The Environment sector’s core business is centered on our investigation and remediation expertise and comprehensive regulatory knowledge. WSP | Parsons Brinckerhoff is an influential industry leader with new ideas and insight into the remediation of contaminated groundwater using in situ technologies and sustainable practices. We pride ourselves on being the employer of choice and have a culture that drives innovation and common sense design solutions. Our engineers, geologists, and scientists are industry-recognized technical experts that deliver client-focused collaborative solutions.

Our engineers follow their designs to the field, where they provide the construction oversight and monitoring to ensure the designs are implemented properly. This first-hand knowledge allows us to provide our clients with innovative designs that are not only cost effective but also readily implemented. It also ensures that the cost estimates we develop reflect the real costs of the project and not generic unit rates.

We provide engineered innovative solutions. We are the only firm in the world to successfully engineer the formation of reactive iron minerals for dissolved chlorinated solvents treatment in bedrock groundwater.

OUR TEAM

Our team of investigation and remediation experts includes engineers, geologists, hydrogeologists, chemists, hazmat specialists, licensed site remediation professionals, and LEED Green Associates. Our engineers are licensed in 42 states and many have practiced engineering for over 15 years, several with 20+ years of experience. Additionally, our professionals frequently speak at technical conferences and author articles regarding state-of-the-art remedial technologies.

OUR APPROACH

We manage legacy issues by mitigating the risks posed by historical contamination and land use; we protect current assets through monitoring, management, and updates, and we future-proof to cope with an ever changing regulatory landscape and climate. Our practice is built on 25 years of delivering successful projects around the globe.

We are also renowned for the strength of our relations with regulators across the USA. This is built on the credibility of our professional expertise and our practical approach to ensuring a positive outcome for all parties. Many of our clients have benefited from successful site closure due to our pragmatic and innovative approach to existing site conditions.

We assess contaminated land and groundwater at sites and facilities, create a strategy to reach the desired business endpoint, design and implement the appropriate investigation and, if appropriate, remedial action, and help organizations unlock value from under-performing assets through our leading-edge liability solutions. Our innovative and practical solutions are designed to responsibly achieve closure and extinguish the liability within the context of our clients’ business objectives.

OUR SERVICES

We have the scale and expertise to work with you from project conception to completion and beyond. Whether planning the change of use for a site, regenerating brownfield sites or erecting a structure, we evaluate ground constraints, opportunities, and sustainability considerations. We provide holistic recommendations and designs which optimize projects to deliver to environmental, social, and economic aspirations through the services listed below.

- Brownfields
- Conceptual and final remedy design
- Contract negotiation and preparation
- Construction planning and scheduling
- Construction supervision and inspection
- Environmental engineering and remediation
- Environmental liability solutions
- Feasibility studies, bench-scale testing, and pilot testing
- Hazardous materials identification and abatement
- Hydrogeology and hydrology
- Industrial energy and water management
- Permit application preparation, negotiation, and monitoring
- Remediation liability analysis and quantification
- Selection and specification of treatment, transfer, and process control equipment
- Site investigation and characterization
- Water and waste management

OUR EXPERIENCE

Several of our client relationships span upwards of 20 years. We believe this reflects the importance we place on understanding our clients’ businesses and their challenges while developing and implementing the best solutions for our client and the environment. Profiled below are some of the projects with which our USA team has been involved:
Award-winning brownfields project
We are proud to be part of the team that transformed the historic former St. Elizabeths Campus into the new U.S. Coast Guard Headquarters in Washington, D.C. We characterized historical ash-fill and contaminated soil for the $435m construction project, managed the removal of more than 1m tons of soil, and addressed site-specific health and safety training needs for the construction team. With our partners, including the U.S. General Services Administration, we were delighted to have been recognized with the James D.P. Farrell Brownfield Project of the Year Award 2011.

Money saving in-situ bioremediation program in Georgia
An integrated remediation approach is estimated to have saved our client over $1m on unnecessary testing and remedial activity at an industrial site in Georgia. We used molecular biological tools to demonstrate that the release of coolant containing chlorinated solvent was stable as a result of an approach that included source treatment and monitored natural attenuation.

Remediation stabilizes RCRA wastes
To comply with a series of Consent Orders imposed by the State of Ohio, a petroleum refinery retained our firm to identify, evaluate, and implement potential remedial options for five surface impoundments containing wastewater treatment sludge and for groundwater affected by the refinery operations. The active bulk petroleum storage facility and terminal formerly operated as a crude oil storage facility and refinery from 1920 to 1970. We were instrumental in developing an overall exit strategy for the site that involved closing the impoundments, addressing shallow groundwater via monitored natural attenuation, extending an existing vacuum-enhanced hydrocarbon recovery system, and performing active remediation in a nearby residential area.

Award-winning geotechnical solution in Florida
Our use of geotextile reinforcement during capping of a former process pond at the Coronet Superfund Site in Plant City, Florida, won the Award of Excellence from the Industrial Fabrics Association International. We are working with the Florida Department of Environmental Protection and the EPA to investigate and remediate this 1,000-acre former phosphate mining site.

Brownfield remediation excellence in Washington, D.C.
Our work at the new headquarters site for the Department of Transportation included implementing a remediation plan for the 11-acre site at the Southeast Federal Center in Washington, D.C. We worked closely with the project team implementing the remedy, which involved removing over 150,000 cubic yards of contaminated soil and enhancing bioremediation of petroleum in groundwater.

Groundwater remediation in residential neighborhood
We were retained to investigate and remediate impacted groundwater beneath a residential area near a former refinery in Kansas. Investigations had identified both dissolved-phase petroleum and light non-aqueous phase liquid in onsite and offsite groundwater. Our design included integrating seven existing wells, eliminating underperforming wells, and installing 10 new wells. Our evaluation of new and existing data, innovative design approach, and performance monitoring program facilitated rapid regulatory approval for recovery system installation in the residential neighborhood. Work was completed in a manner that minimized interruption to the client, local businesses, and residential properties.

ABOUT WSP | PARSONS BRINCKERHOFF
WSP and Parsons Brinckerhoff have combined strengths and formed one of the world’s leading engineering and professional services consulting firms. This global organization provides services designed to transform the built environment and restore the natural one. The firm’s expertise ranges from environmental remediation and urban planning, to engineering iconic buildings and designing sustainable transport networks, to developing the energy sources of the future and enabling new ways of extracting essential resources. Approximately 34,000 employees, including engineers, techniciens, scientists, architects, planners, surveyors, program and construction management professionals, as well as various environmental experts, work for this dynamic organization in more than 500 offices across 40 countries worldwide.