Fox River PCB cleanup

National Sediment Forum

James Hahnenberg
U.S. EPA
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Topics today

• Cleanup update

• “Issues”
OU 1
2004 – 2009
790,000 cy
$100 million
COMPLETED

OU 2 - 5
2009* – 2017
7.2 million cy
$650 million

* Phase 1 in 2007
The plan

- Dredging/disposal
- Caps
- Sand covers
- Cap monitoring & maintenance
OU 2 - 5 Cleanup plan

Dredging

Dredge and Cap

Cap (sand and gravel)

Cover (sand only)

Courtesy of Tetra Tech
Dredging
Dredge and cap
Cap (sand and gravel)
Cover (sand only)

Dewatering & water treatment facility

OU 2 - 5 Cleanup plan

Courtesy of Tetra Tech
Dewatering and water treatment facility

Photo courtesy of TetraTech
Fox River dredging to begin this week

BY TONY WALTER • TWALTER@GREENBAYPRESSGAZETTE.COM • APRIL 27, 2009

The Lower Fox River cleanup is expected to start making history this week.

The dredging, dewatering and transporting of PCB-contaminated sediment were scheduled to begin today, but a spokesman for the three major paper mills involved in the project said the work will probably start Tuesday instead.

Tetra Tech Inc., the general contractor hired by the paper mills to complete the work, was still without a long-term contract Friday.

The eight paper mills named by the U.S. Environmental Protection Agency as potential responsible parties in polluting the river, have been ordered by the government to start the dredging by Friday.

A worker welds at the dewatering facility at 1811 State St., Green Bay, in preparation for the Fox River PCB dredging project, which is scheduled to begin this week prior to the federal government’s Friday deadline. H. Marc Larson/Press-Gazette
Dredge cutterhead

Photo courtesy of Boldt
Pre-thickener

Photos courtesy of TetraTech
Plate and frame presses to dewater dredge slurry

Photo courtesy of Boldt
Sediment storage area

Green Bay Press Gazette photo
Loading

Disposal

Photo courtesy of Boldt
Sediment disposal at landfill

Photo courtesy of Boldt
2009 dredging progress

• As of 10-3-09: 407,000 cubic yards

• Projected to November 14th: 519,000 cubic yards*
  (volume of ~7 Walmarts)

* ~15% more than 2009 target
“Issues”

• Boater safety
• Noise from pipeline booster pumps
• Truck traffic to disposal facility
• Navigation dredging
In-water pipeline from dredge to dewatering facility
CONSTRUCTION
ZONE
STAY IN CHANNEL
BETWEEN THE RED AND GREEN BOUYS
GO SLOW

Photo courtesy of Boldt
Boating incidents

Photo courtesy of TetraTech
Noise from dredge pipeline pumps

Photo courtesy of Boldt
Monitoring truck speed
Port of Green Bay concerned that order to halt dredging of PCBs on Fox River will harm shipping

BY TONY WALTER • TWALTER@GREENBAYPRESSGAZETTE.COM • OCTOBER 14, 2009

The U.S. Department of Justice has ordered the Army Corps of Engineers to halt dredging in the 3.3-mile Fox River navigational channel through downtown Green Bay, a move it says will prevent the spread of PCB sediment, but that port officials say could seriously hurt the shipping business.

County officials say they also are concerned that the Fox River cleanup project's final design plan, expected to be completed in early 2010, might include placing sand and gravel over contaminated river bottom in the two places where large ships need to turn around, which could hinder their movements.

But Bruce Baker, deputy administrator of the DNR's water division, said
Benefits/results
Before | After
---|---
3.7 | 0.22

94% reduction

Goal: 0.25 ppm
Reduce PCB exposure

- Human health
  - Cancer
  - Non-cancer
- Ecological
Prognosis appears good for Fox River

Despite pollution problems, the Fox River has attracted development, including luxury housing. The boat in the foreground, part of the massive cleanup project along the 39-mile lower segment of the Fox, carries booster pumps that send contaminated river sediments to a processing plant.

As the cleanup of toxic chemicals along the Fox River prepares to pause for winter, the project is ahead of schedule - but the price tag has grown.

By Lee Bergquist of the Journal Sentinel

Posted: Sept. 29, 2009