Respect for a Fragile Planet: Remediation

Transforming brownfields into green spaces where other users can thrive plays a significant part in repurposing our planet for a safer, more sustainable future. Harnessing decades of know-how and commitment, FMC continues to develop practices and products that ensure the success of environmental remediation.
“Our commitment to site remediation encompasses full compliance with applicable environmental clean-up laws. Our corporate commitment is to return lands and property to fully functioning, safe and beneficial uses. Our leadership efforts at a variety of sites are achieving transformational results.”

ROBERT FORBES
Director, Environment, FMC

The Remediation Transformation

Decades ago, as we began to transform industrial sites that we previously owned or operated, we decided to establish our leadership role by setting best practices for site reuse. We knew that the more successful chapters in FMC’s history focused on developing close and productive relationships between our business and the communities in which we operate, so we began to assemble teams of community leaders and local regulators to envision future uses for these sites on a case-by-case basis.

Each site was different and each set of remediation challenges unique. By working with local leaders and proactively developing remediation plans accordingly, we established a process for redeveloping sites that others have followed, securing our reputation as a remediation leader in the process. In many ways, the groundwork and mindset for FMC’s sustainability practices was laid in our successful approach to remediation.

Our Values at Work

Remediation transforms not only the physical environment, but can also open new possibilities for an adjacent community. The city of San Jose, California, is one such example – where a neighborhood is realizing the opportunities that a remediated brownfield can offer.

In 1946, FMC purchased 70 acres of agricultural land from the then-rural town of San Jose. The site became a manufacturing facility focused on development and production of various military vehicles under U.S. Department of Defense contracts between 1951 and 1997. The location was a multi-use facility, offering the Department a 1,700-foot track and pond to test the vehicles before they were deployed.

The site closed in 1997, followed immediately by remediation efforts that included soil excavation, soil vapor extraction and groundwater treatment, plus ongoing monitoring and water treatment that continue today. All of this work has transformed the site into a budding mixed-use development that the city is positioning as a future center for entertainment, retail and social use.
Current plans for the land parcel envision construction of a stadium that would serve as home to San Jose's Major League Soccer team, the EarthQuakes. In 2010, developers took the first step in that direction by installing a new natural grass practice field for the team and in 2011 began demolishing and removing former site structures to clear the way for eventual stadium construction.

Additional adjacent property, which required no remediation, was sold and has already been redeveloped for construction of a new home improvement store and restaurant.

**Transforming Healthcare in Princeton**

A very different type of remediation took place at FMC's Chemical R&D Center, which made its home in Princeton, New Jersey, for more than 50 years. The operation included a pilot plant for converting coal into oil as well as a test farm for agricultural products. When we changed our research platform, the facility was downsized. At the same time, Princeton Health Care System (PCHS) needed to expand its capabilities to better serve the needs of its community, but didn't have the necessary space.

FMC sold the entire 160-acre facility to PCHS in 2008. The new owner was on a tight schedule and, naturally, this type of transformation presented many remediation challenges. FMC accelerated demolition and clean-up so that PCHS could meet its construction goals.

Today PCHS's vision for a diverse healthcare campus is nearing reality. Upon completion, the remediated site will feature a world-class, 220-bed medical center featuring rehabilitation services, a fitness center, a park and other amenities.

**Effective Remediation: Science and Service**

In some cases remediation requires the removal of toxic deposits in soil and groundwater. On the foundation of our 60+ years in the peroxygen business, FMC has developed an effective portfolio of peroxygen-based products that treat a broad range of recalcitrant pollutants, including chlorinated solvents, BTEX, petroleum hydrocarbons, PAHs, MTBE, pesticides, and more.
Klozur®, an activated persulfate for *in situ* and *ex situ* chemical oxidation, is FMC’s most popular remediation product. Klozur provides an unmatched combination of oxidative power and control to successfully provide safe and cost-effective treatment for a wide range of contaminants.

In addition to being a supplier of high quality chemicals, FMC also delivers its remediation expertise and experience through a range of support services for site owners, consultants, engineers, contractors and the academic community. We recently acquired Adventus Intellectual Property, Inc., to expand this segment of our business. They offer a field-proven portfolio of remediation technologies for contaminated soil, sediment, and groundwater environments, as well as some of the most cost-effective remediation strategies. Our goal is to provide a flexible range of biotechnology-based remedial solutions to help our customers effectively manage complex, challenging environmental liabilities.

**Sustainable Leadership**

As with all sustainability efforts, our approach to remediation continues to evolve. FMC has participated as a leader at the National Brownfields Conference and is a long-time member of the well-respected Superfund Settlements Project. SSP assists the government in establishing environmental cleanup requirements by providing a voice for parties in the private sector who actually perform the work. These collaborative efforts help to develop national benchmarking and metrics for remediation practices.

Through our expertise and resources, we enable customers and communities to replenish valuable resources, promote economic growth, create jobs and increase the health and safety of the planet and our business. It’s the right remedy – and the right thing to do – for all of us.

Do you have ideas about sustainability at FMC? Please share them at sustainability.info@fmc.com.