

**ALLIED PAPER/PORTAGE CREEK/KALAMAZOO RIVER SUPERFUND SITE:  
Plainwell PCB Cleanup Progress and Updates**

Region 5  
Office of Public Affairs (P-19J)  
77 W. Jackson Blvd.  
Chicago, IL 60604

United States  
Environmental Protection  
Agency



**FIRST CLASS**

**Plainwell PCB Cleanup  
Progress and Updates**

Informational open houses  
Wednesday, Nov. 7  
(details inside)



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Environmental Protection  
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# Plainwell PCB Cleanup Progress and Updates

**Allied Paper/Portage Creek/Kalamazoo River Superfund Site**  
Kalamazoo, Michigan October 2007

## Informational open houses

EPA is holding two identical open house sessions Wednesday, Nov. 7, so you can learn more about the latest developments in the Kalamazoo River cleanup.

Both will be at the Comfort Inn, 622 Allegan St., Plainwell, Mich. You may attend either session, from 1:30-3 p.m. or 6:30-8 p.m. Formal presentations will be at 1:45 p.m. and 6:45 p.m.

EPA representatives and other officials will be available to discuss site activities with you individually. If you need special accommodations, contact EPA Community Involvement Coordinator Don de Blasio (see below) by Oct. 31.

## Contact EPA

For more information, or if you have comments about the Kalamazoo River cleanup, contact:

### Don de Blasio

Community Involvement Coordinator  
EPA Region 5 (P-19J)  
77 W. Jackson Blvd.  
Chicago, IL 60604-3590  
312-886-4360 or 800-621-8431,  
Ext. 64360, weekdays 10 a.m. to  
5:30 p.m.  
deblasio.don@epa.gov

## For more information

You can read more information about the Kalamazoo River cleanup online at: [www.epa.gov/region5/sites/kalproject](http://www.epa.gov/region5/sites/kalproject)

The project to remove PCB-contaminated sediment (mud) from the Kalamazoo River's Plainwell Impoundment is on schedule. Workers dredged up 17,325 cubic yards, or 495 truckloads, of sediment through Oct. 3.

The Kalamazoo River Superfund area stretches from Saugatuck on Lake Michigan to the Morrow Dam. Contractors hired by Millennium Holdings LLC and Georgia-Pacific LLC are doing the work. The two companies are legally responsible for the pollution.

Polychlorinated biphenyls, better known as PCBs, are chemical compounds with common industrial uses. At high concentrations and exposures they can cause illness in humans and wildlife (see box on Page 3).

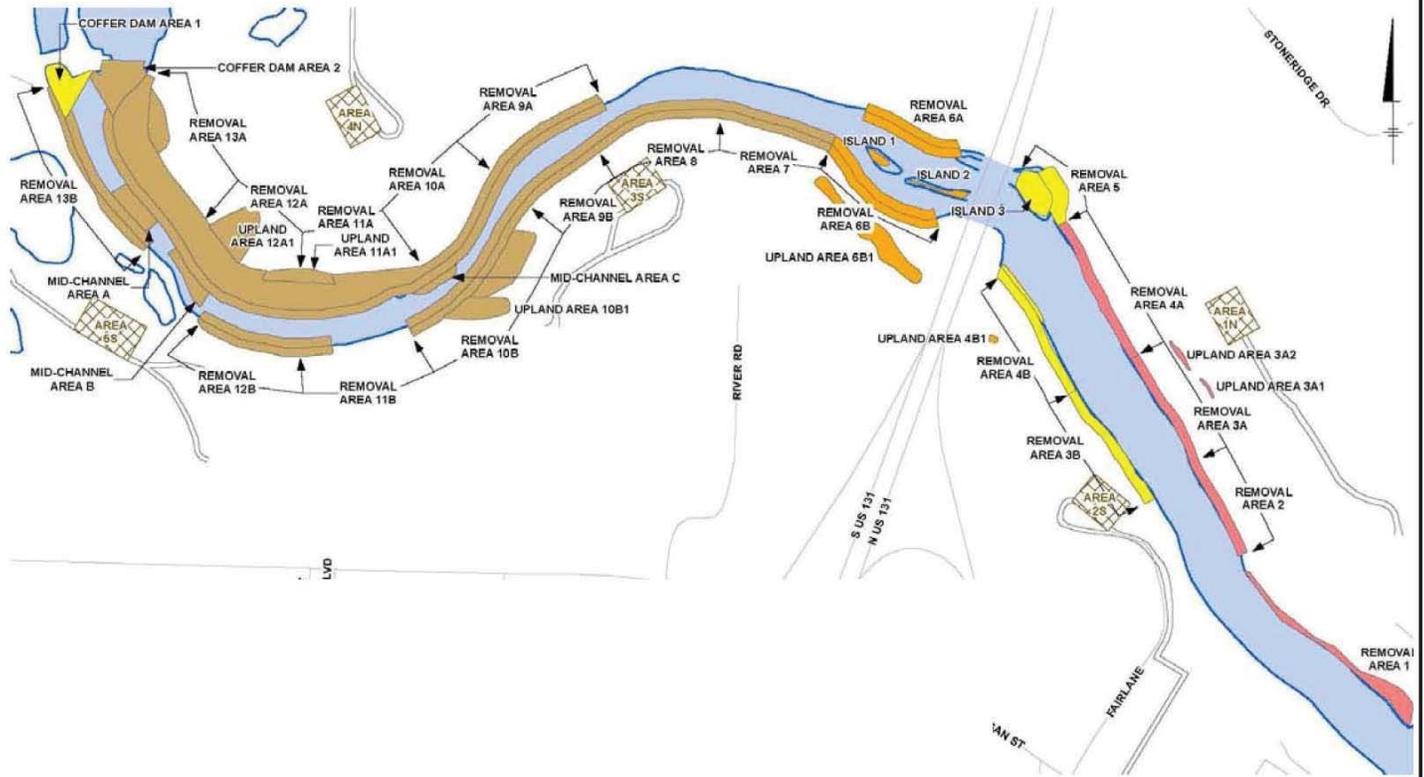
So far, workers have removed sediment and restored the banks along some 6,800 feet of river bank. This includes removal areas 1, 2, 3A and B, 4A and B, 5, and 6A and B (see map on Page 2). They have started work in the Phase 1 coffer dam area with construction of the western water diversion structure (Phase 1 coffer dam), which will maintain the current flow of the river over the eastern spillway area. That allows workers to dredge behind the dam, build a water control structure and remove the dam in the former powerhouse area.

Under the federal Toxic Substances Control Act, U.S. Environmental Protection Agency regulates the use, storage and disposal of sediment with PCB concentrations exceeding 50 parts per million, or ppm. One part PCB per million parts sediment is a tiny amount, similar to one second in 12 days. So far, workers have sent 2,345 cubic yards of sediment with PCBs above 50 ppm to Environmental Quality Co.'s Wayne Disposal Landfill in



*Dredging operations on the Kalamazoo River downstream of the US-131 bridge.*

## Targeted Removal Areas—Former Plainwell Impoundment



Map courtesy of the Kalamazoo River Study Group

Belleville, Mich. Another 14,980 cubic yards of sediment, considered non-hazardous at less than 50 ppm, went to Allied Waste's C and C Landfill near Marshall, Mich.

Dredging will cease during the winter. When it resumes in the spring of 2008, all sediment will be sent off-site to approved facilities for disposal. Millennium Holdings and Georgia-Pacific agreed to that plan earlier this year. The two companies will recommend, for EPA approval, commercial disposal facilities with the proper permits.

Eventually the dredging project will remove about 132,000 cubic yards of sediment containing 4,400 pounds of PCBs. The estimated cost is \$30 million. The project is expected to continue through the fall of 2008.



Silt screens keep contaminated mud under control

## Mill updates

Removal work was completed in June at the Georgia-Pacific Kalamazoo Mill and former Hawthorne Mill. An inspection was conducted in July. EPA and state partner Michigan Department of Environmental Quality are reviewing the final project report that was submitted in September.

At the Plainwell Mill, preliminary work (removing trees and shrubs) has begun on a project to remove paper residuals from the banks of the mill. MDEQ, EPA, city of Plainwell and Weyerhaeuser are still discussing the details of the plan for this work. They are also working on the scope of a study to determine the nature and extent of contamination at the mill.

## Kalamazoo River/Portage Creek supplemental cleanup studies

A February legal agreement requires additional study of the Kalamazoo River and Portage Creek. Planners divided the river into seven areas for the additional investigation. Area 1 consists of the river between Morrow Dam and Plainwell, and the creek between Cork Street and the river. Work started in this area the week of Sept. 24.

## Other cleanup actions

In addition to the Plainwell Impoundment cleanup, developments on other parts of the Kalamazoo River site this summer include:

- EPA is reviewing an MDEQ study on the nature and extent of contamination at the Allied Paper Landfill. When it is completed at the end of this year, those responsible for the pollution will use it to develop cleanup alternatives. After studying the alternatives, EPA will issue a document called a “proposed plan.” EPA will then seek comments from the public.
- Willow Boulevard/A-Site Landfill will be capped and a monitoring network installed. EPA is working with the responsible parties about designing and implementing a final cleanup plan for the work that is expected to begin in 2008.
- Weyerhaeuser is near completion on reshaping the eastern slope of the 12th Street Landfill. This work was done under Weyerhaeuser’s agreement with EPA to clean up this part of the Kalamazoo River site. The reshaping will protect the landfill and prevent erosion when the river is rerouted to its original channel – part of the overall design for the Plainwell Impoundment. Weyerhaeuser dug up contaminated sediment from the channel next to the landfill, placed the sediment in the landfill and re-graded the eastern edge of the facility that lies alongside the

channel. On top of this new slope, Weyerhaeuser constructed erosion control measures that will contain the contaminated materials in the landfill when water is flowing along the bank of the 12th Street Landfill.

- Georgia-Pacific completed the removal of hazardous waste from certain areas of its Kalamazoo mill and sediment from nearby floodplains. Most of this waste was consolidated with the material in the Willow Boulevard/A-Site Landfill and will be capped as part of the final cleanup for that part of the Kalamazoo site.



*At left, river-run rock helps create a stable shoreline along portions of the Kalamazoo River with higher water velocities. Native vegetation is planted, center, to return the shoreline to a more natural appearance.*

## What are PCBs?

PCBs are a group of toxic chemicals that were produced in the United States between 1929 and 1978 for use primarily as industrial coolants, insulators and lubricants. PCBs were used in hundreds of industrial and commercial applications, including carbonless copy paper – which contributed to the Kalamazoo River contamination – and many other applications because they were stable and resisted wear and chemical breakdown.

The same chemical properties that made PCBs useful to industry are now responsible for persistent levels of PCBs remaining in the environment, including the Kalamazoo River. PCBs last in the environment because they adhere readily to organic material in

sediment and soil and tend to build up in the fatty tissue of fish and other animals. PCBs have been demonstrated to cause a variety of adverse health effects in animals. PCBs cause cancer and may affect the immune, reproductive, nervous and endocrine systems. Studies suggest PCBs have similar effects on people.

The different health effects of PCBs may be interrelated, as alterations in one system may have significant implications for other systems of the body. The potential adverse environmental and health effects of PCBs were not well understood until 1977, when the government banned most uses of PCBs.

## On the Web:

[www.epa.gov/region5/sites/kalproject](http://www.epa.gov/region5/sites/kalproject).