



Coal Combustion Residuals

Integrated and Compliant Solutions

The Challenge

New federal regulations on coal combustion residuals (CCR) management and disposal has created capital-intensive compliance obligations for coal-fired plant owners and operators and driven a renewed focus on coal ash infrastructure. Plant owners must resolve how the new CCR rules impact their operations, how their existing infrastructure stacks up against new location, design, structural, drainage, operating and monitoring criteria, and what course of action will balance capital spending, plant development, risk management, and regulatory compliance.

Long Record of CCR Solutions

WorleyParsons has been successfully delivering CCR solutions to coal-fired plant owners/operators for 30 years and offers a proven portfolio of technical expertise needed to bring CCR impoundments and landfills in compliance with Federal regulations, manage risks associated with CCR facilities, convert wet ash handling to dry technologies, and optimize plant water and wastewater systems that may involve coal ash ponds.

- CCR facility assessments and inspections
- CCR facility siting studies/site selection
- Feasibility and optimization studies
- CCR impoundment closure engineering/design
- Impoundment post-closure beneficial end use studies/design
- New CCR landfill expansion/design
- CCR landfill expansion-over-impoundments engineering/design
- Plant water/wastewater system optimization studies
- Water/wastewater treatment system engineering/design
- Compliance strategies for ELGs and 316(b) requirements
- Wet-to-dry ash conversion system studies/design
- Permitting and compliance documents and approvals
- Environmental impacts studies
- Risk assessments
- Ash landfill operations management
- Groundwater and surface water monitoring program development
- Construction services
- Long-term monitoring program implementation

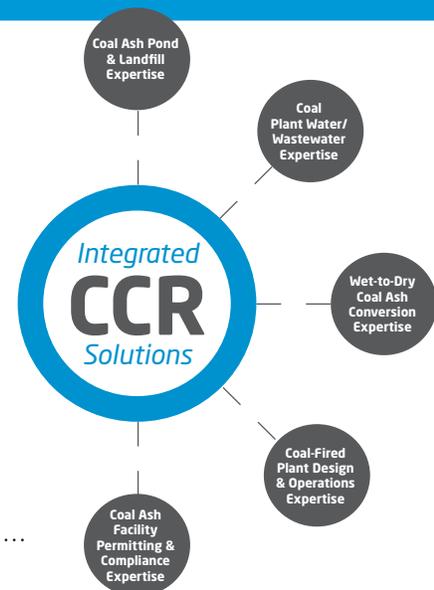
Why WorleyParsons

In the CCR market, WorleyParsons separates itself from the crowd.

- Recognized and trusted service provider with a delivery portfolio that includes over 35,000 MW of coal power generation
- Proven experience delivering assessment, optimization, environmental, design, permitting, and construction solutions for CCR facilities
- Direct experience in the execution and delivery of projects in conformance with RCRA Subtitle D
- Proprietary approach for modeling and optimizing flows, chemistries, and costs across the plant water and coal ash pond systems
- Local and national network of professional staff with the technical expertise required for coal combustion residuals facility solutions
- The resources and track record to provide a project team with a deep commitment to safety

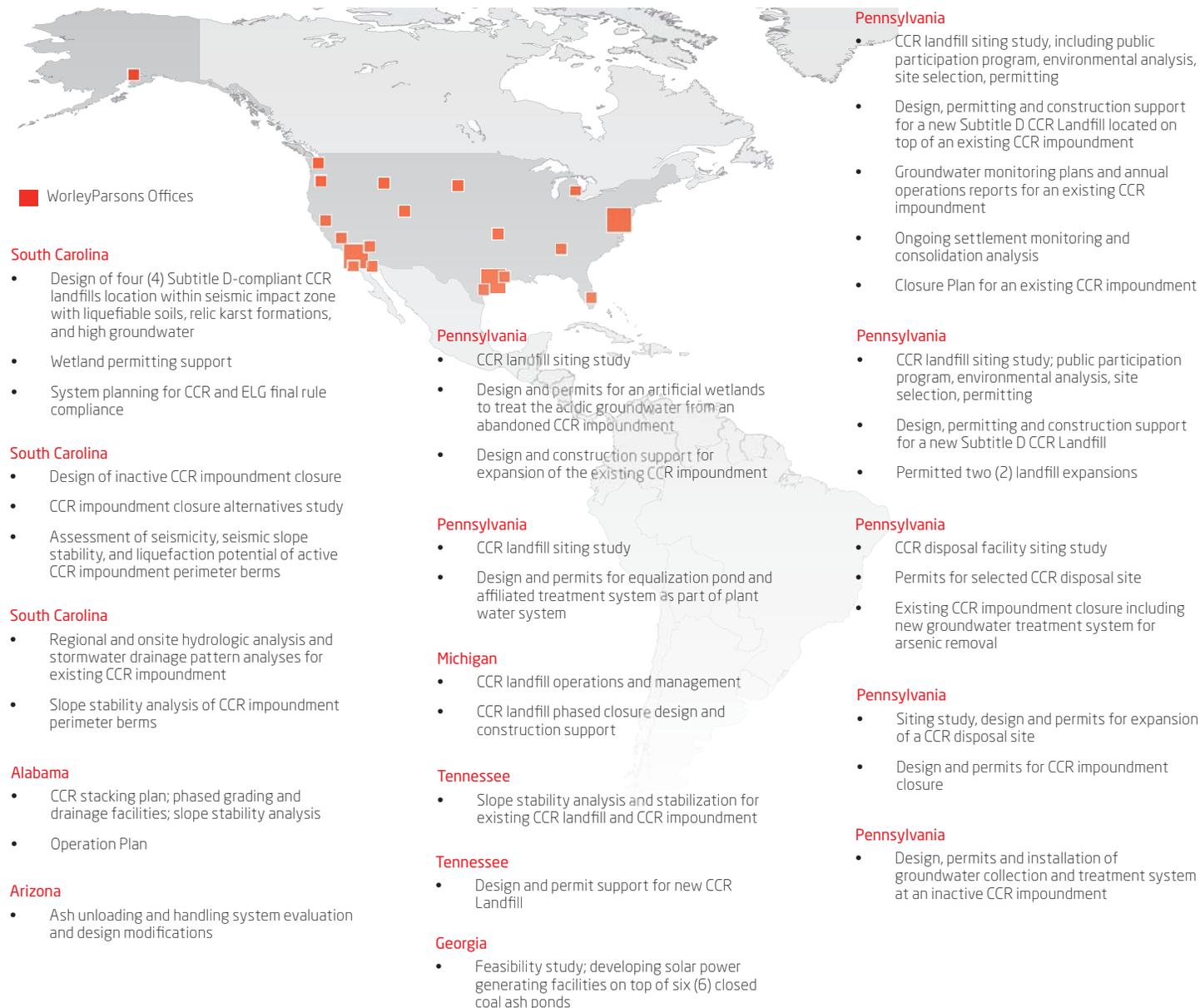
The Solution

WorleyParsons' extensive experience in virtually all aspects of wet and dry coal ash handling and disposal facility design and closure, combined with our award-winning expertise in power plant water optimization and treatment solutions, allows us to employ integrated planning and technical CCR solutions tailored to optimize plant operations, plant water management, and coal ash handling and disposal practices.





Samples from our Project Portfolio



Contact WorleyParsons today to get started on an assessment of the physical and operational conditions of your plant's coal ash capture, delivery and management facilities as well as your plant water/wastewater systems. We will complete the Hazard Potential Classification Assessment, Structural Stability Assessment, Hydraulics analyses, and Safety Factor Assessment required by the new Federal CCR regulations. WorleyParsons will identify potential risks across your CCR system to allow you to prioritize capital spending while optimizing facility operations and development plans.

Scott Eckman

Coal Combustion Residuals Market Lead, WorleyParsons

Tel: +1 916.817.3930

Mob: +1 916.813.6118

Scott.Eckman@worleyparsons.com



WorleyParsons

resources & energy