



Construction quality assurance and construction management services

WSP USA is experienced in planning all steps of a project — from conceptualization through construction, utilization and decommissioning — while providing the most efficient and cost-effective tools to meet the challenges of today's construction environment.

With more than 25 years of experience we have emerged as a leading provider in CQA and CM services for soil and geosynthetic-lined containment systems in the landfill and mining industries. In addition, we expertly serve dams, food processing facilities, reclamation, civil, transportation, oil and gas, and environmental construction projects.



OUR CQA/CM TEAM

With over 100 experienced monitoring personnel, we are one of the largest solid waste CQA/QC and CM organizations providing services around the world including installation of more than 100 million square feet of geosynthetics.

Providing comprehensive services

- Earthworks, concrete, asphalt, geosynthetic and mechanical field testing and observation
- Laboratory testing services
- Construction documentation
- Computerized project database tracking of construction
- Construction certification report

CM services

- Conceptual project planning
- Project risk analysis
- Regulatory strategies
- Constructability review
- Bid package/contract preparation
- Contractor prequalification
- Bid evaluation/contract negotiation
- Project scheduling
- Contract administration
- Resident construction management
- Payment reconciliation/approval
- Change order and claims processing
- Project completion/acceptance
- Project certification

OUR PROCESS

Prior to beginning work, we meet with the owner, operator. We listen closely and designer to discuss the project's requirements and scope to alleviate misunderstandings as the project progresses and provide regular communication. Implementing a robust CQA program enhances quality, meets industrial standards of practice and satisfies regulatory requirements.

Our construction documentation (including test results, procedures to correct non-compliant work and verification testing) provides confidence that the constructed project meets or exceeds design criteria, plans and specifications. At the conclusion of a project, we prepare a final report that is suitable for submittal to regulatory agencies as part of the final operating permit approval process.

Closure and leachate collection system upgrade

CQA and CM services were provided during final closure of the two landfill cells at a facility in upstate New York. The closure cap covered approximately 13-acres and consisted of general fill, a 12-inch thick sand gas venting layer, a 40-mil textured VLDPE geomembrane, 12-inch thick sand drainage and protective cover layers, topsoil, and surface water management structures. A Record Documentation Report was prepared for submittal to the client and NYSDEC.

CQA and landfill cover design

The landfill consists of an inactive portion and an active portion. The active portion of the landfill is approximately 17 acres with an additional 9 acres that were closed in 1990. Throughout the project, the following services were completed:

- Designed the landfill cover system including cover section, stormwater management, and landfill gas (LFG) venting

- Evaluated the existing groundwater and leachate collection systems and designed system upgrades
- Evaluated the M-7 pumping station and designed upgrades

The Final Closure Design required negotiations with the NYSDEC Region 8 office on behalf of the client.

CQA for cells 5 & 6

CQA services were provided for construction of two double-lined landfill cells at a landfill in New York. CQA oversight included clearing and grubbing, subgrade excavation and filling, mechanically stabilized earth wall installation, geocomposite groundwater collection system installation, secondary clay liner and geomembrane liner installation, secondary leachate collection system, primary structural fill layer and geomembrane liner installation, primary leachate collection system and a granular drainage layer. Two leachate storage tanks were constructed with capacity of approximately 500,000 gallons each and involved subgrade preparation, concrete footings, and tank erection oversight. A pre-engineered leachate loadout building and access roadways were constructed. The project included construction of a 2.7-acre wetland mitigation area.

CQA for closure cover system

A hydrogeologic study, slurry wall design, and perimeter berm/cover redesign for a landfill were provided along with a cover redesign to more efficiently control surface water and erosion. CM and CQA/QC testing was provided for the installation of the closure cover system. The team inspected and evaluated the construction soil materials, performed field density tests of the compacted clay, measured in-place thickness of clay and topsoil, and performed QA/QC laboratory testing of the clay cover materials.

ABOUT WSP

WSP USA is the U.S. operating company of WSP, one of the world's leading engineering, environment and professional services firms. Recognized on [Fast Company's Brands that Matter List for 2022](#) as a top Community-Minded Business, WSP USA brings together engineers, planners, technical experts, strategic advisors and construction management professionals who are dedicated to collaborate in the best interests of serving local communities. WSP USA designs lasting solutions in the buildings, transportation, energy, water and environment markets. With more than 15,500 employees in 300 offices across the U.S., WSP partners with its clients to help communities prosper.



CONTACT US

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