



**POWERFUL SERVICES.**  
**SUSTAINABLE SOLUTIONS.**



**Charah<sup>®</sup>  
Solutions**

Service Above All

With more than 30 years of experience, Charah® Solutions core business is centered on coal ash byproduct management, the beneficial recycling of ash products, and environmental remediation and compliance.

Utilities and independent power producers count on us to deliver innovative sustainable solutions to complex environmental issues for the betterment of the planet and the communities in which we operate. As an industry leader in quality and safety, our portfolio of services reflects our strong commitment to reduce greenhouse gas emissions for a sustainable future. When you put Charah Solutions on the job, you get a market leader in providing results and innovative solutions.



With our comprehensive range of power generation expertise, Charah Solutions is the industry partner of choice providing services which include Remediation and Compliance Services, Byproduct Sales, Fossil Services, and Environmental Risk Transfer (ERT) Services. Our sustainability efforts conserve virgin resources and water, reduce greenhouse gases, and decrease landfill disposal, all while providing essential recycled-products that contribute to the growth of our economy and land remediation.

### CHARAH SOLUTIONS DELIVERS A HIGHER LEVEL OF SERVICE



Our experience working in a wide variety of utility locations and applications, and complying with a diverse set of environmental regulations, has allowed us to earn the know-how to provide many business advantages. With project locations from coast-to-coast and proven results for numerous beneficial use

applications, we have the dedicated staff, the equipment and the experience to raise your customer satisfaction to a whole new level.

## CHARAH SOLUTIONS FULL SERVICES

### Remediation & Compliance Services

#### Ash/Gypsum Pond Management

- ENVIRONMENTAL MANAGEMENT
- DESIGN
- CONSTRUCTION
- EXCAVATION
- CLOSURE BY REMOVAL
- CAP IN PLACE
- POND CONVERSIONS
- ENVIRODITCH®

#### Landfill Construction & Management

- ENVIRONMENTAL MANAGEMENT
- SITE STUDIES
- DESIGN
- PERMITTING
- CONSTRUCTION
- CERTIFICATION
- CLOSURE
- ENGINEERED FILLS (OFFSITE)

### Byproduct Sales

#### SCMs Sales & Marketing

- FLY ASH SALES
- ENVIROSOURCE™ ASH BENEFICIATION
- MULTIPOZZ™ POZZOLAN
- BOTTOM ASH SALES
- GYPSUM SALES
- IGCC SLAG SALES
- TERMINAL OPERATIONS
- KILN FEED PRODUCT SALES
- DELIVERY
- LOGISTICS

#### International Raw Materials Sales & Services

- INDUSTRIAL RAW MATERIALS
- CEMENT MANUFACTURING MATERIALS
- TRANSPORTATION & LOGISTICS MANAGEMENT
- INVENTORY MANAGEMENT
- MATERIALS HANDLING

### Fossil Services

#### CCR Landfill Operations

- FLY ASH DISPOSAL
- BOTTOM ASH DISPOSAL
- FGD GYPSUM DISPOSAL
- FSS/POZATEC DISPOSAL
- FBC ASH DISPOSAL

#### Utility Support Services

- LIMESTONE GRINDING
- SILO O&M
- ASH TRANSPORTATION
- FGD AND WWTS O&M
- LEACHATE DISPOSAL
- OTR HAULING
- DBO PROJECTS
- COAL HANDLING

### Environmental Risk Transfer

#### Environmental Risk Transfer

- INSURED RISK TRANSFER
- DECOMMISSION ASSETS
- SITE REMEDIATION
- SCMS SALES & MARKETING
- SITE REDEVELOPMENT



### ASH/GYPSUM POND MANAGEMENT

For ash and gypsum pond management, we know that utilities need the benefit of a customized approach that fits your operation. These service offerings cover all aspects of new and existing active pond management, including closure by

removal, cap-in-place, and design and construction of new ponds. Charah Solutions provides the proven experience and expertise to handle every regulatory, engineering and technical issue.

### LANDFILL CONSTRUCTION & MANAGEMENT

Based on three decades of experience, Charah Solutions completes all aspects of the landfill development, management, construction and closure from start to finish, including:

- Site studies, design and permitting
- Construction, certification and closure
- Inspection and reporting
- Quality assurance/quality control and documentation
- Engineered fills (Offsite)

### SCMs SALES AND MARKETING

Charah Solutions' vast knowledge of SCMs helps us to identify the best ways to improve each utility's long-term position in the market. With deep expertise in marketing SCMs to concrete producers, our dedicated byproduct sales and marketing team keeps your fly ash sales moving in the right direction. Our broad lineup of available materials, includes high-quality Class C and Class F fly ash, bottom ash, gypsum, IGCC slag and MultiPozz™ pozzolan. All are sold and efficiently distributed through our MultiSource® materials network which includes over 40 nationwide locations with international sourcing and distribution as well as a national network of barge, rail and truck services for quick and reliable supply across the country



### ENVIROSOURCE™ FLY ASH BENEFICIATION

Effective fly ash marketing is all about the strength of your process, your technology and your network. With our proprietary EnviroSource (formerly MP618®) fly ash beneficiation technology, we offer a cost-effective thermal beneficiation solution that is versatile and scalable to reduce carbon, ammonia, mercury and other contaminants in wet or dry fly ash. This process makes formerly unusable fly ash stored in ponds or landfills immediately marketable, reducing the need for landfills, ponds, or other disposal methods.

### INTERNATIONAL RAW MATERIALS SALES AND SERVICES

Whether its industrial raw materials for production use or quality cement manufacturing materials, Charah Solutions has the global network, the broad materials lineup and the technical expertise to source and ship exactly what you need, where you need it. We provide the complete package – a broad portfolio of materials, backed by strong sales and technical support, efficient inventory management, customized options and door-to-door logistics covering every point on the globe.





