

**United States Environmental Protection Agency
Region V
POLLUTION REPORT**

Date: Friday, January 8, 2010

From: Sam Borries, OSC

Subject: Completion of Season One Activities

Plainwell No. 2 Dam

Plainwell, MI

Latitude: 42.4279865

Longitude: -85.6292009

POLREP No.:	3	Site #:	059B
Reporting Period:	11/1/2009 - 11/21/2009	D.O. #:	
Start Date:	8/5/2009	Response Authority:	CERCLA
Mob Date:	8/5/2009	Response Type:	Time-Critical
Demob Date:		NPL Status:	NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

Former industrial and waste water treatment practices, that took place from approximately the 1950s to the mid-1970s, released polychlorinated biphenyls (PCBs) into the Kalamazoo River in southwest Michigan. At least one source of the PCBs was the waste water released from the paper mills operating in the Kalamazoo, Michigan area; specifically, from the processing and de-inking of carbonless copy paper containing PCBs. These paper mills released PCBs into the Kalamazoo River system, some of which deposited in the area of the river known as the Plainwell Impoundment (which was created as a result of the building of a hydroelectric dam on the Kalamazoo River in the early 1900s).

Beginning in 2007 and continuing through 2008, investigations in Area 1 of the Kalamazoo River OU, including Plainwell Dam #2, were conducted as part of the Supplemental Remedial Investigation/Feasibility Study (SRI/FS). Phase 1 of that work involved the delineation of frequently inundated areas of the floodplain upstream of Plainwell Dam #2. Phase 2 of the investigation involved the sampling of Plainwell Dam #2. Results of the Phase 2 investigation of Plainwell Dam #2 found elevated levels of PCBs in bank and floodplain soils and, to a limited extent, in in-stream river plain soil. Samples were collected at 94 locations from a uniform grid in the floodplain, including in-stream islands. A total of 302 individual samples were collected from the floodplain, with total PCB concentrations ranging from non-detect to 60 milligrams per kilogram (mg/kg). Bank soil samples were collected from 78 locations. A total of 265 samples were analyzed for PCBs, with total PCB concentrations ranging from non-detect to 45 mg/kg. River plain soil samples were collected from 60 locations, resulting in 267 samples analyzed for PCBs. PCB concentrations in the river plain soil ranged from non-detect to 100 mg/kg. A summary of the investigation results is presented in the Plainwell No. 2 Conceptual Design Report.

On December 10 and 11, 2008, MDEQ collected 30 river plain soil cores and 18 bank cores. A total of 50 individual river plain soil and 25 soil samples were analyzed for PCBs. Total PCB concentrations in the river plain soil ranged from non-detect to 80.2 mg/kg. Total PCB concentrations in soil ranged from non-detect to 80.5 mg/kg.

The Allied Paper Inc./Portage Creek/Kalamazoo River Superfund Site (Site) encompasses the Kalamazoo River from Morrow Dam to Lake Michigan and approximately 3 miles of Portage Creek to the Kalamazoo River. The Plainwell Dam #2 (Site) is located approximately 3.5 miles upstream of the former Plainwell Dam in the Township of Gun Plain, T 1N, R 11 W, in portions of Sections 32 and 33 upstream to the Penn Central Railroad Bridge.

On June 8, 2009, an Administrative Order on Consent (AOC) was entered into between U.S. EPA and Georgia-Pacific, LLC, whereby, Georgia-Pacific agreed to conduct a time-critical removal action at the Site. The response actions include dredging and/or excavation of river plain soil, riverbank soils and floodplain soil, containment, monitoring, water treatment, stabilization and off-Site disposal of excavated material in accordance with federal PCB regulations at 40 C.F.R. § 761.61. The response activities will require approximately 200 on-Site working days to complete, and will result in the removal of

approximately 12,000 cubic yards of waste material, containing approximately 89% of the PCBs in the Plainwell Dam #2.

Additional site description and history can be found in the July 2009 Plainwell No. 2 Dam Area Time-Critical Removal Action Design Report, the June 8, 2009, Administrative Settlement Agreement and Order on Consent for Removal Action, the June 8, 2009, Time-Critical Removal Action Memorandum, and other Administrative Record documents.

Current Activities

During the week ending November 7, 2009, Terra completed scraping the top three inches of gravel from the river access road along Areas 1, 4A, and 5A; and completed the laying of river run rock and matting along the shorelines of Areas 4A and 5A. Terra also continued to remove metal posts and turbidity curtains from Areas 2, 3A, and 4A; continued to decontaminate the floodplain soil removal and hauling machinery and the sheet piling sections; and began laying topsoil in Area 4A. Terra also shipped five loads of non-TSCA floodplain soil (247.79 tons) to the Ottawa Farms Landfill in Coopersville, MI.

Arcadis collected no floodplain soil, surface water, or water treatment samples, and conducted no turbidity monitoring during this week.

JFNew continued its restoration activities along the shorelines of Areas 8 and 9A of the Plainwell Impoundment.

During the week ending November 14, 2009, Terra completed the laying of topsoil in all of the areas from Area 1 through Area 5A; and completed the decommissioning of the pugmill and shipped the pugmill offsite. Terra also continued pulling the turbidity curtain posts from Areas 4A and 5A; continued the decontamination of the sheet pilings, swamp pads, and turbidity curtain sections; and completed the construction of a portage that will allow boaters to bypass the diversion structure. Terra did not ship any floodplain soil to the landfill during this week.

Arcadis collected no floodplain soil or surface water samples during this week. However, Arcadis did collect five water samples from the water treatment system located at Staging Area 3A (W_SA3_In_007, W_SA3_RM_007, W_SA3_LM_007, W_SA3_RE_007, and W_SA3_LE_007). The water samples collected from the water treatment system effluent were below the discharge criteria for PCBs. The monthly discharge criteria was set by the MDEQ in permit MIU990029 which states that it is permissible to discharge 0.7×10^{-8} pounds of total PCB's per day at a maximum concentration of 2.6×10^{-5} ug/L. Arcadis also did not conduct any turbidity monitoring during this week.

JFNew completed its restoration activities along the shorelines of Areas 8 and 9A of the Plainwell Impoundment, and began reseeding activities in Area 1 and the laying of biologs in Areas 2 and 3 of the Plainwell Dam #2 work area.

During the week ending November 21, 2009, Terra continued to decontaminate the turbidity curtains, swamp pads, and concrete blocks; and completed the installation of a silt fence around the topsoil staged near Area 2. Terra did not ship any floodplain soil to the landfill during this week.

Arcadis collected no floodplain soil or surface water samples during this week. However, Arcadis did collect five water samples from the water treatment system located at Staging Area 3A (W_SA3_In_008, W_SA3_RM_008, W_SA3_LM_008, W_SA3_RE_008, and W_SA3_LE_008). The samples collected from the water treatment system effluent were below the discharge criteria for PCBs. Arcadis also did not conduct any turbidity monitoring during this week.

JFNew continued reseeding and matting activities in Areas 1 and 2, and began laying biologs in Areas 4A and 5A.

Planned Removal Actions

See Pollution Report #1.

Next Steps

- (1) Complete all of the restoration activities in the Plainwell Dam #2 work area in December 2009;
- (2) Complete the decommissioning of Staging Area 3;
- (3) Complete the demobilization of the support zone office and supply trailers; and
- (4) Begin and complete the setup of the removal activities on the south side of the Kalamazoo River during the week of November 30, 2009 (set for the 2010 construction season).

Key Issues

The progress of excavation activity is based on weather conditions.

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