GEC
Glynn Environmental Coalition

The report is produced by an independent technical advisor to interpret and help the community understand technical information about our Superfund Sites.

EPA Releases the Remedial Design Work Plan for the LCP Chemicals Site Marsh

Aerial view of the LCP Chemical Site Photo by James Holland

Site Background

The LCP Chemicals Superfund site consists of approximately 850 acres, the majority of which is a tidal marsh. From the 1920s through 1994, many industries (i.e. oil refinery, electrical power, paint/varnish, and a chlor-alkali chemical plant) used this site. These industries polluted the site with polychlorinated biphenyls (PCBs), mercury, lead, dioxins, and cancer-causing hydrocarbons. All of these contaminants are still at the site as runoff and are impacting the soil, groundwater, tidal marsh sediment, marsh plants and animals, including dolphins and Least Terns. Cleanup for the site is being managed in three parts: the estuary, the groundwater, and the upland soils and sediments. The Work Plan for the Remedial Design for the estuary was released in January 2018.

Historical Highlights

- **August 1980: Site discovery**
- **1995: Remedial Investigation/Feasibility Study begin**
- **1996: Site added to National Priorities List**
- **July 2011: Estuary Human Health Baseline Risk Assessment**
- **June 2014: Estuary Feasibility Study**
- **November 2014: Estuary Proposed Plan**
- **October 2015: Record of Decision /Responsiveness Summary**
- **July 2016: Consent Decree and Statement of Work**

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This update and more information about Glynn County Superfund Sites at:

www.glynnenvironmental.org

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Superfund Process: Where are we now at the LCP Chemicals Site?

Superfund is the federal law to clean up contaminated places, the process is displayed above.

The **Remedial Investigation** for the marsh involved testing the site and the results showed that there are health risk to humans, plants, and animals from the harmful chemicals at the site. Thus, the site must be cleaned up. The **Feasibility Study** for the marsh looked at cleanup options to figure out the best way to protect human health and the environment from the chemicals in the marsh. The cleanup options were compared to each other. These steps were finished at LCP in 2014.

EPA selected a cleanup plan, in December 2014, known as the **Proposed Plan** for the LCP Chemical site.

Members of the Brunswick community commented on this plan before mid March 2015. EPA wrote the **Record of Decision** in 2015, after the comment period closed. The Record of Decision states generally how a site will be cleaned up and the long-term monitoring plan.

The **Consent Decree** and **Statement of Work** were released in July 2016 and finalized in court a year later, in fall 2017. These documents explain the process and requirements for carrying out the cleanup by the parties responsible for polluting the site, Honeywell International, Inc. and Georgia Power Company.

The **Remedial Action Plan** is under way, starting with planning the work of the clean up and the pilot project.

Remedial Design Work Plan

The cleanup discussed in the latest document– the Remedial Design Work Plan is the cleanup option chosen in the Record of Decision and the Proposed Plan. The issues and problems with the cleanup plan previously identified by the community remain.

Summary of the document EPA released

The document that EPA released to the public in early 2018 is the Remedial Design Work Plan. This report describes how the companies' consultants will plan the cleanup of the marsh, starting with a pilot project for the thin layer of sediment on the marsh. The final report will contain detailed plans for all the work at the marsh.

There are 11 topics that will be presented in the design of the cleanup, and the design will be done in two phases, which is normal for such documents. The first phase will be done when the consultants have half (50%) of the work described, and the final report will explain how the entire project will be done. The topics include how the sediment will be removed in some places, how they plan to control sediment in the water, and the details of placing the thin layer of material on the marsh .

The schedule for the work that is presented in the Work Plan will take many months to finish before EPA and the companies know if the pilot project works the way they plan. They hope to start in the spring of 2018. The project has to run for at least two years before they know if it works. Then they have to collect samples and other information, analyze that information and report to EPA. The official schedule in the Work Plan shows that the work began at the end of August in 2017 and will continue until July 2020. During this 3 year period, the consultants will produce a series of reports on the specific details of the cleanup.

Figure 1. Marsh Site at the LCP Chemicals Superfund Site

Issues with the Work Plan

Environmental Stewardship Concepts has covered many of these topics in previous Technical Assistance Reports and comments submitted to EPA on the marsh site cleanup.

Pilot Project in Contaminated Marsh Areas

During the public comments on the clean up plan for the LCP marsh site, GEC and ESC raised concerns about several aspects of the plan. Three specific issues concern the plan to place a thin layer of clean material on top of the contaminated marsh. This part of the work is called a thin layer, and the Work Plan for the Remedial Design has a pilot project to test out the thin layer cap in the marsh. The concerns for the thin layer cap include:

- The marsh grass now in the marsh will continue to grow and can collect mercury from the sediment into the roots and spread the mercury around;
- Animals that burrow in the mud, such as fiddler crabs, will burrow into the thin layer and disturb the contaminated sediments below;
- Severe weather, such as floods, hurricanes and high storm tides can erode the loose materials and even the deep marsh, destroying the thin cap and moving around the contaminated sediment below.

The clean up plan leaves a lot of contamination in the marsh and intends to cover it up or let the sediment that comes in naturally cover it up.

EPA needs to insist that the pilot project monitors the issues raised above- the mercury in marsh grass, burrowing and erosion by storms, but the document does not say what or how this monitoring might be done.

The pilot project will be done on two areas of 1/3 acre each, totaling 2/3 acre. Different materials will be applied to each of these plots- one will use sand and the other will use silt and clay. Both areas will have about 9 inches of material applied to the surface and then consultants will see what happens over a period of 2 years. At the end of one year, and at the end of two years, consultants for the company will examine the marsh and take some samples to check if the pilot project worked as hoped. During this time, the report indicates that the plan is to check if marsh grass is affected.

The report indicates that the thin layer will be designed to withstand such things as extreme weather and boats, but does not say anything about animals and plants that can disrupt the sediment cap.

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Technical Assistance Report: EPA Releases the Work Plan for the Remedial Design for the LCP Chemicals Site Marsh

Aerial view of the LCP Chemicals site prior to demolition of the buildings.
Photo by Daniel Parshley

The cleanup now being planned is the one that was in the Proposed Plan and Record of Decision. The community raised a number of issues and problems with the cleanup plan that remain. The work is supposed to start in spring 2018 with a pilot project to place a thin layer of sediment .