

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

**Date:** Thursday, February 21, 2008

**From:** Mike Ribordy

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**Subject:** On-going Time-Critical Removal Activities  
Kalamazoo River OU5 - Plainwell Impoundment  
Plainwell, MI  
Latitude: -85.6683500  
Longitude: -42.4554300

<b>POLREP No.:</b>	5	<b>Site #:</b>	059BBB05
<b>Reporting Period:</b>	11/28/2007 - 01/31/2008	<b>D.O. #:</b>	
<b>Start Date:</b>		<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>		<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>		<b>NPL Status:</b>	NPL
<b>Completion Date:</b>		<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>		<b>Contract #</b>	
<b>RCRIS ID #:</b>			

**Site Description**

Refer to Pollution Report #1

**Current Activities**

During the week ending November 17, 2007, Arcadis BBL collected 12 sediment samples from Area 7 (K55326 to K55337), and split two of these samples (K55331 and K55333) with START (Note: the START-designated names for these samples, including one duplicate sample, were APS-111507-10-SD/K55331, APS-111507-11-SD/K55333, and APS-111507-11-SD-DP/K55333); two water samples from the Kalamazoo River (K30680 and K30681); and five water samples from the wastewater treatment system located at Staging Area 3S (W\_SA3S\_Influ\_0008, W\_SA3S\_MidA\_0007, W\_SA3S\_MidB\_0008, W\_SA3S\_EffluA\_0007, and W\_SA3S\_EffluB\_0008). The analytical results for these sediment, surface water, and water treatment samples indicated PCB levels below the cleanup criteria for sediment and water.

Arcadis BBL also continued taking turbidity readings from three locations in the Kalamazoo River (one upstream and two downstream of the excavation areas). On November 13, an Arcadis BBL crew member detected a visible plume as a result the downstream turbidity reading being more than twice the upstream reading. Upon observing the plume, Arcadis BBL directed Terra to repair the curtain. All other downstream readings were less than twice the upstream measurement.

Terra continued to demolish and remove the concrete structures that comprised the former Plainwell Dam powerhouse; continued to treat sediment at Staging Area 5S and Staging Area 3S; and continued to excavate sediment from Area 7 and Coffey Dam Area 1. Terra also began building gabion baskets (large wire-mesh enclosed baskets filled with rocks) that Terra eventually placed at the base of the water control structure to act as scour protection. No shipments of sediment from the site to the C & C Landfill in Marshall, Michigan took place during the week ending November 17, 2007.

The Terra contractor, King Company, continued its activities related to the building of the water control structure.

During the week ending November 24, 2007, Arcadis BBL collected two water samples from the Kalamazoo River (K30683 and K30684). The analytical results for these surface water samples indicated PCB levels below the cleanup criteria for water.

Terra continued to demolish and remove the concrete structures that comprised the former Plainwell Dam powerhouse; continued to treat sediment at Staging Area 5S and Staging Area 3S; and continued to build the gabion baskets that Terra used for scour protection at the base of the water control structure. Terra began placing the gabion baskets at the base of the water control structure, and shipped 70 loads of non-TSCA-level sediment (7,680.75 tons) to the Ottawa Farms Landfill in Coopersville, MI.

The King Company continued the construction of the water control structure.

During the week ending December 1, 2007, Arcadis BBL collected one soil sample from the material that Terra had formerly used for building the first of the two earthen berms located immediately upstream of the water control structure (K25752); sixteen water samples from the water treatment system located at Staging Area 3S (W\_SA3S\_Influ\_0009 and W\_SA3S\_Influ\_0011, W\_SA3S\_MidA\_0008 and W\_SA3S\_MidA\_0010, W\_SA3S\_MidB\_0009 and W\_SA3S\_MidB\_0011, W\_SA3S\_EffluA\_0008 and W\_SA3S\_EffluA\_0010, W\_SA3S\_EffluB\_0009 and W\_SA3S\_EffluB\_0011, and W\_SA3S\_Dup\_0003); and two water samples from the Kalamazoo River (K30686 and K30687). The analytical results for these soil, water treatment, and surface water samples indicated PCB levels below the cleanup criteria for soil and water.

Arcadis BBL also continued taking turbidity readings from three locations in the Kalamazoo River (one upstream and two downstream of the excavation areas). All downstream readings were less than twice the upstream measurement.

Terra continued to demolish and remove the concrete structures that comprised the former Plainwell Dam powerhouse; continued to demobilize the water treatment system located at the Plainwell Dam work area; and continued to treat sediment at Staging Areas 5S and 3S. Terra also built additional gabion baskets and placed these baskets at the base of the water control structure; poured concrete into the base of the water control structure; and began clearing debris and brush from the peninsula that lies immediately downstream of the Plainwell Dam. Terra also placed topsoil in Area 7, and shipped 57 loads of non-TSCA-level sediment and concrete (2,632.28 tons) to the Ottawa Farms Landfill in Coopersville, MI.

The King Company continued its operations related to the construction of the water control structure.

During the week ending December 8, 2007, Arcadis BBL collected sixteen water samples from the water treatment system located at Staging Area 3S (W\_SA3S\_Influ\_0012 to W\_SA3S\_Influ\_0014, W\_SA3S\_MidA\_0011 to W\_SA3S\_MidA\_0013, W\_SA3S\_MidB\_0012 to W\_SA3S\_MidB\_0014, W\_SA3S\_EffluA\_0011 to W\_SA3S\_EffluA\_0013, W\_SA3S\_EffluB\_0012 to W\_SA3S\_EffluB\_0014, and W\_SA3S\_Dup\_0004); and two water samples from the Kalamazoo River (K30689 and K30690). The analytical results for these water treatment and surface water samples indicated PCB levels below the cleanup criteria for sediment and water.

Arcadis BBL also continued taking turbidity readings from three locations in the Kalamazoo River (one upstream and two downstream of the excavation areas). All downstream turbidity readings were less than twice the upstream turbidity reading.

Terra initiated the draining of the water treatment frac tanks, located at the Plainwell Dam work area (that were used for storing the water that was pumped from Coffey Dam Area 1); collected one wipe sample from each of the five water treatment frac tanks in order to ensure that the decontamination of the tanks was effective; began placing river run rock along the shoreline of the peninsula that lies immediately downstream of the water control structure; began demobilizing the water treatment system located at the Plainwell Dam work area; continued the excavation of sediment from the non-TSCA section of Area 8 and the pugging of this sediment at Staging Area 3S; and continued the demolition and hauling of the Plainwell Dam powerhouse foundation. Terra shipped 113 loads of non-TSCA-level sediment (5,623.72 tons) to the Ottawa Farms Landfill in Coopersville, MI.

The King Company continued its operations related to the construction of the water control structure by placing stop logs in the structure, itself.

During the week ending December 15, 2007, Arcadis BBL collected five water samples from the water treatment system located at Staging Area 3S (W\_SA3S\_Influ\_0015, W\_SA3S\_MidA\_0014, W\_SA3S\_MidB\_0015, W\_SA3S\_EffluA\_0014, and W\_SA3S\_EffluB\_0015); three sediment samples from Area 7 (K5538 to K55340); seven sediment samples from Area 8 (K55341 to K55347); and three water samples from the Kalamazoo River (K30689 to K30691). The analytical results for the effluent water treatment samples, and the sediment and water treatment samples indicated PCB levels below the cleanup criteria for sediment and water.

Arcadis BBL also continued taking turbidity readings from three locations in the Kalamazoo River. All downstream turbidity readings were less than twice the upstream turbidity reading.

Terra completed the demobilization of the water treatment system that had been staged at the Plainwell Dam work area; continued the removal of demolition debris and sediment from the area immediately upstream of the water control structure; completed the excavation of sediments from both the non-TSCA and TSCA sections of Area 8; began to establish a 3 to 1 slope along the western shore of the river immediately upstream of the water control structure; and began to place river run rock along the western shoreline that lies immediately downstream of the water control structure. Terra shipped 108 loads of non-TSCA-level sediment (5,401.33 tons) to the Ottawa Farms Landfill in Coopersville, MI and eight loads of TSDA-level sediment (358.13 tons) to a waste disposal facility, Wayne Disposal, Incorporated, in Belleville, MI.

The King Company was not onsite during the week ending December 15, 2007.

During the week ending December 22, 2007, Arcadis BBL collected five water samples from the water treatment system located at Staging Area 3S (W\_SA3S\_Influ\_0016, W\_SA3S\_MidA\_0015, W\_SA3S\_MidB\_0016, W\_SA3S\_EffluA\_0015, and W\_SA3S\_EffluB\_0016); four sediment samples from Coffey Dam Area 1 (K55348 to K55350 and K55359); eight sediment samples from the bank of Area 6B (K55351 to K55358); and one wipe sample from the interior of the site vacuum truck (VT-1). The analytical results for the water treatment samples, and the sediment and wipe samples indicated PCB levels below the cleanup criteria. Arcadis BBL also determined the water depth and sediment thickness along ten transects that spanned the width of the Kalamazoo River (Note: this activity extended from the Coffey Dam area upstream to the U.S. 131 bridge).

Arcadis BBL also continued taking turbidity readings from three locations in the Kalamazoo River (one upstream and two downstream of the excavation areas). All downstream turbidity readings were less than twice the upstream turbidity reading.

Terra continued to line, load, and decontaminate dump trucks at Staging Areas 3S and 5S; continued to demolish and load out the debris from the former Plainwell Dam powerhouse and the concrete debris that Terra had used as a platform to remove a concrete structure in Coffey Dam Area 1; began placing river run rock along the west bank of the river (immediately upstream of the water control structure); and began and completed the removal of a silt curtain from Area 7 and 8. Terra shipped 71 loads of non-TSCA-level sediment (3,222.69 tons) to the Ottawa Farms Landfill in Coopersville, MI and 21 loads of TSDA-level sediment (1,062.49 tons) to the Wayne Disposal, Incorporated.

During the week ending December 29, 2007, Terra completed removing the turbidity curtain from Removal Areas 7 and 8, and demolition of the former Plainwell Dam powerhouse foundation. Terra continued placing river run rock along the west bank of the river near the Plainwell Dam. Terra shipped 18 loads of non-TSCA-level sediment (819 tons) to the Ottawa Farms Landfill in Coopersville, MI and 3 loads of TSDA-level sediment (136 tons) to the Wayne Disposal, Incorporated. Completed decontaminating heavy equipment and winterizing Staging Areas for the winter shutdown.

Arcadis BBL also continued taking turbidity readings from three locations in the Kalamazoo River (one upstream and two downstream of the excavation areas). All downstream turbidity readings were less than twice the upstream turbidity reading.

Between January 3 and January 30, 2008, Terra completed excavation of soil and sediment and placing backfill and erosion control stone on the west bank of the Kalamazoo River near the Plainwell Dam. Completed solidifying excavated soil and sediment at Staging Area 5S. Began clearing and grubbing activities at Removal Areas 11A and 12A. Began the construction of an access road between Miller Road and the Kalamazoo River.

For the first year (Phase 1) of the Former Plainwell Impoundment Time-Critical Removal Action, a total of 969 loads of non-TSCA-level sediment (44,090 tons) to the C & C Landfill in Marshall, Michigan and the Ottawa Farms Landfill in Coopersville, MI, and a total of 90 loads of TSDA-level sediment (4,095 tons) to a waste disposal facility, Wayne Disposal, Incorporated, in Belleville, MI.

#### **Planned Removal Actions**

See Pollution Report #1.

#### **Next Steps**

Continue clearing and grubbing activities and construction of access roads into Removal Areas 9A through

13A. Begin construction activities associated with Staging Area 4N.

Start of year two (Phase 2) construction activities are scheduled to begin in early March 2008.

**Key Issues**

The progress of site activities based on weather conditions and the extent of PCB contamination, and the impact of public opinion on the site activities.

**Estimated Costs \***

	<b>Budgeted</b>	<b>Total To Date</b>	<b>Remaining</b>	<b>% Remaining</b>
<b>Extramural Costs</b>				
RST/START	\$152,000.00	\$149,000.00	\$3,000.00	1.97%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	\$152,000.00	\$149,000.00	\$3,000.00	1.97%

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

[response.epa.gov/kzooplainwell](http://response.epa.gov/kzooplainwell)

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