

U.S. ENVIRONMENTAL PROTECTION AGENCY  
 POLLUTION/SITUATION REPORT  
 Portage Creek Area - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 Region V**

**Subject:** POLREP #15  
 Progress  
 Portage Creek Area  
 059B05  
 Kalamazoo, MI  
 Latitude: 42.2839750 Longitude: -85.5791570

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**From:** Craig Thomas, On-Scene Coordinator

**Date:** 8/3/2012

**Reporting Period:** 7/20/2012 - 8/3/2012

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	059B05	<b>Contract Number:</b>	EP-S5-09-05
<b>D.O. Number:</b>	0087	<b>Action Memo Date:</b>	7/5/2011
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Time-Critical
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	NPL	<b>Operable Unit:</b>	05
<b>Mobilization Date:</b>	9/26/2011	<b>Start Date:</b>	8/30/2011
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>	MID006007306	<b>RCRIS ID:</b>	NA
<b>ERNS No.:</b>	NA	<b>State Notification:</b>	Yes
<b>FPN#:</b>	NA	<b>Reimbursable Account #:</b>	NA

#### 1.1.1 Incident Category

Fund-lead removal action

#### 1.1.2 Site Description

See POLREP #1

##### 1.1.2.1 Location

See POLREP #1

**1.1.2.2 Description of Threat**

See POLREP #1

**1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results**

See POLREP #1

**2. Current Activities****2.1 Operations Section****2.1.1 Narrative**

Dredging operations in Axtell Creek were delayed by high PCB test results at the target excavation depths (see Sections 2.1.2, 2.2 and 2.2.2). Dredging will continue on August 8 once the groundwater dewatering system has had sufficient operational time to capture groundwater. Crews began preparations for excavation in SA5-D and SA5-C (Upjohn Park). A creekwater bypass pump system, groundwater dewatering system, and temporary bridge were installed to facilitate contaminated sediment removal operations. Remaining excavated sediments from Axtell Creek were further solidified on the staging pad and shipped for disposal at designated landfills.

**2.1.2 Response Actions to Date**

From July 21 to August 3, EPA, START and ERRS contractors/sub-contractors conducted the following activities:

Site Activities - Axtell Creek

- Completed post-excavation sampling for the initial over-excavation depths in grids AXC-1 thru AXC-5 to determine if cleanup goals were met. Only the sample result from grid AXC-5 met the performance standard of 10 mg/kg PCBs. None of the confirmatory sample results from any of the grids met the performance standard goal of 1 mg/kg PCBs. Based on these results, additional core sampling was conducted (see Section 2.2.2) and additional PCB-contaminated material was identified. All grids will undergo a second over-excavation (see details in Section 2.2). Grids AXC-1 through AXC-5 are estimated (est) to be over excavated as follows once the de-watering system is installed:

GRID	TOTAL EXCAVATION DEPTH (in)	TERTIARY CONFIRMATION PCB RESULT (mg/kg)
AXC-1	60 (est)	TBD
AXC-2	66 (est)	TBD
AXC-3	60 (est)	TBD
AXC-4	66 (est)	TBD
AXC-5	36 (est)	TBD

- Completed installation of groundwater de-watering system around perimeter of excavation;
- Began construction of a 12" discharge pipeline from the John Street pump station to Vine Street to prevent Axtell Creek discharge from filling SA5-D and SA5-C excavation areas in Portage Creek and enhance existing pump capacity to handle extreme rain events;
- Pumped and treated contaminated contact water in AXC-2 to AXC-4 in EPA's mobile wastewater treatment system; and
- Conducted personnel air monitoring, stream turbidity, and perimeter particulate monitoring in work areas with all results below action levels.

Site Activities - Staging Pad

- Solidified and loaded out 511.87 tons of TSCA (> 50ppm PCBs) contaminated sediments for disposal at Wayne Disposal landfill in Belleville, Michigan;
- Solidified and loaded out approximately 421.67 tons of non-TSCA (< 50ppm PCBs) contaminated sediments for disposal at C&C Landfill in Marshall, Michigan; and
- Treated 140,415 gallons of contaminated contact water in EPA's mobile wastewater treatment plant, with a total of 378,678 gallons treated to date.

Site Activities - SA6

- Spread topsoil, grass seed and straw on the top of the creek banks and impacted adjacent properties;
- Began installation of new fencing on the west bank which was removed to facilitate contaminated sediment

removal; and

- Installed new fencing at two properties on the east bank which was removed to facilitate installation of the 30" bypass pump system discharge line.

#### Site Activities - SA5-D & SA5-C

- Completed installation of temporary fencing around work area on east bank;
- Installed and tested creek bypass pumping system at Lake Street bridge;
- Constructed two 18" discharge lines on west bank from Lake Street pump station to Vine Street to handle discharge from creek bypass pumping system;
- Began installation of groundwater dewatering system; and
- Installed temporary steel bridge to facilitate transport of excavated sediments to staging pad without using public roadways.

#### Project Management Activities

- Continued weekly progress meetings with City of Kalamazoo;
- Awarded contract to implement restoration plans for SA5, SA6, and SA7;
- Awarded contract to re-pave or fix damaged asphalt in paved lots used to access SA6; and
- Conducted data validation for post-removal confirmation sediment samples and investigatory cores collected from Axtell Creek.

### **2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)**

The major PRP for this portion of the Allied Paper Inc./Portage Creek/Kalamazoo River Superfund site was dissolved through bankruptcy proceedings in April 2010. Other PRPs are being evaluated.

### **2.1.4 Progress Metrics**

<b>Waste Stream</b>	<b>Medium</b>	<b>Quantity</b>	<b>Manifest #</b>	<b>Treatment</b>	<b>Disposal</b>
TSCA contaminated sediments	solidified sediment	511.87 tons	009952872JJK to 009952882 JJK	disposal	Wayne Disposal, Belleville, MI
Non-TSCA contaminated sediments	solidified sediment	421.67 tons (est)	NTSCA-79 to NTSCA-87	disposal	C&C Landfill, Marshall MI
Scrap metal	steel	1240 lbs		recycling	Shupan Industrial Recycling, Kalamazoo, MI
Plastic	bottles	100 lbs	none	recycling	Best Way Disposal, Kalamazoo, MI
Wooden shipping pallets	solid	100	none	dismantlement reuse	Holland Pallet, Kalamazoo, MI

### **2.2 Planning Section**

A summary of removal activities that will take place from August 6 through August 17 include:

#### Site Activities - Axtell Creek

- Complete overexcavation, backfilling and restoration of creek channel and banks;
- Complete tertiary confirmatory sampling at excavation bottom in AXC-1 to AXC-5;
- Complete construction of a 12" pipeline to support creek bypass pumps at John Street and discharge at Vine Street; and
- Conduct personnel air monitoring, stream turbidity, and perimeter particulate monitoring in work areas.

#### Site Activities - Staging Pad

- Complete de-watering and solidification of excavated sediments for transport;
- Complete transport of solidified sediments for disposal; and

- Continue treatment of contaminated water in EPA's mobile waste water treatment plant.

#### Site Activities - SA5-D

- Complete installation of groundwater de-watering system between Lake Street and Axtell Creek;
- Install fencing around Lake Street pumping station, west bank between Axtell Creek and Crosstown Parkway, and both east and west banks between Crosstown Parkway and Vine Street;
- Construct sand-bag coffer dam to facilitate groundwater de-watering between Lake Street and the Upjohn Park footbridge; and
- Construct wood platform working deck on east bank to support contaminated sediment removal and transport operations.

#### Site Activities - SA6

- Complete construction of new fencing along east and west bank;
- Remove temporary fencing from City of Kalamazoo parking lot;
- Repair asphalt from impacted lots used to access area;
- Complete temporary grass seeding and straw on east and west banks; and
- Replace impacted gravel areas on east bank properties impacted by the 30" discharge pipeline.

#### Project Management Activities

- Continue weekly progress meetings with City of Kalamazoo.

### **2.2.1 Anticipated Activities**

See POLREP #2

#### **2.2.1.1 Planned Response Activities**

See above

#### **2.2.1.2 Next Steps**

See above

### **2.2.2 Issues**

Only one post-excavation confirmatory sample result from the second round of excavation in grids in Axtell Creek was under the performance standard of 10 mg/kg. All of the second round of confirmatory sampling results at target dredging depths in the grids were above the performance standard goal of 1 mg/kg as listed below (see table).

<b>GRID</b>	<b>TARGET DEPTH (in)</b>	<b>INITIAL PCB RESULT (mg/kg)</b>	<b>OVERDIG (in)</b>	<b>TOTAL DEPTH (in)</b>	<b>CONFIRMATION PCB RESULT (mg/kg)</b>
AXC-1	24	27.9	12	36	35.8
AXC-2	30	8.9	12	42	14.3
AXC-3	24	16.10	12 (est)	36	19.3
AXC-4	30	18.7	12 (est)	42	22.6
AXC-5	24	4.15	6 (est)	30	3.93

Based on these results, additional core sampling was conducted in Axtell Creek and it was determined that additional PCB contaminated material was at depth which requires excavation. The following table shows the results of the additional core sampling effort:

<b>GRID</b>	<b>CORE DEPTH (in)</b>	<b>PCB RESULT (mg/kg)</b>
AXC-2-A	0-12	2.33
AXC-2-B	0-12	5.29
AXC-2-C	0-12	14.7
AXC-3-A	0-12	13.7
AXC-3-A	12-16	23.1

AXC-3-B	0-13	3.31
AXC-4-A	0-12	18
AXC-4-B	0-12	0.079
AXC-4-B	12-15	18.2
AXC-4-C	0-12	0.087
AXC-4-D	0-12	8.1
AXC-4-D	12-15	0.049
AXC-5	0-13	8.9
AXC-5B	0-8	0.2

Additional over-excavation will result in increased costs and added expenses for personnel, equipment, transportation, disposal, sampling and backfill material.

### 2.3 Logistics Section

The current resources present on site during this reporting period include:

- Office trailers
- Portable restrooms and hand-washing stations
- Portable generators
- Submersible pumps
- Equipment storage container
- ERRS work crews and subcontractor work crews
- START sampling contractor
- Heavy equipment
- Water truck
- Street sweeper
- Mixing boxes
- Frac (water) tank
- Pressure wash trailer
- Bypass pumps and piping
- Sheet piling and steel bridge personnel support structures
- Mobile wastewater treatment plant
- Temporary steel bridge

### 2.4 Finance Section

#### 2.4.1 Narrative

See table

#### Estimated Costs \*

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
ERRS - Cleanup Contractor	\$5,200,000.00	\$3,200,000.00	\$2,000,000.00	38.46%
TAT/START	\$300,000.00	\$200,000.00	\$100,000.00	33.33%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	<b>\$5,500,000.00</b>	<b>\$3,400,000.00</b>	<b>\$2,100,000.00</b>	<b>38.18%</b>

\* 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.

## **2.5 Other Command Staff**

### **2.5.1 Safety Officer**

Craig Thomas and Paul Ruesch serve as safety officer(s). The HASP is reviewed and signed by all site personnel. All new personnel are provided a site orientation and safety briefing. Safety meetings are held each morning with all workers.

### **2.6 Liaison Officer**

Craig Thomas and Paul Ruesch serve as liaison(s) with local officials and interested parties.

### **2.7 Information Officer**

See Section 2.6

#### **2.7.1 Public Information Officer**

See Section 2.6

#### **2.7.2 Community Involvement Coordinator**

Don DeBlasio - U.S. EPA

## **3. Participating Entities**

### **3.1 Unified Command**

N/A

### **3.2 Cooperating Agencies**

U.S. Environmental Protection Agency  
 Michigan Department of Environmental Quality  
 Michigan Department of Agriculture and Rural Development  
 Michigan Department of Natural Resources  
 U.S. Fish and Wildlife Service  
 City of Kalamazoo:  
     Department of Public Services  
     Parks and Recreation Department  
     Economic Development Department  
     Community Planning & Development  
     Public Safety Department  
     Fire Department  
     Police Department  
     ReDevelopment Department  
 Bronson Methodist Hospital  
 Kalamazoo Nature Center

## **4. Personnel On Site**

U.S. EPA - 2  
 ERRS contractor (Environmental Quality Management, Inc) - 14  
 START contractor (Dynamac/Weston) - 1  
 Baker Corporation (pump subcontractor) - 2  
 Rain for Rent (groundwater extraction subcontractor) - 3  
 Selges Construction (pipeline construction subcontractor) - 3  
 Farm & Garden (fencing subcontractor) - 3

TOTAL PERSONNEL = 28

## **5. Definition of Terms**

C&D - Construction and Demolition (waste)  
 ERRS - Emergency and Rapid Response Services  
 FOOSC - Federal On Scene Coordinator  
 U.S. FWS - United States Fish and Wildlife Service  
 HASP - Health and Safety Plan  
 HDPE - High density polyethylene (plastic)  
 mg/kg - milligrams per kilogram

mg/m<sup>3</sup> - milligrams per cubic meter  
MDARD - Michigan Department of Agriculture and Rural Development  
MDEQ - Michigan Department of Environmental Quality  
NA - Not Applicable  
NOAA - National Oceanic and Atmospheric Administration  
NPL - National Priorities List  
NRDA - Natural Resource Damage Assessment  
ntu - nephelometric turbidity units  
PCB - polychlorinated biphenyl  
ppm - parts per million  
PRPs - Potentially Responsible Parties  
RTK GPS - Real Time Kinematic Global Positioning System  
SA - Slope Area  
START - Superfund Technical Assessment and Response Team  
U.S. EPA - United States Environmental Protection Agency

## **6. Additional sources of information**

### **6.1 Internet location of additional information/report**

See the project website at <http://www.epaosc.org/portagecreekarea>.

### **6.2 Reporting Schedule**

The next POLREP will be generated in approximately 2 weeks.

## **7. Situational Reference Materials**

See the project website at <http://www.epaosc.org/portagecreekarea>.

Additional information on the overall Kalamazoo River Project can be found at <http://www.epa.gov/Region5/cleanup/kalproject/index.htm>.