

Williams Engineering Services Company, Inc.

Statement of Qualifications



*Williams Engineering Services Company, Inc.
P.O. Box 833 / 525 Fairgrounds Road
Albany, Kentucky 42602*

Phone: (865) 207-0571 ♦ (606) 387-6361

Fax: (877) 608-5508

<http://www.wescinc.com>

Introduction

Williams Engineering Services Company, Inc., is a small business providing environmental and engineering consulting and support services. Williams Engineering¹ Services personnel and its affiliates have broad experience in providing consulting services for both government subcontractors and private industry. We offer very competitive rates, with both fixed price and level of effort options, for both short-term and long-term projects.

Services

Williams Engineering Services personnel can provide high quality, cost-effective support for the following:

- membrane process development and design, scale-up, and project and process engineering
- waste and wastewater treatment and desalination systems process engineering
- product development and engineering
- waste management (RCRA, PCB, radioactive, mixed radioactive/hazardous)
- environmental compliance and reporting (RCRA, PCB, radioactive waste)
- sampling and analysis planning and strategy development
- waste, facility, and site characterization (including spatial analysis with GIS)
- radiological and chemical data validation
- analytical laboratory services procurement, data review, and verification
- project controls, project scheduling and budgeting, and project management
- Decontamination and Decommissioning (D&D) support
- waste, facility, and site sampling, and sampling and characterization oversight
- facility contingency planning, certification, and closure (KY and TN)
- waste shipment support
- waste treatment and disposal support
- waste and environmental sampling training
- treatability study support
- database development.

In addition, in conjunction with its affiliates, Williams Engineering Services can meet a wide range of both short-term and long-term environmental and engineering support needs. We offer very competitive rates, with both fixed price and level of effort options.

Personnel

Williams Engineering Services personnel are highly qualified, experienced, and motivated, a combination that consistently produces highly rated, cost-effective solutions and services for its clients:

Michael E. Williams, Ph.D., P.E., is president and founder of Williams Engineering Services. Dr. Williams' qualifications include:

- B.S., M.S., Ph.D., Chemical Engineering, University of Kentucky
- Professional Engineer, Kentucky (License No. 21243) and Tennessee (Registration No. 106271)
- 15 years of experience with hazardous and radioactive waste management and compliance, waste, facility, and site characterization, and process engineering and technology development

¹ Williams Engineering Services is registered to provide engineering services in Kentucky and Tennessee.

- Project and process engineering for development and installation of wastewater treatment and desalination systems
- Direction of treatability studies and preparation of treatability study reports
- Membrane process development, design, testing, modeling, and sizing
- Radioactive and hazardous waste management, characterization, compliance, and treatment and disposal support for DOE's Paducah Gaseous Diffusion Plant (PGDP)
- Waste management, characterization, and treatment and disposal support for DOE's Oak Ridge Reservation (ORR) facilities
- Facility characterization and treatment and disposal support for Decontamination & Decommissioning (D&D) activities at the ORR
- CERCLA site characterization, remediation, and disposal support, including RCRA, PCB, and radiological characterization guidance and spatial analysis (ArcGIS) of characterization data
- Waste management support for DOE's Fernald Environmental Management Plant (FEMP)
- Verification, validation, and assessment of radiological and chemical data
- Technical and economic feasibility and due diligence investigations of innovative and conventional waste treatment technologies
- Product and process development and engineering (U.S. Patent awards 5,988,017, 6,058,808, 6,274,020, 6,537,436)
- Hazardous and mixed waste sampling training, environmental sampling training courses development and instruction
- Project management for multi-disciplinary teams
- Data set management and evaluation (e.g., analytical data) and development of custom database applications.

Our other key personnel include project controls managers, project controls/management technical support personnel, and project manager assistants. These possess an in-depth knowledge of our clients' procedures, processes, and guidelines, with an extensive working knowledge of project management applications (e.g., Primavera products P3 / SureTrak). They work with project controls management and other client personnel in incorporating program / project information (Work Breakdown Structures, Project Plans, Estimating, Resource Allocation Matrixes, and Project Baselines) into client project management systems and produce project controls information as needed. They also assist in data collection and verification, report and document preparation, and data presentation relative to the monitoring of project activities such as schedules, resource estimates and any special requirements. Our project support personnel have over 15 years combined experience providing key support services.

Finally, Williams Engineering Services is affiliated with other highly qualified and experienced engineers and scientists, including experts in waste management, characterization, and health and safety. These include Certified Industrial Hygienists (CIHs), Certified Safety Professionals (CSPs), and Professional Engineers (PEs).

Selected Project Histories

Selected project histories for Williams Engineering Services personnel are presented below.

- Mixed hazardous and radioactive waste management and waste characterization support for DOE ORR subcontractors, with activities including treatment and disposal planning and support, development of sampling and analysis strategies and plans for waste management and D&D activities, waste certification program support (including for Nevada Test Site (NTS) waste shipments), waste disposition support, and radiological and chemical data verification, validation, and assessment.

- Waste management, characterization, and other technical support to DOE subcontractors at the PGDP, with activities including radiological and chemical data validation, support for mixed waste treatment statements of work, preparation of characterization reports and data assessments, RCRA, PCB, and radiological compliance recommendations, investigation of waste treatment and disposal alternatives at commercial and DOE facilities, Site Treatment Plan updates, and waste shipment support, including preparation of disposal facility waste profiles, radiological manifest forms (540/541/542), and waste shipment readiness assessments.
- Waste management support for Fernald Environmental Management Plant (FEMP) subcontractor.
- Testing and engineering support for material selection and development of innovative waste stabilization and transport containers for low-level radioactive and mixed (hazardous/ radioactive) waste for commercial clients.
- Sampling and analysis strategy and plan development for representative sampling of fly ash piles at a commercial power plant.
- Technical and economic evaluation of proposed and existing innovative and conventional waste treatment technologies for commercial clients.

Data Management and Database Applications

Williams Engineering Services personnel have routinely analyzed, evaluated, and provided manageable summaries of large data sets, including analytical data, waste storage records, and work activity information. We have also developed and implemented customized, easy-to-use database applications utilized for treatment statements of work, chemical reactivity and hazard evaluation, and job activity hazards evaluation. Williams Engineering Services offers a distinct advantage over traditional information technology companies in that we understand the engineering and technical issues behind the database application as well as the programming aspects.

Some database and application examples include:

- Review, evaluation, and summarization of analytical project data with 100,000+ records for a DOE facility.
- Preparation of information databases for treatment statements of work, with descriptive information, photographs, analytical data, and data summaries for multiple waste streams.
- Development of a customized database for use in chemical reactivity hazard evaluation.
- Development of a customized, easy-to-use interface database for job activity hazard evaluations (AHAs), with the system having capability of securely creating and customizing, copying, editing, and archiving AHAs based on work activities to be conducted and associated hazards and controls.
- Redesign and update of a customized database for specifying field work activity job steps, work controls, hazards evaluation, etc.; system has the capability of creating, copying, editing, and archiving documents.
- Development of a central database application for document tracking with easy-to-use interface and capability of record synchronization with remote satellite document center using e-mailed record sets.

- Redesign of a database application utilized for tracking and scheduling employee training for a large DOE subcontractor; updated interface and added improved reporting capabilities and automatic training schedule notification generation via e-mail.

Project Controls

Williams Engineering Services provides project controls services, as well as project management, tracking, and budgeting support services. Projects have included:

- In conjunction with its affiliate Management Solutions, LLC, project controls support to the U.S. Army Corps of Engineers (USACE) Louisville District. Services include the preparation, loading, and maintenance of projects within the Louisville District, with on-site resource expertise in the USACE PROMIS/CEFMS systems, Primavera Project Planner, and P3/SureTrak.
- Development of waste characterization strategies and plans considering costs, resources, milestones, and regulatory compliance issues in support of waste disposition activities at ORNL, ETPP, and FEMP.
- Creation and implementation of a waste categorization and tracking system to ensure compliance with waste disposition project milestones at FEMP.
- Development and review of baselines, schedules, resource requirements, databases, procedures, sampling and analysis strategies and plans, and other documents necessary to support meeting Site Treatment Plan milestones and satisfying regulatory compliance requirements; during the project tenure of Williams Engineering Services personnel, all milestones were fully met.

Quality Assurance

Williams Engineering Services is committed to providing quality services and products to our customers. To accomplish this commitment, we have developed a written Quality Assurance Program that covers all aspects of the services we provide. In addition, we are dedicated to:

- Integrity in all aspects of our business;
- Customer satisfaction with every product and service;
- Services and products that meet or exceed customer requirements at a cost competitive price; and,
- Continuing evaluation of procedures and practices as necessary to maintain effective and efficient services, as well as participation in Continuing Education and Professional Development activities to further enhance employee qualifications.

Contact

For more information about Williams Engineering Services or its products and services, please contact

Mike Williams, Ph.D., P.E.
Phone: (865) 207-0571 ♦ (606) 387-6361
Fax: (877) 608-5508
mewilliams@wescinc.com
<http://www.wescinc.com>

Williams Engineering
Services Company, Inc.
P.O. Box 833
Albany, Kentucky 42602