LCP Site, Brunswick, Georgia

The environmental cleanup at the former LCP Chemicals site in Brunswick, Georgia, continues to move forward as science and engineering experts develop a detailed design and construction plan to remediate residual contamination in the marsh. This work will build on the substantial sediment dredging that was conducted shortly after the facility shut down.

A pilot study was launched in February 2018 to demonstrate the effectiveness of the thin layer cover, an important part of the U.S. Environmental Protection Agency (EPA) remedy.

MARSH WORK BEGINS WITH PILOT STUDY

The EPA remedy, specified in a Consent Decree between EPA, Honeywell and Georgia Power, will use a combination of technologies: dredging, sediment capping, and a thin layer cover. The thin layer cover was determined to represent the best option for portions of the marsh that are relatively less contaminated and are subject to low levels of erosion.

The pilot study will also provide data to advance the design of the full-scale remedy and enable contractors to develop effective techniques to minimize disruption to the marsh.

In the final design, the thin layer cover will consist of about six inches of clean sand-like material on roughly 11 acres of the marsh that are contaminated with lower levels of mercury and PCBs. The EPA selected thin layer cover for portions of the marsh by considering and balancing several factors, with the end goal of choosing a remedy that is protective of human health and the environment.

In March and April this year, a thin layer cover was constructed in two areas that total about 2/3 of an acre. These areas will be monitored through 2019 to assess performance.

Additional data is being collected that will be necessary to finalize the design. Once construction begins, it will take about two years to complete. The remedy follows two EPA-led public information sessions in Brunswick and years of study and investigation. The remediation will accelerate the marsh's continued recovery, much as the 1999 excavation of 25,000 tons of contaminated marsh flats and 2,650 linear feet of tidal channels improved the ecosystem.

The remediation goal is to reduce the residual risk of mercury (Hg), polychlorinated biphenyls ("PCBs"), lead, and polycyclic aromatic hydrocarbons ("PAHs"). A sampling and verification program will measure progress against the long-term risk objectives established by EPA.

The remedy addresses risk in 24 acres of marsh and will use a mix of technologies:

- Dredging higher concentrations in creeks;
- Capping lower concentrations to isolate contaminants; and
- Placing a thin layer cover in areas with low concentrations to reduce those concentrations.

The anticipated timeline:

2017 – 2020	Pilot study and design of marsh remediation
2020 – 2022	Implementation of remedy
2022 – ongoing	Long-term monitoring

History and Milestones

The LCP property was the location of various industrial operations over the last 75-plus years. Linden Chemicals and Plastics, Inc. (LCP Chemicals), the last operator at the site, declared bankruptcy in 1994. Following LCP Chemical's bankruptcy, the site was placed on the federal Superfund list. Honeywell, Atlantic Richfield, and Georgia Power all had operations at the site at some period during its history.

In the late 1990s, under the supervision of federal and state authorities, the most contaminated soils were excavated. Approximately 225,000 tons of contaminated soils and materials across more than 40 acres of upland area were excavated and disposed of in approved, off-site landfills. Thirteen acres of impacted marsh flats adjacent to the former industrial site were removed.

Continuing to Address Groundwater and Soils

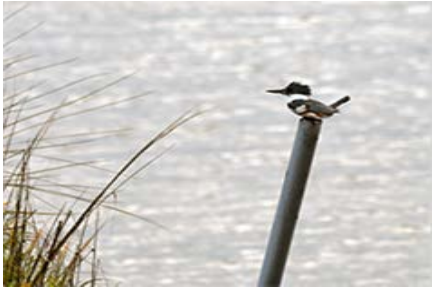
After the property was designated a Superfund site in the 1990s, EPA organized the 681 acres of tidal marsh and 120 acres of land into three sections called "operable units" or "OUs":

- Marsh (OU1);
- Groundwater (OU2); and
- Upland soils (OU3).

Work on assessments for the groundwater and upland soils will continue in parallel with the marsh remediation.

Groundwater

More than 150 groundwater monitoring wells have been installed at the site. Monitoring has shown that local drinking water supplies are unaffected by the conditions at the site.



In addition, Honeywell neutralized a localized groundwater condition referred to as the "caustic brine pool" through an innovative and sustainable treatment technology. That technology injected carbon dioxide into the sub-surface to reduce the pH in the pool and to precipitate the mercury. The

treatment is now complete. Testing has shown significant improvement with nearly all areas achieving substantial pH and mercury reductions.

Upland soils
The next step will be to complete a feasibility study that will look at different approaches for remediating the upland soils not addressed by the remedial action completed in the 1990s. The PRPs are awaiting EPA approval before moving forward.

Contact Us
Honeywell is committed to timely and informative communications with the community. Anyone who has questions or would like more information may visit:
http://www.lcpbrunswickcleanup.com/content/Remediation/

Or, please contact Betsey Weltner: Betsey@Weltner.com or 404-304-3304

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