



## Coal combustion residuals management

We take a strategic, big picture view of your CCR management practices and work with you to design a path forward to get the job done.

U.S. Environmental Protection Agency's (EPA) coal combustion residuals (CCR) Rule and its ongoing revisions have led to many plant closures and have dramatically changed how coal-fired power plants operate. Due to continued litigation, the rules are dynamic and complicated – staying on top of them and interpreting what they mean for your facility can be challenging and time consuming.

Your facility may also be in the crosshairs of vocal environmental and community groups – putting your plant in potential legal or reputational jeopardy. To effectively respond, you need to understand the risks your facility's CCR management may – or may not – be posing and you need to effectively communicate the facts in a way that will resonate with all audiences.

Haley & Aldrich's CCR experts, who have the highest level of technical competence and decades of experience managing CCRs for the electric utility industry, understand the importance of planning ahead to stay compliant. We do so by first seeking to understand the full picture of our clients' operations and then working with both corporate and plant staff to create a comprehensive strategy. This strategic viewpoint allows us to find creative solutions so you can

proactively manage your facilities and CCR units (including active, inactive, and legacy ponds) as efficiently as possible from beginning to end – ultimately avoiding losses and saving costs.

A few examples of how our approach has helped us provide the highest value for our clients: We find onsite resources to handle CCRs and pond closures as opposed to hauling CCRs offsite. We use our engineering best practices supported by geochemistry and a risk-based approach to scientifically prove a less elaborate remedy than initially thought is required. And, we stay ahead of rule trigger dates so our clients can benefit from completing activities ahead of deadlines.

This way of thinking is simply part of our DNA and has been for more than 25 years – we even partnered with our clients to proactively plan for the CCR Rule before it was promulgated. And we have many more examples to share.

## Talk to our service experts



[Steven Putrich](#)

Principal Consultant, Geo-Environmental Engineering and Industrial Waste Management



[Dawn Santoianni](#)

Market Leader, Energy

## Service highlights

- Beneficial use evaluations and strategies development
- CCR corrective action strategies/remedial technologies design and implementation
- CCR groundwater monitoring and assessment
- CCR Rule compliance knowledge and experience
- Community relations and public meeting support

- Concept development, engineering design and permitting of CCR ponds/impoundments and landfills
- Construction management and quality control
- Dam/impoundment assessment and operations management
- Expert witness testimony
- Geology, hydrogeology, and geochemistry expertise
- Risk-based environmental sampling and risk assessment to support corrective action decision-making
- Seismic assessments

*“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

Haley & Aldrich's CCR consultants are passionate about delivering solutions to our clients' specific needs – and using

science to address the potential environmental impact of your facility operations. We do so through not only our technically sound and scientifically defensible evaluations and solutions, but also through our commitment to deeply understand and communicate with all stakeholders involved in your project – the C-suite, regulators, the community, other consultants, and those in the field and in court rooms.

*“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.