

July 2008

Licking River Bank Stabilization Project

Ohio EPA provided \$2.8 million to the U.S. Army Corps of Engineers for a Licking River bank stabilization project at the site of the former Newark Processing facility.

Newark Processing was a secondary aluminum recycling facility that began operating in 1980 on a site adjacent to the Licking River.

The facility processed aluminum dross, a byproduct of primary and secondary aluminum smelting. Dross consists of varying concentrations of aluminum, aluminum oxides, ammonia, free metals and salts.

During the 1980s and 1990s, Ohio EPA conducted several environmental investigations at the site, and took enforcement action in 1988.

The facility ceased operations in 1996 after filing for bankruptcy. Ohio EPA received approximately \$300,000 from the bankruptcy. The city of Newark used the funds to conduct a site evaluation.

During the past several years, the riverbank directly behind Newark Processing has been rapidly eroding as a result of unstable aluminum dross left on the site.

Ohio EPA estimates that approximately 20,000 square feet of waste has eroded into the river since 2004.

The waste is not as resistant as native soil and prior attempts by Newark Processing to stabilize the bank were not successful.

The project stabilized approximately 1,600 feet of bank where erosion has been most severe.

The scope of work included:

- removal of vegetation, rubble, drift and other debris;
- placement of approximately 18,000 tons of stone for the river bank;
- placement of approximately 1,496 cubic yards of stone for the access road; and
- placement of about 425 cubic yards of granular fill

Initially, crews had trouble gaining access to the site, so construction had to be postponed from Spring 2007 to Spring 2008. Work began in mid-March, with a completion goal of August. The project finished in mid-July 2008.

The stabilization of this bank will help protect the environmental integrity of the Licking River and help the local economy by getting this site ready for redevelopment.



These are photos of the Licking River bank behind the Newark Processing facility. The extent of erosion is clearly visible when comparing the photo on the left (taken in May 2006) to the photo on the right (taken in February 2007). Since these photos were taken, the wellhead visible in these photos has been lost to erosion.

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Artist's rendering of complete bank stabilization project.

Funding for this project came from the state's Hazardous Waste Cleanup Fund, which includes penalties paid for hazardous waste violations, solid waste tipping fees and cost recovery from other cleanup sites. Eligibility criteria for funding includes:

- the party responsible for the pollution is not available or not able to pay for the cleanup;
- an analysis of the site clearly shows what cleanup is needed; and
- the cleanup is affordable with the funding available.

Ohio EPA targeted the Licking River Bank Stabilization Project as a priority project in 2005. The Agency approached the U.S. Army Corps of Engineers for assistance due to the Corps' expertise with designing and constructing stream bank stabilization projects. The U.S. Army Corps of Engineers responded enthusiastically and the parties proceeded to formalize the details of the project.

The project was completed for less than \$2.3 million – an estimated savings of approximately 20 percent. These savings allowed Ohio EPA and the Corps to also embark upon a second stabilization project along nearby Shawnee Run to further benefit the Licking River.

For more information and photographs of the Licking River bank stabilization project, log on to: www.epa.state.oh.us/pic/media/licking_river2008.html
