

**POWERFUL SERVICES.
SUSTAINABLE SOLUTIONS.**



**Charah
Solutions**

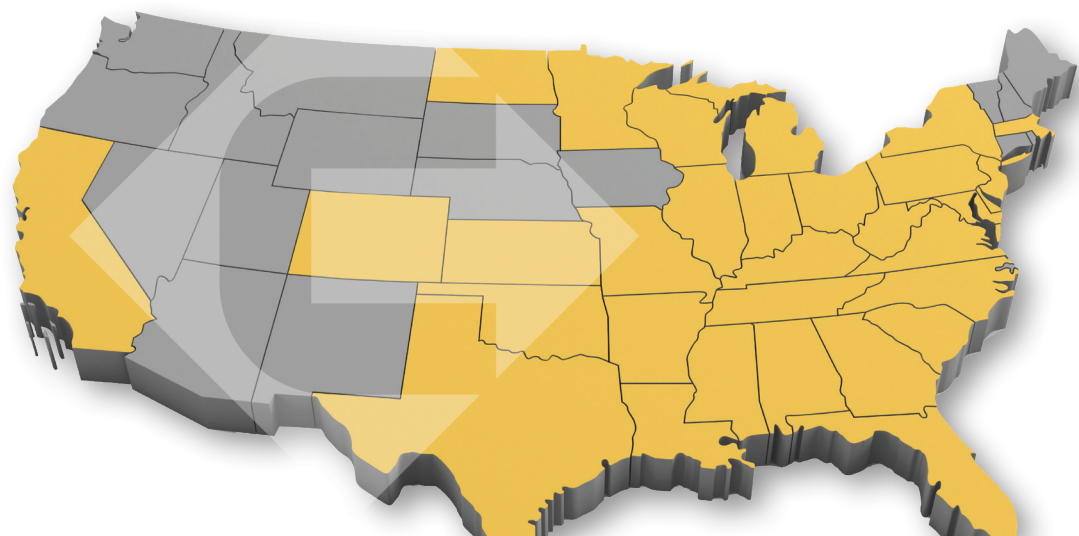
Service Above All

With more than 30 years of experience, Charah® Solutions is the only company that provides environmental and maintenance services to the power generation industry – both coal-fired and nuclear power plants. Utilities count on us to deliver proven results for the management and beneficiation of ash byproducts generated from coal combustion, as well as complete power plant maintenance and nuclear outage services. Charah Solutions also provides sustainable solutions for ash/gypsum pond management and closure, landfill construction, structural fill projects and Environmental Risk Transfer, as well as Supplementary Cementitious Materials (SCMs) sales and marketing, including fly ash and pozzolan.

With our comprehensive range of power generation expertise, Charah Solutions is the partner of choice for solving our customers' most complex environmental challenges. 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.

CHARAH SOLUTIONS DELIVERS SMARTER SOLUTIONS AND 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 handle over 20 million tons of ash each year. We have the dedicated staff, the equipment and the experience raise your customer satisfaction to a whole new level.



CORE SERVICE AREAS

The core business services where Charah Solutions excels include:

- **Coal Combustion Residuals (CCR) Landfill Operations**
- **Landfill Construction**
- **Ash/Gypsum Pond Management**
- **Environmental Risk Transfer**
- **MP618® Multi-Process Fly Ash Beneficiation**
- **Supplementary Cementitious Materials (SCMs) Sales and Marketing**
- **International Raw Materials Sales & Services**
- **Power Plant Maintenance**
- **Utility Support 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.



CCR LANDFILL OPERATIONS

For CCR management and landfill operation needs, Charah Solutions provides many integrated services, including fly ash disposal, bottom ash disposal, FGD gypsum disposal, FSS/Pozatec disposal, FBC ash disposal and more. Annually, we effectively landfill millions of tons of CCRs incorporating a broad spectrum of combustion products.

LANDFILL CONSTRUCTION

Based on three decades of experience, Charah Solutions completes all aspects of the landfill development, 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)

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. Whether it's daily maintenance excavation, closure removal, a cap-in-place, or innovative solutions such as our EnviroDitch®, Charah Solutions provides the proven experience and expertise to handle every regulatory, engineering and technical issue.

ENVIRONMENTAL RISK TRANSFER

With our unparalleled utility expertise, Charah Solutions can also remove the liabilities and headaches associated with your Environmental Risk Transfer projects, providing one-stop service for your entire portfolio. Utilities who need to retire and decommission their older, non-profitable assets while maximizing value need to talk to us first. We have the financial resources to support the transaction, the skill to effectively manage the environmental risk and the expert team ready to safely remediate and redevelop your site, provide due diligence and substantially lower your asset retirement cost model.

MP618® FLY ASH BENEFICIATION

Effective fly ash marketing is all about the strength of your process, your technology and your network. With our proprietary MP618 Multi-Process 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 for immediate marketability. And our MultiSource materials network provides nationwide sales distribution to keep your fly ash moving to meet demand from our growing customer base.

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 such as fly ash to concrete producers, our 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, MultiPozz™ bottom ash, gypsum and IGCC slag. All are sold and distributed efficiently 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.



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.

POWER PLANT MAINTENANCE

Charah Solutions provides complete maintenance for nuclear and coal-fired power plants, ranging from outage services to preventive maintenance and support services to total project solutions. We provide everything from safety and quality control programs, to plant improvements and upgrades, staffing solutions, predictive maintenance procedure implementation, planned outage support and clean-air modifications, all the way to major system upgrades. We also perform routine maintenance services such as replacement parts installation, boiler repair, certified welding, specialty services, field engineering and more. Charah Solutions has the experience, the expert team and the resources to meet all of your plant maintenance needs.

UTILITY SUPPORT SERVICES

Our strong lineup of utility support services include limestone grinding and supply, Silo O&M, FGD and WWTS O&M, leachate disposal management, OTR transportation and logistics, design-build-operate (DBO) projects, coal handling, and more.

READY TO RESPOND

Step up to superior service and sustainable solutions.

For more information, contact us today at sales@charah.com or call 1-877-314-7724.

Or visit charah.com.



TOLL-FREE: 877-314-7724
PHONE: 502-245-1353
FAX: 502-245-7398
EMAIL: sales@charah.com
WEBSITE: charah.com

Charah Solutions, Inc.
12601 Plantside Drive
Louisville, KY 40299



**Charah
Solutions**

Service Above All