

Coal combustion residuals management

We take a strategic view of your coal combustion residuals management practices and work with you to design a path that gets the job done.

The U.S. Environmental Protection Agency's (EPA) coal combustion residuals (CCR) rule has fundamentally changed how coal-fired power plants manage CCR, requiring a shift to landfills, expanded beneficial use, and enhanced groundwater monitoring. Navigating this complex rule as well as other evolving regulations can be daunting.

Haley & Aldrich's CCR consultants bring decades of regulatory and utility experience to help clients strategically plan for compliance, manage risks, and control costs, even as regulations change. Now that the CCR rule has been in effect for nearly a decade, we can help you reexamine your CCR program to reduce risks, gain efficiency, and plan for evolving requirements. Our CCR consulting team provides thorough programmatic reviews and gap analyses that consider recent and potential rule changes, dynamic site conditions, and complex site geology and groundwater geochemistry.

Our approach begins with gaining a deep understanding of client operations; then we collaborate across corporate and facility teams to develop actionable strategies. A forward-thinking mindset is simply part of our DNA — it's how we've supported clients for over 25 years, even partnering with them to proactively plan for the CCR rule before its promulgation.

We deliver value by developing real-time monitoring dashboards, securely managing data by leveraging artificial intelligence (AI), designing on-site CCR management solutions, and applying risk-based engineering strategies for

groundwater remedies. Clients also rely on us for regulatory impact analysis, compliance document review, and clear stakeholder communication, which helps them stay ahead of deadlines and achieve long-term value.

Talk to our service experts



Steven Putrich

Principal Consultant, Geo-Environmental Engineering and Industrial Waste Management



Dawn Santoianni

Market Leader, Energy

Market highlights

- CCR rule regulatory strategy and policy support
- CCR corrective action strategies, remedial technologies design, and implementation
- Surface water permitting, management, and treatment (National Pollutant Discharge Elimination System [NPDES], Effluent Limitation Guidelines [ELGs], etc.)
- CCR groundwater monitoring, assessment, and statistical reporting
- Custom AI tools for instrumentation, groundwater treatment systems, and large data set management
- Community relations, stakeholder engagement, and public meeting support
- Concept development, engineering design, and permitting of CCR ponds/impoundments and landfills
- Construction management and quality control
- Expert witness testimony
- Third-party independent programmatic reviews and gap analyses
- Risk assessments and conceptual site modeling

> *"They see the overall picture and they understand all of the different ways we're regulated, and that enables them to achieve cost savings. That is one of the key reasons we use them."*
>
> Associated Electric Cooperative Inc., corporate CCR management



Passionate people applying engineering and science to support sound and defensible strategies

Clients trust us to deliver solutions that meet their specific needs — to use science to address the potential environmental impact of their facility operations. We do so not only through technically sound and scientifically defensible evaluations and solutions, but also through our commitment to deeply understand and communicate with all stakeholders involved in their project, including the C-suite, regulators, the community, other consultants, and those in the field and in courtrooms.

> *"They're really very responsive to our needs. They do phenomenal work on some very complex issues."*
>
> AES, Corporate Environmental

> *"They're a very well-run technical organization and have a strong commitment to meeting the customer's needs."*
>
> Southwestern Utility

Haley & Aldrich's CCR experts are passionate about advocating for our clients and delivering on their needs. Our ability to do so allows us to find solutions that save costs, avoid losses, and protect their reputation.