EPA RELEASES CLEANUP PLAN FOR KANAWHA RIVER

Kanawha River Site, Nitro, West Virginia **August 2016**

Proposed Cleanup Plan Released

The U.S. Environmental Protection Agency has issued a proposed plan to address the 2,3,7,8-TCDD dioxin contaminated sediment in the Kanawha River. The plan, called the Engineering Evaluation and Cost Analysis (EE/CA), lays out six alternatives for addressing the contaminated sediment ranging from "no action" to limited dredging.

This EE/CA addresses the dioxin in the river sediment and is the final step in EPA's efforts to clean up the river. Previous EPA actions have reduced the load of dioxin into the river. The main concern is that dioxin does accumulate in fish. Dioxin accumulates throughout the food chain and the concentrations of dioxin increase with the size of the fish.

Can I Eat The Fish?

The fish can be eaten in limited quantities, as specified by West Virginia Department of Health and Human Resources's fish consumption advisory. For more information about fish consumption quantities, see http://www.wvdhhr.org/fish/Current_Advisories.asp).

EPA's Preferred Alternative

EPA's preferred alternative described in the EE/CA is Alternative 4. Alternative 4 includes:

Limited Armored Capping - The contaminated sediments will be covered with a layer of sand and thick fabric (geotextile fabric). Large stones, called rip rap, will hold the cap in place. Contaminated sediments under the caps will not be able to mix back into the river water. (See diagram on last page)

Institutional Controls - The U.S. Army Corps of Engineers has agreed to restrict dredging in the capped areas of the river.

Monitored Natural Recovery - As the river flows, soil from upstream will settle on top of the older, contaminated sediment. Over time this will create a natural barrier and lower the amount of contaminated sediment that can get mixed back into the river. Samples will be taken to confirm the effectiveness of natural recovery.

Alternative 4 will also reduce the amount of dioxin that fish can absorb.

EPA Seeks Public Comment on the EE/CA

You are invited to submit written comments on the EE/CA during the 30-day public comment period:

August 25, 2016 to September 24, 2016

Submit all comments to:
U.S. EPA
Region 3 Office
1650 Arch Street
(Mailcode 3HS32)
Philadelphia, PA 19103
Attn: Melissa Linden, OSC

Or via e-mail to:
linden.melissa@epa.gov

To review the entire EE/CA please visit:
http://www.epaosc.org/kanawhariverdioxin

A copy of the EE/CA is also available at the

Cross Lanes Library
5449 Big Tyler Road
Cross Lanes, WV 25313

Or visit:
https://semspub.epa.gov/src/document//03/2231291

AR300004

About the EE/CA

The EPA signed a Consent Order with Monsanto and Pharmacia Corporation in March 2004 to develop the EE/CA. EPA and West Virginia Department of Environmental Protection (WVDEP) directed work for developing the EE/CA.

The EE/CA studied a 14-mile stretch of the Kanawha River from approximately Mile Point (MP) 46 to MP 32 near the Winfield Dam. The study focused on the area near the Flexsys/ Solutia plant since it was the greatest source of dioxin in the river.

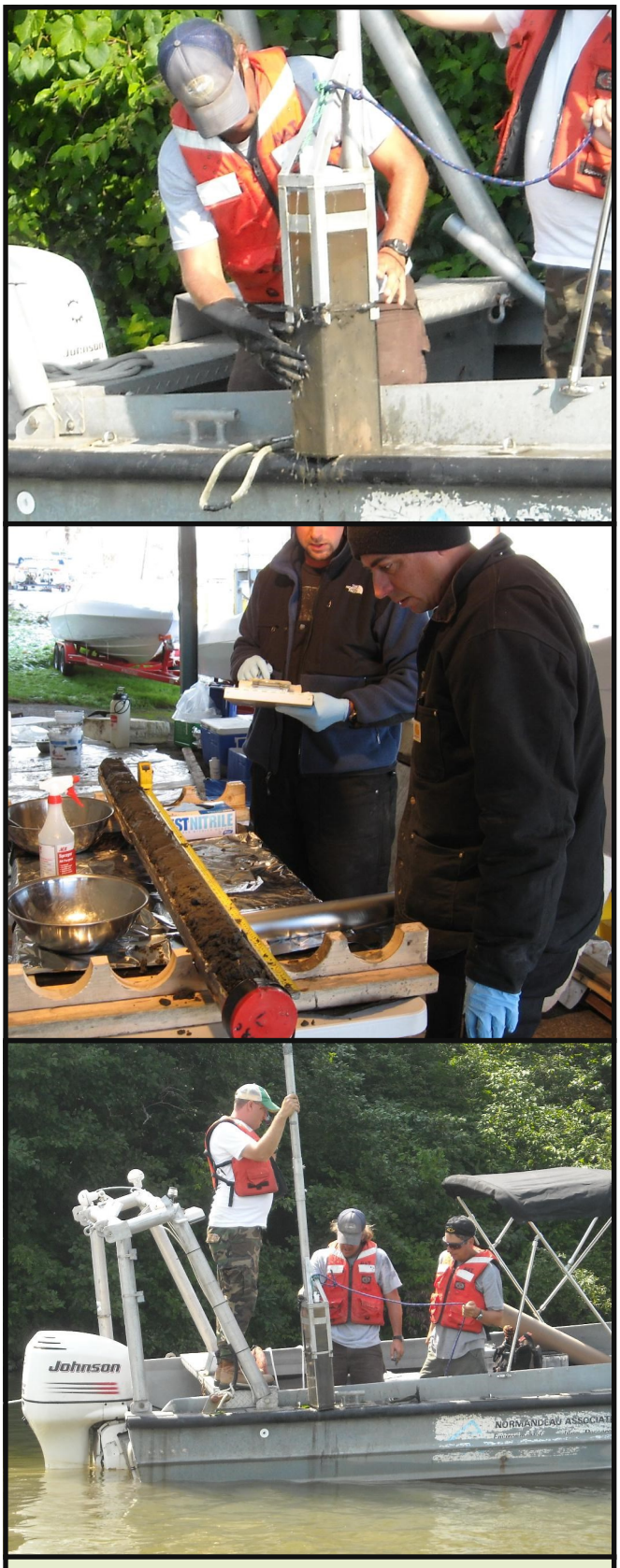
The EE/CA also assessed the dioxin risk to human health and the environment. Six alternatives to address the contaminated sediment were then developed and evaluated to establish the preferred alternative.

Past Cleanup Actions

EPA and WVDEP conducted numerous cleanup actions along the river to prevent dioxin from entering the river, including actions at Heizer Creek Landfill, Poca Dioxin Landfill, Armour Creek Landfill, Old Monsanto, AES Old Monsanto Property, Manilla Creek Landfill, Flexsys Solutia Plant, Fike Superfund Site, Nitro Sanitation and the former A.C.F. Industries.

Site Background

The Kanawha River Site is contaminated with dioxin generated from the past production of 2,4,5-trichlorophenol. The compound was then used to make Agent Orange between1948 to 1969 at Old Monsanto's Nitro, West Virginia, facility located along the banks of the Kanawha River.



Top: Erosion testing of sediments in the Kanawha River. **Middle:** Sediment core harvesting activities. **Bottom:** Sample collection activities.

Your Role In The Process

The public is encouraged to review the EE/CA and submit comments or concerns to the EPA during the **public comment period which runs from August 25, 2016—September 24, 2016.**

To review the EE/CA online, please visit:

http://www.epaosc.org/kanawhariverdioxin

Or In Person At:

Cross Lanes Library
5449 Big Tyler Road Cross Lanes, WV 25313

Or Visit:

https://semspub.epa.gov/src/document//03/2231291

Comments on the EE/CA may be submitted by postal mail or e-mail postmarked no later than September 24, 2016, to:

U.S. Environmental Protection Agency
Region 3 Office
1650 Arch Street (Mailcode 3HS32)
Philadelphia, PA 19103
Attn: Melissa Linden, OSC

Email:
linden.melissa@epa.gov

Contact Us

Carrie Deitzel
Community Involvement Coordinator
EPA Region 3
215-814-5525
deitzel.carrie@epa.gov

Melissa Linden
On-Scene Coordinator
EPA Region 3
215-814-3263
linden.melissa@epa.gov

Resources

For more information about the Kanawha River Dioxin Site, please visit:

https://www.epaosc.org/kanawhariverdioxin

For more information about EPA's Superfund Program: http://www.epa.gov/superfund

This Is Superfund: A Community Guide to EPA's Superfund Program
http://semspub.epa.gov/work/11/175197.pdf

Alternative 4 Cap Design

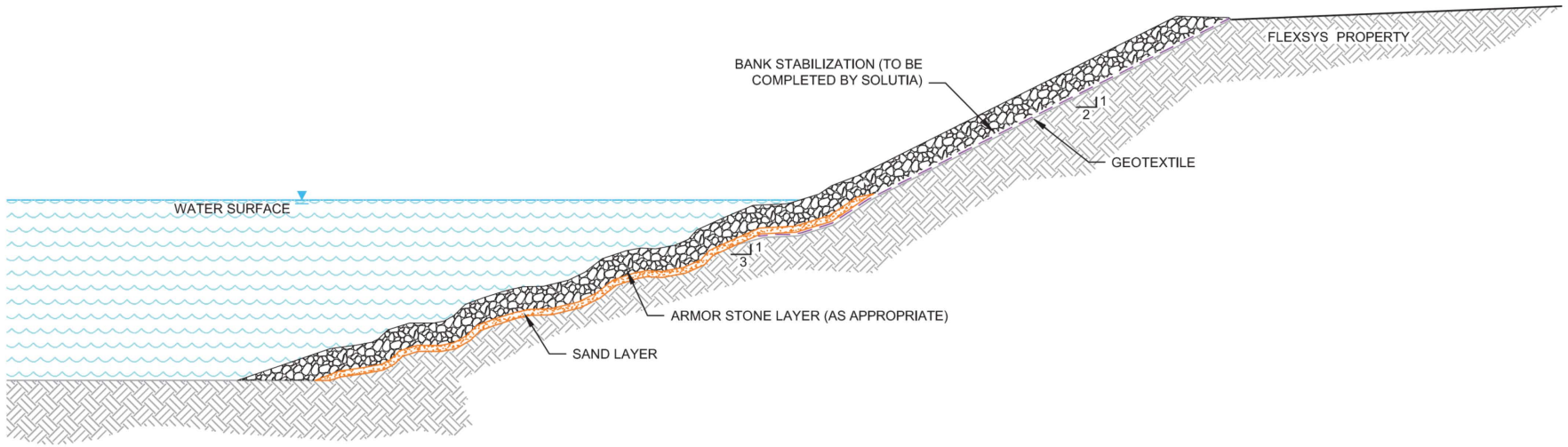


figure 7.5

CONCEPTUAL CAP CROSS-SECTION - REMOVAL ACTION ALTERNATIVE 4
EE/CA REPORT
Kanawha River, West Virginia
AR300007

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