

COAL COMBUSTION RESIDUAL (CCR) MANAGEMENT

The professionals at DiGioia Gray have extensive and proven experience with Coal Combustion Residual (CCR) management. We understand the new rules that have tightened the regulations for CCR management, and we are here to help you navigate your CCR challenges. We recognize that each CCR manager defines their needs differently and our professionals commit to leveraging our industry knowledge to partner with our clients and develop cost-effective solutions. Our industry knowledge comes from our deep roots in CCR management, from our active membership in the American Coal Ash Association (ACAA), to our leading CCR research with Electric Power Research Institute (EPRI) and the Federal Highway Administration (FHWA), to our practical design solutions for leading electric producers. Trust DiGioia Gray to help you successfully navigate the complexities of your CCR project.



Third Party Review

The new CCR rule brought new requirements to an already complex industry. The CCR professionals at DiGioia Gray will help you mitigate disruptions and risks to your project, environment, and community through an independent third party review of project deliverables. We will leverage our professional engineering and practical construction experience to deliver insight so you can navigate and manage all aspects of the industry, including the complexities that the new CCR rule presents. DiGioia Gray understands that the goal of any third party review is to quickly identify risk, provide timely solutions, and minimize any negative financial impact to your project – rely on our professionals to help you efficiently navigate the complexities of CCR management.

CCR Beneficial Use and Marketing

Recognizing that disposal costs can be avoided, the cost of generation lowered and an overall environmental benefit realized, DiGioia Gray promotes CCR beneficial use. Our staff participate in national research programs in cooperation with the EPRI and the FHWA. We provide consulting services to numerous electrical utilities, mine operators, and independent power producers and manufacturers. We conduct product characterization studies to determine potential uses for specific materials, perform market research to identify economical end-uses, coordinate demonstration projects, and assist our clients in developing utilization programs through liaison activities with the ACAA, regulatory personnel, and potential end users.

Geotechnical and Hydrogeologic Investigations

Geotechnical and hydrogeologic investigations are essential to assess the suitability of a site with regard to the new CCR regulations for location restrictions under CCR §257.60 - 64. These investigations include characterization of soil, rock, and groundwater conditions beneath a proposed site, which provide assistance in identifying location restrictions. To accomplish this, we develop and coordinate site characterization activities, such as drilling services, soil and rock laboratory testing, subsurface water field monitoring and testing, and geophysical investigations. In addition, we have experienced geo-professionals that understand the field data and can properly characterize a site to support the necessary analyses required under CCR §257.70 - 74.

Disposal Facility Design and Environmental Permitting

Our staff's consistent and comprehensive, yet practical, approach to the complex regulatory process has led to demonstrated success in designing and permitting CCR management facilities. We are experienced in preparing CCR facility permit applications for prevailing state regulations and taking full advantage of innovation, exemptions and alternatives where allowable. Services include:

- Hydrogeologic and geologic investigations for site characterization
- Pre-siting notices
- 404 permit application
- Solid waste permit application
- NPDES permit applications
- Prepare and apply for Erosion and Sedimentation Permits
- Existing permit modifications
- Closure plans
- Regulatory liaison and compliance assistance
- Conceptual and detailed site design
- Liner design (clay and/or synthetic)
- Advocate alternative materials and equivalency reviews
- Groundwater monitoring plans
- Estimates of probable construction costs
- Construction monitoring and certifications

Construction Support and Quality Assurance Monitoring

Our staff can assist you with construction monitoring and management of your project. Our services for construction projects include: contract document preparation (drawings and specifications), assistance with bidding, quality assurance (QA) monitoring, quality control (QC) testing, and permit compliance documentation.

DiGioia Gray coordinates geotechnical testing for soils, liners, and other engineered materials, as well as for concrete and synthetic membrane liners, such as PVC and HDPE.

Site Closure

Considering the increase in renewable energy sources, and the shutdown of coal-fired electric generation, DiGioia Gray can assist with power plant and ancillary facilities closure. We can develop pond closure strategies and plans for the power plant sites or for ancillary landfill facilities. Modifications to previously approved closure plans can be implemented to be consistent with current utility strategy.

DIGIOIA GRAY LOCATIONS

PITTSBURGH, PA

MONROEVILLE, PA

PHILADELPHIA, PA

ROANOKE, VA

CHARLOTTE, NC

PHOENIX, AZ