County Solid Waste Management Department, Naples, FL. Project Manager responsible for developing three solid waste procurement projects including a gasification facility, organic waste collection and processing facility, and a grease trap waste processing facility. Responsibilities included strategic planning, management of multidisciplinary project teams, procurement document development, proposal period assistance (coordinating preproposal meetings, responding to requests for clarification, etc.), proposal evaluations, project due diligence, client relations, billing, and quality control.

Request for Expressions of Interest; Collier County Solid Waste Management Department; Naples, FL. Task Manager responsible for developing, issuing, and evaluating requests for expressions of interest and requests for additional information for solid waste technologies and alternatives for the long-term management of solid waste generated in the county. The findings were critical in the county’s decision to issue requests for proposals for various long-range solid waste management technologies.

Ship Waste Reception and Treatment Facilities; Presidency of Meteorology and Environment; Kingdom of Saudi Arabia. Task Manager responsible for performing due diligence, including a needs assessment, market assessment, cost estimates, and tariff structure, and prepared a request for proposal for Ship Waste Reception and Treatment Facilities to assist the Kingdom of Saudi Arabia to comply with the requirements of the MARPOL 73/78 Convention.

Truck Maneuvering Hall Procurement; Connecticut Resources Recovery Authority; Hartford, CT. Project Manager responsible for developing turnkey procurement documents and performed proposal evaluations to ensure conformance with the turnkey procurement documents for the truck maneuvering hall expansion at the Mid-Connecticut Waste Processing Facility. Responsibilities included the development of technical specifications with the support of the geotechnical, structural, architectural, electrical, instrumentation, and mechanical specialty groups. Additional work elements included the development of a payment milestone schedule, construction schedule and sequencing, inspection and acceptance test, and permit requirements.

Lynn Combined Sewer Overflow Abatement System; Lynn Water and Sewer Commission; Lynn, MA. Task Manager responsible for developing a design/build request for proposal (RFP) preparation activities for the procurement of the design/ builder for the Lynn Water and Sewer Commission’s

combined sewer overflow abatement system. Responsibilities included developing, reviewing, and editing portions of the Lynn CSO request for proposals. Portions developed included escalation indices, a project summary matrix for the RFP in advance of contract principles, and coordination of numerous addenda to the RFP.

Sustainable Materials Management

Kumtor Mine Integrated Solid Waste Management Plan; Centerra Gold, Inc.; Issyk Kul Province, Kyrgyzstan. Project Manager responsible for the preparation of a site-specific integrated solid waste management plan for nonhazardous domestic wastes generated at the workers camp and industrial and select hazardous wastes generated from the mining operations. Activities included a site visit; waste composition and generation analysis; and characterization of the current waste handling, collection, segregation, storage, and transportation practices. The integrated solid waste management plan recommended waste reduction and waste management strategies (programs and technologies) that are in alignment with good international industry practices and can be employed at Kumtor given the unique conditions including—but not limited to—ease of implementation and its remote location and proximity to markets, weather, and labor and capital requirements. Organizational improvements were also identified to increase the likelihood for successful implementation. The recommended strategy will result in the beneficial use and recycling of more than 90 percent of the waste generated on site.

Integrated Solid Waste Management Strategy; Collier County Solid Waste Management Department; Naples, FL. Project Manager responsible for the analysis and evaluation of various solid waste management initiatives that provide the strategic framework for the development of environmentally sound and cost-effective solid waste management services for the next 50 years and beyond. The strategy includes enhancements to existing programs as well as new initiatives, all of which are consistent with the County's Evaluation and Appraisal Report Amendments for the Solid Waste Sub-Element of the Collier County Growth Management Plan. The Integrated Solid Waste Management Strategy was unanimously adopted by the Board of County Commissioners.

Solid Waste Facilities Master Plan; Collier County Solid Waste Management Department; Naples, FL. Project Manager responsible for preparing a comprehensive solid waste facilities master plan consistent with the County's integrated solid waste management strategy to guide the development of needed solid waste management infrastructure for the next 50 years and beyond. Performed a solid waste facilities needs assessment, including existing and planned facilities and infrastructure, trend analysis, and contractual constraints. The solid waste facilities master plan included a siting analysis and economic analysis, as well as a phased development approach consistent with the County's Integrated Solid Waste Management Strategy.

Theater Energy and Efficiency Master Plan; U.S. Army Central Command. Technical Expert responsible for subject matter expert guidance for the solid waste elements of the Theater Energy and Efficiency Master Plan. The Plan builds on the Environmental Component Plan for the 20-country Central Command Area of Responsibility. The goals of the Theater Energy and Efficiency Master Plan include decreasing the life-cycle costs for solid waste management, reducing the environmental footprint and the environmental impacts and creating host nation goodwill through cooperative management of their waste resources. The Plan identified specific solid waste management technologies and solutions that can be efficiently and effectively implemented in Afghanistan and other contingency environments to support U.S. military operations. Targeted solutions relate to recycling, organics management, and waste-to-energy.

MASDAR Sustainable Waste Implementation Plan; Abu Dhabi, United Arab Emirates. Task Manager responsible for the development of the sustainable waste implementation plan for the world's first

zero-carbon and zero-waste sustainable city. Activities included analyzing waste generation; identifying and characterizing emerging and commercially proven thermal, biological, and mechanical solid waste management technologies; developing an integrated systems approach using emerging and commercially proven thermal, biological, and mechanical solid waste management technologies that will work toward achieving zero waste, zero carbon and energy production; and performing an options analysis for the integrated systems compared to the program objectives. Work also involved modeling (i.e., simulating) different solid waste management alternatives on a life-cycle cost basis to identify the interaction of the variables such as zero waste (percent diversion from a landfill), carbon footprint (tons of CO₂ equivalent), and other environmental releases to the air, land, and water; energy consumption/production (kWh per ton); cost (per ton); and land requirements (acres); and optimizing the preferred alternative, developing a project phasing plan, and preparing a summary technical report.

Broward RRB Assistance; Broward County Waste and Recycling Services; Fort Lauderdale, FL. Task Manager responsible for assisting the Resource Recovery Board to plan and execute a solid waste management visioning summit related to future solid waste management in Broward County. Activities included participation at steering committee meetings, development of an informational CD, facilitating break-out discussion sessions, and preparation of a unifying policy statement. Ongoing stakeholder engagements included the preparation of a request for expressions of interest and the preparation of a strategic framework guide for policy makers.

GIS Integration Project; Collier County Solid Waste Management Department; Naples, FL. Project Manager responsible for developing geographic information system (GIS)-based enhancements to Collier County Utility's Billing and Customer Service Department's special assessment system to facilitate better management of solid waste collection contracts. Responsibilities included project management, resource coordination, and project delivery.

Performance Standards for Solid Waste Collection; City of Winter Springs; Winter Springs, FL. Project Manager responsible for developing performance standards for its solid waste franchise collection contract. Responsible for overall project delivery, including solid waste industry-based due diligence activities and developing a technical memorandum comprising contract provisions related to: term of agreement, renewal, and default; assignment of contract; quality of performance; complaints; reports; routing; vehicles and licensing; damage; public awareness; employee conduct; and definitions.

Commercial Solid Waste Study and Analysis, New York, NY. Technical Consultant responsible for providing technical assistance to complete the Commercial Solid Waste (CSW) Study and Analysis for the Department of Sanitation of New York's (DSNY). The purpose of the CSW Study and Analysis was to improve the DSNY understanding of commercial waste generation, diversion, and composition; to assess the knowledge and behavior of commercial waste generators and the waste industry concerning recycling; and to consider the efficiency of waste hauler routing under the current system. The project included data gathering, database creation and querying, and intensive field work to address each of these specific goals regarding the commercial putrescible waste stream. CH2M developed a series of models to estimate and characterize the commercial solid waste stream that included Literature-Based Generated Waste Model, Literature-Based Disposed Waste Model, Mass Flow Analysis and a Statistical Model.

Low Solids Anaerobic Digestion Technology Assessment; Confidential Client. Project Manager responsible for performing a systematic analysis of low solids (i.e., wet) anaerobic digestion (AD) technologies for a range of waste streams. Project goals included a two-step assessment (Tasks I and II) of viable wet AD technologies and to establish the preliminary framework to commercialize wet AD technologies in the marketplace. Services included the development of qualitative technology

alternatives evaluation criteria with input and guidance from our client to create alignment with the project goals. Using this framework, more than 20 viable wet AD technologies were evaluated. Task I included an assessment based on nonmonetary qualitative factors and focused on technological viability in terms of waste stream components and variability, pretreatment requirements, post-treatment requirements and end use options. A simple multi-attribute rating technique (SMART) methodology was used to calculate benefit scores for each technology alternative and to shortlist the five-highest ranked wet AD technologies. Task II, included a monetary evaluation of the short-listed technologies, including capital costs, operational revenues and costs, and project life-cycle costs for nominal 60,000-tons-per-day (tpd) and 100,000-tpd facilities.

Organics Management

Regional Compost Facility Feasibility Studies; Northwest Solid Waste Management Board; Amherst, NY. Quality Consultant for the Town of Amherst Yard Waste Compost Facility expansion feasibility study. Options explored included expansion of the existing site, development of a new regional facility, or the addition of a yard waste transfer station. The feasibility studies involved economic cost analyses and engineering assessments of potential sites for expansion or relocation.

Biosolids Management; Butler County Solid Waste District; Hamilton, OH. Task Manager responsible for assisting with the development of a county biosolids management program. Responsibilities included drafting the scope of work and budget, assisting with procurement strategy, and drafting proposal evaluation criteria for the management of biosolids generated in Butler County.

Bioferm Compost Systems International; Gloucester, MA. Project Manager responsible for designing and manufacturing an in-vessel air recirculation composting prototype for composting municipal solid waste. Directed construction and field operations in Tennessee, New Hampshire, and Massachusetts. Organized and implemented testing strategies, maintained operation of the prototype, documented the process in accordance with U.S. Environmental Protection Agency (EPA) and state regulations, conducted research, synthesized pilot study data to improve operation, and initiated modifications to the technology. Engineered automation system for commercial composting facilities, designed criteria for feasibility study, and coordinated an international team of engineers and waste management specialists in the design, construction, and operation of a permanent compost demonstration site.

Cornell Waste Management Institute; Cornell Waste Management Institute; Cornell University; Ithaca, NY. Research Associate responsible for performing guided and independent multidisciplinary research. Coordinated three *Upstate New York Composting Roundtables*, managed *New York State Food Composting Survey*, and determined nitrogen requirements of agricultural lands and total nitrogen available from manure and sewage sludge produced in New York. Projects were conducted to fulfill state and federal research grants.

Cornell University, Agricultural and Biological Engineering Department; Cornell University, Agricultural and Biological Engineering Department; Ithaca, NY. Project Manager responsible for the planning and development of a centralized on-farm composting project to process food, manure, and yard waste. Work included providing technical assistance related to site development, permitting, operations, and financial analysis. The project involved a wide array of participants, including the Cayuga Nature Center, Cornell University, Cooperative Extension of Tompkins County, the New York State Department of Environmental Conservation, and Wegman's Grocery Store.

Conversion Technologies

Thermal Conversion Project Procurement; Brevard County, FL. Project Manager responsible for the preparation of a request for proposals for a thermal conversion project to process solid waste generated in the County. Services included preparing a white paper on the available technologies and prepared a design criteria package and related technical procurement support. Based on the relative maturity of available technologies and the risk tolerance of the County, the project did not proceed beyond the conceptual phase.

Project Manager; Thermal Technology Review Update; The City of Calgary, Alberta. Project Manager responsible for the preparing a status update to thermal conversion technology information provided in the Waste Organic Materials and Biosolids Master Plan, which was presented to the Standing Policy Committee on Utilities and Environment in February. The technical memorandum summarized emerging thermal technologies and trends in those technologies related to scale, applications, and conversion efficiency. In addition, the memorandum provided an overview of procurement activities related to thermal technologies in North America. The update was presented to the Standing Policy Committee on Utilities and Environment.

Strategic Planning

Biosolids Management Options Assessment; Collier County Solid Waste Management Department; Naples. Project Manager responsible for facilitating a Multi-Attribute Utility Analysis process to evaluate various biosolids cake management options. Activities included an initial workshop to: establish the decision goal; identify and specify evaluation criteria; develop performance measures (measurement scales) to measure how well options meet each evaluation criterion; assign scores for each evaluation criterion under each option; assign weights to the evaluation criteria; and calculate total value scores and conduct sensitivity analysis. The results from the initial screening were presented in a follow-on workshop. Relative life-cycle screening level costs for each alternative were then developed and used as part of the screening process. A short list of alternatives was developed to compare and contrast the costs, non-monetary benefits and risks of each short-listed alternative on a readily visible quantitative basis. The ranking of benefit-to-cost ratios of each alternative was used to select the preferred alternative.

Palm Bay Vision Plan; City of Palm Bay; Palm Bay, FL. Deputy Project Manager responsible for Assisted with the planning and execution of a vision plan to guide future city development. Activities included facilitating a vision planning workshop (Phase I) in April 2006 with department directors and the City Council and subsequent vision setting and scenario planning (Phase II) phases with the Vision Plan Steering Committee and community stakeholders. The project resulted in Palm Bay being the first Florida community to comply with the revised Senate Bill 360 related to community visioning.

Performance Standards for Solid Waste Collection; City of Winter Springs; Winter Springs, FL. Project Manager responsible for developing performance standards for its solid waste franchise collection contract. Responsible for overall project delivery, including solid waste industry-based due diligence activities and developing a technical memorandum comprising contract provisions related to: term of agreement, renewal, and default; assignment of contract; quality of performance; complaints; reports; routing; vehicles and licensing; damage; public awareness; employee conduct; and definitions.

Management Audit; Escambia County Utilities Authority; Pensacola, FL. Deputy Project Manager responsible for performing a management audit designed to identify opportunities to improve the Escambia County's organizational systems and processes to better meet its future challenges. Responsibilities included overall project coordination, as well as assisting with the development of

key deliverables including, kick-off meeting presentation, process documentation memoranda, and management audit presentation and report. Additional activities included performing management interviews and facilitating the kick-off meeting.

Mandatory Nonresidential Recycling Ordinance Development Assistance; Collier County Solid Waste Management Department; Naples, FL. Project Manager responsible for developing a mandatory nonresidential recycling ordinance to increase business recycling participation and to decrease the quantity of land filled recyclables. Managed the development of a recycling rate analysis based on local, state, and national nonresidential recycling data, and performed a benefit/cost analysis to measure the potential financial impact to businesses. Prepared a summary report and presentation to the Board of County Commissioners.

Material Recovery Facilities in the United States; Pirnie/HPL; New York City, NY. Project Manager responsible for preparing a Country Report detailing the status of material recovery facilities in the United States. The report serves as the basis for the City of Hong Kong to evaluate the feasibility of constructing a material recovery facility. Conducted extensive internet and library research and interviewed staff from numerous national commodity trade associations.

Financial Services

Rate Structure Assessment; Collier County Solid Waste Management Department; Naples, FL. Project Manager responsible for performing a rate structure assessment for the Collier County Solid Waste Management Department. The primary project goal was to establish a solid waste rate structure based on full cost accounting in accordance with Florida Department of Environmental Protection (FDEP) requirements. The following specific work elements were performed: set the tipping fees of the Naples and Immokalee landfills for residential municipal solid waste (MSW), commercial MSW, yard waste, and construction and demolition debris (C&D) to appropriately reflect the true and full cost of providing the disposal service; set the solid waste collection fees, rates, and charges to residential and commercial customers to appropriately allocate the costs among these sectors, which reflect the true and full cost of providing transfer and collection service to each sector; developed a financial model that allocates the direct and indirect, and fixed and variable costs to the different solid waste activities and billing categories so that the true costs of providing a service are appropriately identified and sensitivity analysis can be run to assess how changes to the system will impact future rates and charges; assessed the financial feasibility of implementing a variable rate billing system for residential waste services; performed a benchmark analysis to evaluate the impact of increasing the disposal fees charged at the Naples Landfill for construction and demolition debris, yard waste, used tires, and white goods; and assessed the adequacy of its landfill closure reserve fund. Additional responsibilities included coordinating all aspects of project management, including the facilitation of a financial objective workshop, preparation of a project management plan, interim progress reports, and board presentation materials.

Solid Waste Management Nonresidential Fees; Prince George's County; Largo, MD. Project Manager responsible for developing and implementing a nonresidential system benefit charge program to enable the county to equitably distribute the cost of owning and operating county-owned solid waste management facilities and services. Work elements included developing a rate structure, coordinating field verification work and corresponding statistical analysis, managing the development of a public information campaign, including the creation of a project website, informational mailers, and a call-in center, and acting as liaison between participating state agencies. Ongoing work elements include verifying the assignment of properties to waste generation categories, policy evaluation, data management assistance, and program management assistance. The project has achieved its annual financial objectives since inception.

Processing & Transfer

Solid Waste Facilities Master Plan; Collier County Solid Waste Management Department; Naples, FL. Project Manager responsible for preparing a comprehensive solid waste facilities master plan consistent with the County's integrated solid waste management strategy to guide the development of needed solid waste management infrastructure for the next 50 years and beyond. Performed a solid waste facilities needs assessment, including existing and planned facilities and infrastructure, trend analysis, and contractual constraints. The solid waste facilities master plan included a siting analysis and economic analysis, as well as a phased development approach consistent with the County's Integrated Solid Waste Management Strategy.

Broward County Waste-to-Energy Facilities Operations Monitoring; Broward County Waste and Recycling Services; Fort Lauderdale, FL. Project Manager responsible for operations monitoring activities at the North and South Wheelabrator Waste-to-Energy Facilities on behalf of Broward County Waste and Recycling Services Department. Activities included:

- Monthly onsite inspections to assess and evaluate the physical condition of the major equipment and systems at each respective facility. Based on observations during these inspections, completed inspection forms describing the facility and equipment conditions and updated the rolling punchlist report for each facility.
- Reviewed data logs, analyzed facility performance data to confirm whether facilities were operated and maintained in compliance with the service agreement and other applicable documents.
- Conducted inspections during scheduled outages of major equipment such as boilers, turbine generators, cooling towers, and ash recovery systems.
- Reviewed continuous emissions monitoring data on a quarterly basis to evaluate emissions levels in terms of permit and contract compliance.
- Reviewed quarterly mercury stack testing reports and results.
- Observed the performance of annual stack testing and documented the final stack test report and results.
- Performed a trend analysis that summarized the performance of each facility since the facilities commenced operations. Prepared an annual trend report that included an overview of processed waste, delivered waste, power production, downtime, ash production, emissions, and metals recovery for each facility through the current year of operations.
- Prepared quarterly, semi-annual and annual operations monitoring reports that summarized the monthly facilities operating reports, compared of actual facilities performance to typical and guaranteed performance standards, reviewed and commented on solid waste throughput and processing efficiency, reviewed and commented on any significant equipment upgrades, reviewed and commented on the facilities maintenance program based on reviews of the maintenance log books and visual inspections, reviewed and commented on the observed physical condition of major equipment and systems, reviewed the rolling punchlist report to determine the status of any issues that needed to be addressed, reviewed and commented on energy efficiency and production, reviewed and commented on environmental testing (including continuous emissions monitoring data, stack testing, groundwater monitoring, leachate, and ash analyses), reviewed and commented on consumable usage including, urea, natural gas, lime, and carbon, and verified whether the operation of the facilities are satisfactory with respect to the technical and engineering terms and conditions of the service agreement and other applicable documents.

- Facilitated monthly operations meetings between Broward County Waste and Recycling Services and Wheelabrator. Discussions focused on observed operations at the facilities, future maintenance and capital improvement activities, the impacts of potential changes in law, and the status of the rolling punchlist developed in conjunction with the monthly inspections.

Truck Maneuvering Hall Construction Assistance; Connecticut Resources Recovery Authority; Hartford, CT. Project Manager responsible for leading a multidisciplinary engineering team tasked with providing technical assistance and oversight during the design and construction of a deep-pile-supported truck maneuvering hall contiguous to the tipping floor of an operating 1,000-tpd RDF-to-WTE facility. Assistance included the following:

- Performed a detailed review of the interim and final design for contractual conformance.
- Reviewed the request for information submitted regarding technical issues and/or requests for clarifications to the technical specifications and prepared a technical memorandum responding to issues raised by the request for information.
- Attended progress meetings twice a month over a 12-month period to review the status of design and construction activities.
- Reviewed equipment/materials submittals, quality assurance/testing information submitted for project documentation or in support of payment requests, and other technical submittals to assess conformance with the technical specifications.
- Reviewed permit application submittals to the city and CTDEP.
- Reviewed operations and maintenance manual submittals for conformance with the technical specifications.
- Reviewed and provided technical assessments of the change order requests submitted by the contractor.
- Prepared technical memorandum summarizing our analysis of change order requests to the CRRA.
- Attended meetings with CRRA, city, and regulatory officials on an as-requested basis.
- Performed weekly inspections of the progress of construction with the CRRA onsite representative and contractor, prepared memoranda summarizing the observations during the site inspection, and summarized technical issues that needed to be addressed.

Waste Composition Studies

ICI Waste Infrastructure and Programs, Waste Characterization, and Waste Diversion Policy Options; The City of Calgary, Alberta. Task Manager responsible for completing the analysis and managing the completion of three technical memoranda relating to ICI wastes generated in Calgary. The first technical memorandum described the existing waste management system for ICI waste, including collection, processing, and disposal systems, and highlighted some of the waste diversion programs available to ICI clients. The second technical memorandum provided a review of the composition and characterization of the ICI waste stream. The third memorandum presented an overview of ICI waste diversion policy options adopted in other jurisdictions and described how they might apply to the city going forward.

Operations Assistance

Recycling Options Assessment; The Recycling Partnership; Atlanta, GA. Project Advisor for a recycling options assessment for the City of Atlanta, GA in terms of cost, efficiency, and effectiveness. Options evaluated included: 1) using a dedicated recycling fleet and labor; 2) reconfiguring collection services from weekly to bi-weekly; 3) reconfiguring collection services from 5 days per week to four days per week; and 4) outsourcing recycling services to a private vendor. Based on the study, the City engaged SCS through The Recycling Partnership to optimize collection routes and continue to utilize a dedicated fleet and labor.

Recycling Route Optimization Study; The Recycling Partnership; Atlanta, GA. Project Manager for a recycling Route Optimization Study for the City of Atlanta, GA to optimize collection routes and continue to utilize a dedicated fleet and labor. SCS analyzed the City's baseline recycling collection operations, identified which routes are best to convert to dedicated automated side loading collection vehicles, and recommended route efficiency improvements to optimize automated side loading vehicle collection service. SCS also prepared fact sheets to inform recommendations for long-term cart inventory control and management, including the use of radio-frequency identification (RFID) tags. The findings, if implemented will increase efficiency and decrease costs without our sacrificing quality. Specifically, the recommended approach will reduce the number of routes by 28 percent and reduce annual operating costs by approximately \$2MM.

Recycling Options Analysis; Leon County/City of Tallahassee, FL. Project Manager responsible for conducting a recycling options analysis that included evaluating opportunities to remove materials from the recycling stream that could be used in other ways while also reducing the cost to recycle (e.g. glass, or anything that could be pelletized, etc.), any potential regional opportunities for recycling (collecting from other nearby communities), evaluating/addressing opportunities to increase commercial recycling, renegotiating the existing agreements, and providing a final report that presents a range of policy options for recycling in the long term. Based on the findings both the County and City extended their current recyclable materials processing agreement and engaging in negotiations with their current service provider to achieve more equitable and sustainable agreements.

Immokalee Landfill Master Plan, Collier County Solid Waste Management Division, Naples, FL. Project Director responsible for analyzing options to improve the functionality of the closed Immokalee Landfill Site to incorporate facilities for residential (e.g., citizen drop-off center, education center) and commercial (e.g., scalehouse, transfer station) customers. Activities included conducting a fatal flaw analysis based on prior Commission approvals and site zoning, preparing a basis of design report, proposed site renderings, and presentation package for the Board of County Commissioners.

GIS Integration Project; Collier County Solid Waste Management Department; Naples, FL. Project Manager responsible for developing geographic information system (GIS)-based enhancements to Collier County Utility's Billing and Customer Service Department's special assessment system to facilitate better management of solid waste collection contracts. Responsibilities included project management, resource coordination, and project delivery.

Solid Waste Code Development – MASDAR Development Program Management; Abu Dhabi, United Arab Emirates. Task Manager responsible for developing solid waste codes for the world’s first carbon-neutral and zero-waste sustainable city, consistent with the MASDAR Master Plan. Activities included developing a vision statement and project goals and objectives; “best of class” code benchmarking; gap analysis development; and preparation of draft and final development code related to solid waste resource management. Responsibilities included day-to-day coordination with project team, development and coordination of the project plan of action, and coordination of the completion and achievement of deliverables and milestones and assured sustainability compliance.

Solid Waste Container Enclosure Standards Development, Manatee County Solid Waste Management Department; Bradenton, FL. Project Manager responsible for researching and recommending updates to the County’s Land Development Code, Zoning Code and permitting requirements for solid waste enclosures to better align the regulatory framework with effective solid waste management once development projects become operational.

Performance Standards for Solid Waste Collection; City of Winter Springs; Winter Springs, FL. Project Manager responsible for developing performance standards for its solid waste franchise collection contract. Responsible for overall project delivery, including solid waste industry-based due diligence activities and developing a technical memorandum comprising contract provisions related to: term of agreement, renewal, and default; assignment of contract; quality of performance; complaints; reports; routing; vehicles and licensing; damage; public awareness; employee conduct; and definitions.

Commercial Solid Waste Study and Analysis, New York, NY. Technical Consultant responsible for providing technical assistance to complete the Commercial Solid Waste (CSW) Study and Analysis for the Department of Sanitation of New York’s (DSNY). The purpose of the CSW Study and Analysis was to improve the DSNY understanding of commercial waste generation, diversion, and composition; to assess the knowledge and behavior of commercial waste generators and the waste industry concerning recycling; and to consider the efficiency of waste hauler routing under the current system. The project included data gathering, database creation and querying, and intensive field work to address each of these specific goals regarding the commercial putrescible waste stream. CH2M developed a series of models to estimate and characterize the commercial solid waste stream that included Literature-Based Generated Waste Model, Literature-Based Disposed Waste Model, Mass Flow Analysis and a Statistical Model.

Ongoing Regulatory Tracking Services; Confidential Client. Project Manager responsible for performing weekly regulatory review activities, which included tracking state and federal final and proposed rules for those related to waste management: air, water, waste, and waste transportation and hazardous materials, and preparing weekly summaries of the regulatory items of interest into an Environmental Regulatory Monitoring Alert (ERMA) report for the preceding work week, with a summary of the potential business impacts.

NexCycle, Inc., Recycling; NexCycle, Inc.; Hayward, CA. Operation Manager responsible for the personnel and operations of 26 staffed recycling centers on the San Francisco peninsula. Maintained standard operating procedures, client and customer satisfaction, and control of all commodities and valuables. Hired, trained, and supervised recycling center attendants and support staff, visited each site weekly to audit commodities, accounted for payment vouchers, and monitored compliance with California Department of Conservation regulations and personnel policies, including payroll, safety issues, and incentive programs.

Landfill Services

Preliminary Solar Assessment for Closed Landfills and South County Transfer Station Site, Hillsborough County Solid Waste Management Division, Tampa, FL. Project Manager responsible for updating a feasibility study to beneficially use solid waste facilities for alternative energy generation. Activities include assessing changes in market conditions, performing an economic feasibility and recommending options for consideration to optimize existing County assets.

Landfill Gas to Energy Project Identification and Screening Services; Lockhart Power Company; Lockhart, SC. Project Manager responsible for assisting Lockhart Power Company to identify landfill gas-to-energy project development opportunities. Activities included landfill screening, site visits, regulatory assessment, landfill gas generation estimates, and project development strategy.

Landfill Gas Utilization Procurement Services; Orange County Solid Waste Management Department; Orlando, FL. Task Manager responsible for assisting with the development of a beneficial use landfill gas project. Activities included the preparation of a basis of design report, identification of different development opportunities, preparation of detailed construction and operations cost estimates, and financial modeling and due diligence in support of contract negotiations.

Landfill Gas Recovery RFP; New Haven CT; City of New Haven, CT. Project Manager responsible for the development of an RFP to procure vendor services for landfill gas recovery operations. Responsibilities included coordinating the procurement team; preparing the RFP, including technical and performance specifications; and conducting document quality control.

Landfill Negotiations; Collier County Solid Waste Management Department; Naples, FL. Task Manager responsible for assisting with contract negotiations between the county and its landfill operator. Performed cost estimates and net present value analysis to evaluate possible scenarios faced by the county. Successful negotiations resulted in substantial savings to the county over the remaining life of the landfill operations contract.

Landfill Gas-to-Energy; Collier County Solid Waste Management Department; Naples, FL. Project Manager responsible for evaluating and developing a landfill gas-to-energy project at the Collier County Landfill. Responsibilities include project management, technical and financial analysis, and coordination between the County, Waste Management, and state and federal agencies

Whippany Landfill Closure; Eden Wood Realty; Whippany, NJ. Task Manager responsible for assisting with the development of the Whippany Landfill Closure/Post-closure Plan for a privately owned 16-acre landfill. Responsible for coordinating the various work elements required to meet state of New Jersey landfill closure requirements, including engineering investigations, closure design, permit submittals, monitoring and maintenance, and quality assurance/ quality control.

Sediment Management

Wagner Creek/Seybold Canal Restoration Project, Office of Capital Improvements; Miami, FL. Project Manager responsible for serving as the City's Owner's Agent to restore impaired waterways in the heart of the City. Activities include coordinating the work of the City's project delivery team including the Office of Capital Improvements, Public Works, Purchasing, Legal and Finance, managing project permits with the U. S. Army Corps of Engineers, Florida Department of Environmental Protection and Miami-Dade County Department of Environmental Resources Management, securing project financing through the Florida State Revolving Loan Program, preparing the procurement documents including the preparation of the design criteria package, procuring a qualified contractor, negotiating the agreement and providing services during construction during the removal of contaminated sediments

from Wagner Creek and Seybold Canal. Following the procurement phase, activities include providing services during construction through project completion.

Quality Consultant, Beneficial Reuse of Sediments; Harris County Flood Control District; Houston, TX. Quality Consultant responsible for the beneficial reuse of dredged sediment project performed for the Harris County Flood Control District. The project considered the feasibility of using composting technology to transform dredged sediments into compost of sufficient quality that it could be used in public parks. Project tasks included assessing technical treatment options, determining a regulatory permitting strategy, and identifying an effective public relations approach.

Disaster Recovery

Disaster Debris Management Plan; Solid Waste Management Department; Osceola County, FL. Project Manager responsible for updating the County Disaster Debris Management Plan.

PBC Debris Management; Palm Beach County Solid Waste Authority; West Palm Beach, FL. Task Manager responsible for providing debris recovery project management assistance related to Hurricanes Frances, Jeanne and Wilma. Activities included logistics coordination and management and reporting services related to loading and disposal site monitoring, daily status reports, debris contractor oversight, and quality control auditing.

Litigation Support

Litigation Support, Martin County, FL. Expert Witness in ongoing litigation related to a contract for construction and demolition debris management services.

Litigation Support; Chadbourne & Parke LLP; Fayetteville, NC. Project Manager responsible for coordinating the technical review of design, construction, and operations issues related to the failed design/build BCH Energy Project. Coauthored a technical evaluation report and subsequent technical memoranda, and produced a video presentation depicting specific design and operations problems used as the basis for expert testimony provided at a binding arbitration hearing. The report contained findings from the dissemination of complex issues detailed in numerous project agreements and years of correspondence between project participants. Additional research included technology and equipment reviews and visiting an operating refuse-derived-fuel and waste-to-energy facility.

Remediation

Environmental Remediation Projects Program Management, City of Miami, FL. Project Director responsible for comprehensive oversight of environmental engineering services provided by multiple environmental consulting firms at City parks impacted by historical property use. Services support City staff to ensure consistency in the quality and evaluation of complex environmental data, provide consistency in communications with the City, regulatory agencies, the community and other stakeholders, and track and maintain progress of the program.

Water and Wastewater Services

Annual Report; Lee County; Fort Myers, FL. Task Manager responsible for performing small meter inspections and analysis as part of the utility's annual report.

Insurance Evaluation Assistance, Lee County Water and Sewer Engineer; Fort Myers, FL. Task Manager responsible for evaluating the type and level of property insurance carried for the water and wastewater systems as part of the annual engineering report. Work included identifying items to be covered, reviewing existing coverage, and providing comments and recommendations. Interfaced

with the County Risk Program Manager to identify and review key reports including current insurance policy declarations, listings of insurable values of water and wastewater assets, and the actuarial report of the Self-Insurance Loss Fund.

Agricultural and Biological Engineering Department; Cornell University, Agricultural and Biological Engineering Department; Ithaca, NY. Research Assistant responsible for supporting post doctorate fellow with research concerning the uptake of phosphorus by wollastonite for constructed wetland wastewater treatment applications. Activities included planning, preparation, and operation of experiments. Other duties included constructing and installing wick lysimeters to measure heavy metal transport from land-applied sewage sludge on agricultural lands.

Publications and Presentations

Dietch, D, "Leon County and the City of Tallahassee Partner on a Recycling Analysis to Assess Best Value Options," Recycle Florida Today Renewable News, 2021.

Dietch, D.E., Wood, J.J., Beinstein, R., "Sustainable Cities and Solid Waste," Planning Sustainable Cities: An Infrastructure-based Approach, Zofnass Program for Sustainable Infrastructure, Harvard University Graduate School of Design, 2021.

Coca, K., Dietch, D.E., "Zero Waste LA Commercial Franchise System," presented at WasteCon, Solid Waste Association of North America (SWANA), Orlando, FL, August 24-27, 2015.

Rodriguez, Daniel R, Dietch, D.E., "Collier County: A Case Study in Integrated Solid Waste Management Planning," presented at the 2008 SWANA Sunshine Chapter Winter Conference, St. Augustine, FL, January 21-23, 2008.

Yonkosky, J., Dietch, D.E., "When Solid Waste Collections Contracts Expire: Evaluating Your Options," presented at the 11th Annual Landfill Symposium and Solid Waste Managers Trends and Challenges, Solid Waste Association of North America (SWANA), Nashville TN, June 5-8, 2006.

DeLony, J.W., Dietch, D.E., "The Puck in the Net: Using the Collier County Public Utilities Division's Project Delivery Process to Pass a Controversial Mandatory Non-Residential Recycling Ordinance," presented at the Planning and Management Symposium, Solid Waste Association of North America, Boulder CO, June 6-10, 2005.

French, R.H., Jackson, D.E., Dietch, D.E., "Customized Program Management Approaches for Collier County's Northeast Utility Facility Program," Program Management White Paper prepared for Collier County, Florida, May 16, 2005.

Dietch, D.E., "Mandatory Non-Residential Recycling Ordinance," Government Engineering, November-December 2004.

Dietch, D.E., "Prince George's County, Maryland: Implementation of a Non-Residential System Benefit Charge," Proceedings, 9th Annual Landfill Symposium and Solid Waste Managers' Trends and Challenges Conference of the Solid Waste Association of North America, Monterey CA, June 21-25, 2004.

Yilmaz, G., Kirk, D., Dietch, D.E., "Collier County Business Recycling Initiative: Building Partnerships and Benefiting the Bottom Line," APWA Reporter, December 2003/January 2004.

Dietch, D.E., Kirk, D., "Recycling Benefits the Bottom Line," The Greater Naples Chamber of Commerce Currents, December 2003.

Schwarz, S.C., Dietch, D.E., "Lessons Learned from a Failed Design-Build Project," MSW Management, November/December 2003.

Anderson, R.B., Schwarz, S.C., Dietch, D.E., "Gasification in Collier County, Florida," Proceedings, Annual Conference of the Solid Waste Association of North America (WASTECON 2003), St. Louis MO, October 14-16, 2003.

Chamberlin, W.P., Dietch, D.E., "Finding Alternatives to Funding Resources: Reducing Resident Costs Using a New Revenue-Generating Program," Public Works Magazine, September 2003.

Schwarz, S. C., Dietch, D. E., "Collier County, Florida - Consideration of Gasification as a Long-Term Waste Management Solution," Proceedings, North American Waste-to-Energy Conference, Tampa FL, April 21-30, 2003.

Schwarz, S. C., Dietch, D. E., "BCH Energy – Lessons Learned from A Failed Design/Build Project," presented at the 4th Annual Planning and Management Symposium of the Solid Waste Association of North America, August 2000.

Dietch, D. E., "Case Study: Cayuga Nature Center Food Scrap Composting Project," Master's Project (Master of Professional Studies), Cornell University, Ithaca NY, 1999.

Dietch, D. E., Natale, B., "Securing Engineering Support for Food Scrap Composting," presented at the Annual Conference of the Solid Waste Association of North America, New York Chapter, October 1998.

Kelly, W. R., Dietch, D. E., "Using a Biofermenter," presented at the 14th Annual Northeast Resource Recovery Conference, 1995.