


BC Today

SERVICE:
Remediation



Stepping Closer to Closure



“This is one of the few projects I’ve worked on where you can actually see an end point to the remediation.”

Brownfield Breakthrough

“The owner wanted a clear path to site regulatory closure—plain and simple,” says Jeff Caputi, Brown and Caldwell’s project director for the remediation and redevelopment of a 186-acre industrial property on the banks of the Raritan River in Woodbridge, N.J. The site owner, EPEC Polymers, Inc., is a subsidiary of one of Brown and Caldwell’s key clients—El Paso Corporation. “Our job was to create a cost-effective plan for site closure that would be accepted by the regulators and by the public; complete the necessary investigations, studies and designs; and obtain the required permits so the property could be remediated and ultimately redeveloped.”

Sounds simple enough, but prior attempts to characterize and clean up the site, dating back to 1979, had been unsuccessful due to the complex nature of contamination from chemical manufacturing operations at the site that began in the early 1900s. The site, in its present condition, was acquired in 1991 by EPEC Polymers as part of a legal settlement.

Earlier efforts resulted in the property being divided into 37 areas of concern with independent investigation and remediation of each one resulting in long cycles of characterization, planning, implementation and monitoring. Progress was slow and difficult to measure, and the contamination continued to spread. “This site has not been active since 1984,” Woodbridge Mayor John McCormac announced at press conference.

“We needed a solution that would work, that we could prove would work, so the property could be put back to beneficial use,” says Sharon Stecker, BC’s Northeast Area Leader. “It took strong leadership within BC to look beyond standard practices, and pull together a team that could get the job done. Fortunately, El Paso Corporation had always wanted the same thing, and we had their support as we explored every option.”



Making commitment to El Paso Corporation's success a priority, Jeff put aside his other responsibilities at BC to lead the project full time. He and Sharon called on scientists and engineers from BC offices nationwide. The technical team, led by chief engineer Steve Kessel and chief hydrogeologist Peter Randazzo, developed an "outside-in" approach that addressed the site in a holistic manner. With comprehensive site modeling, contaminant visualization and analysis, practical application of remedial technologies, and proactive engagement with regulators and public stakeholders, the team was able to develop a well-defined strategy to remediate the entire site, gain approval for the remediation and mitigation plans, and give the owner and potential developers the certainty they needed to move forward with restoration and redevelopment efforts.

Ground was broken on the construction phase of the project in July 2011, and ultimate development plans include an electric generating station in the former manufacturing plant area and a 100-acre waterfront park with a woodland trail, bird blind, tidal boardwalk and public access to the Raritan River.

El Paso Corporation's redevelopment plan has won the support of political, business and environmental leaders. "It's been a fantastic project, and it's been done in record time," said Mayor McCormac.

"I have to give a lot of credit to El Paso for really stepping up and doing the right thing," said Tony Findley, from the New Jersey Department of Environmental Protection's Office of Brownfield Reuse. BC's Steve Kessel agreed. "What the team has done is really amazing. It really couldn't have happened without the commitment of El Paso."

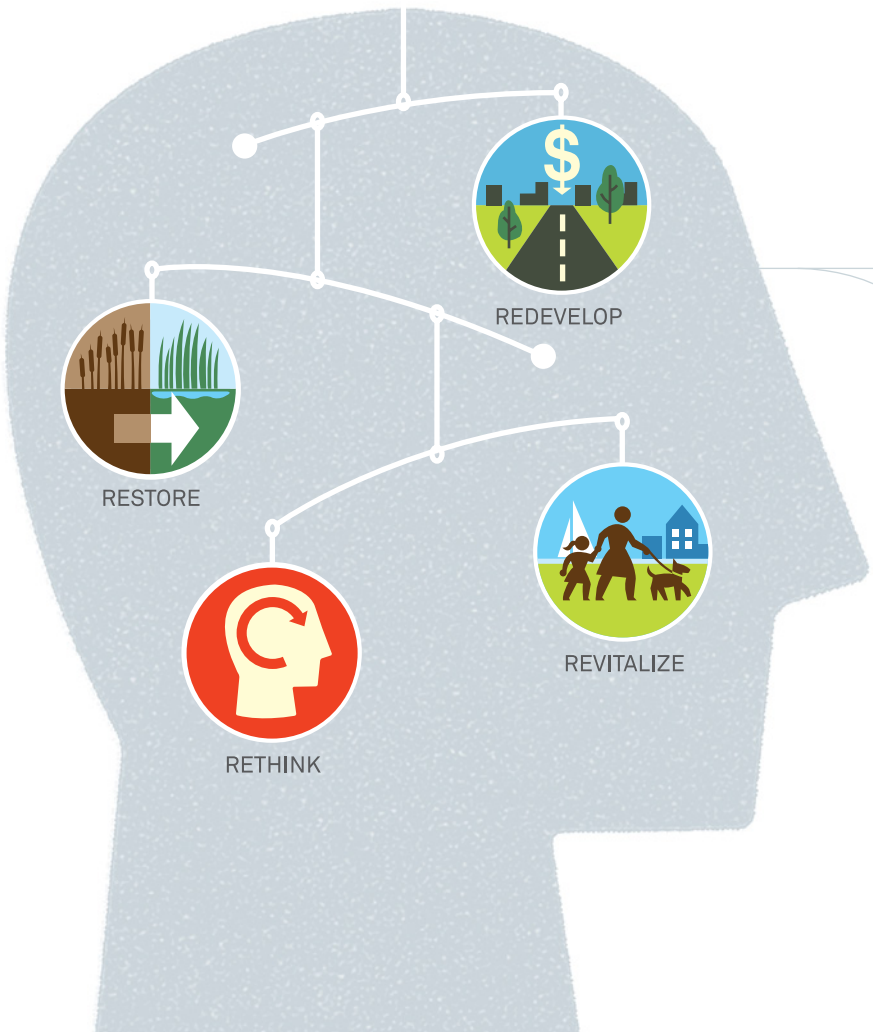
"This is one of the few projects I've worked on where you can actually see an end point to the remediation," Brian Johnson, project manager for EPEC Polymers said. "The city will get the benefit from this for a long time."



● Sharon Stecker, Peter Randazzo, Jeff Caputi and Steve Kessel from BC at the El Paso remediation project in Woodbridge, N.J. ● Remedial construction gets underway. ● A rendering of community access to a restored Raritan River waterfront (courtesy of Great Ecology, Inc).

Thinking Beyond the Basics

Regulatory understanding, technical expertise, and a service-minded professional team are basic requirements for a successful remediation program, but what to do when a complex site requires more to get results? BC remediation professionals share strategies and lessons learned for crafting a faster, more certain exit plan.



RESTORE



SITE:
Ordot Dump Closure

CLIENT:
GBB, Guam Solid Waste
Receivership

HISTORY & CHALLENGES:
Undocumented materials including unexploded ordnance and leachate discharge have frustrated efforts to achieve Subtitle D and Clean Water Act compliance at this 70-year old, 50-acre dump for years.

BREAKTHROUGH STRATEGY:
Developed a prioritized plan to meet a looming closure deadline and converted a portion of the site to a public park. Using landfill gas to generate up to 500 KW of power is an added community benefit.

JEFF'S ADVICE

"Success breeds acceptance. On stalled or troubled sites, the best way to convince regulators and stakeholders to accept your plan is to show early results."



RETHINK



SITE:
49 USAF Bases

CLIENT:
AFCEE

HISTORY & CHALLENGES:
Remediation efforts at 49 US Air Force bases was proving costly and slow with each site approached independently.

BREAKTHROUGH STRATEGY:
Applied Remedial Process Optimization (RPO) to form a single, core team that reviewed and optimized plans for all sites, streamlining planning and permitting and achieving \$30 million in cost savings.

KELLY'S ADVICE

"Communication is often just as important as technical expertise. Sharing information and decision making eliminates overlap and improves outcomes."



REDEVELOP



SITE:
Tempe, Ariz.

CLIENT:
Miravista Holdings

HISTORY & CHALLENGES:

With 90 owners and parcels, attempts to remediate and redevelop this 120-acre former mining, landfill and manufacturing site were stalled by lack of coordination and inconsistent data.

BREAKTHROUGH STRATEGY:

Collaborated with regulators and owners to review all existing data, perform new investigations, and model the entire site to define and implement a master remediation plan.

STEVE'S ADVICE

"Viewing a project as a comprehensive whole involves stakeholders, expands ownership and accelerates progress."



REVITALIZE



SITE:
Former PECO Power Plant
Chester, Pa.

CLIENT:
Exelon Power

HISTORY & CHALLENGES:

Multiple contaminants, regulatory program overlap and community concerns had stalled redevelopment of a 90-acre industrial property on the Delaware River.

BREAKTHROUGH STRATEGY:

Working with the owner, the community and regulators, gained approval of a more aggressive plan and schedule, saving \$25 million and creating a landmark community asset.

MIKE'S ADVICE

"Assume that regulators from different programs can work together to form partnerships that lead to better results."





Creating a Solid Path

by Ed Ricci | Senior Vice President



Time after time, when I talk to clients about complex remediation projects, they want one thing: closure. Closure is good for business and good for the environment. Impaired properties are rethought, restored, revitalized or redeveloped to be made productive once again.

With decades of remediation experience and a passion for solving complex problems across the environmental spectrum—in surface water, groundwater, wastewater, solid waste, energy and sustainability—BC has worked with clients and regulators to find alternative solutions to reach environmental goals. A full toolkit of technology options, along with strategic thinking by experienced professionals, is essential for progress. But as the stories in this issue demonstrate, success often depends on softer qualities—commitment, collaboration, communication, relationships and flexibility—to get the job done, and step closer to closure.

Too often, cleanup programs apply well-known technologies but result in endless cycles of monitoring and adjustment—meeting minimal requirements but getting no closer to an exit. Regulatory priorities can be unpredictable or difficult to interpret, and projects can go on for decades without reaching an environmental or financial target. Many times, a fresh strategy, collaboration with regulators, or a complete rethink is in order to make progress, save money and increase certainty about plans and timelines.

With current economic pressures, exit strategies that provide increased certainty while trimming the time and costs of remediation are needed more urgently than ever. At Brown and Caldwell, that's our specialty.

advancing*collaboration™



Engineers



Scientists



Consultants



Constructors

Brown AND
Caldwell

Find out more at BrownandCaldwell.com