

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Otsego Township Dam Area - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region V

**Subject:** POLREP #26  
Progress  
Otsego Township Dam Area  
059B  
Otsego Township, MI  
Latitude: 42.4601694 Longitude: -85.7199333

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**From:** Paul Ruesch, OSC

**Date:** 10/13/2017

**Reporting Period:** 9/30/2017 - 10/13/2017

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	059B	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	4/6/2016
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	PRP Oversight
<b>Response Lead:</b>	PRP	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	NPL	<b>Operable Unit:</b>	5
<b>Mobilization Date:</b>	8/1/2016	<b>Start Date:</b>	8/1/2016
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>	MID006007306	<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	DEQ
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	059B

#### 1.1.1 Incident Category

Time Critical Removal Action - PRP Oversight

#### 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

Restoration with native plantings continues in BRSAs 3 & 4. Removal operations are near completion in BRSAs 6 & 9. Hydraulic dredging of a pilot channel to support removal and restoration operations continues in BRSAs 7 & 8.

#### 2.1.2 Response Actions During Reporting Period

##### BRSA 1

- Irrigated native plantings; and

- Performed maintenance and repairs on several areas impacted by high water levels earlier this spring.

**BRSA 3 & 4**

- Irrigated native plantings; and
- Planted native trees and shrubs along river banks.

**BRSA 6**

- Excavation of contaminated soils continues with excavation completed and confirmation results received in riverbank grids and stream tube grids shown in the tables below. There are 54 total grids in BRSA 6, with each grid consisting of approximately 50 lineal feet of riverbank. There are 4 stream tubes, with each stream tube varying in size. The target clean-up goal in the riverbank soils is 5 mg/kg total PCBs and in-stream sediments is 1mg/kg total PCBs; and
- Continued transportation and disposal of contaminated soils and sediments.

Estimated excavation depths and confirmation sampling results are found below for riverbank grids in BRSA 6 (Table 1), and adjacent stream tube grids (Table 2).

<b>BRSA 6 RIVERBANK GRID</b>	<b>TOTAL ESTIMATED EXCAVATION DEPTH (in)</b>	<b>FINAL CONFIRMATION TOTAL PCBs RESULT (mg/kg)</b>
33	36	0.69
36	24	0.30
47	36	2.3
48	36	2.8
49	36	2.9
50	36	< 0.056
51	36	< 0.065
52	36	1.1
53	36	0.24
54	TBD	TBD
Table 1. BRSA 6 Riverbank Grid Confirmatory Sampling Results		

<b>BRSA 6 STREAM TUBE</b>	<b>TOTAL ESTIMATED EXCAVATION DEPTH (in)</b>	<b>FINAL CONFIRMATION TOTAL PCBs RESULT (mg/kg)</b>
12E-49	6	0.26
12E-50	6	0.13
12E-51	6	< 0.036
12E-52	6	< 0.038
12E-53	6	< 0.039
12E-54	6	< 0.075
Table 2. BRSA 6 Stream Tube Confirmatory Sampling Results		

*Table Notes: Confirmatory sampling takes place immediately following excavation of contaminated soils and/or sediments in accordance with procedures outlined in the FSP and the TM for BRSA 4, 5, 6 & 9. Both documents can be found in the 'Documents' Section of the project website. Stream Tube grids are numbered consistent with the riverbank grid they are located adjacent to. A figure showing the location of both (preliminary) riverbank grids and stream tubes can be found on Figure 8 of the BRSA 4, 5, 6 & 9 TM.*

**BRSA 9**

- Excavation of contaminated soils continues with excavation completed and confirmation results received in riverbank grids and stream tube grids shown in the tables below. There are 38 total river bank grids in BRSA 9, with each grid consisting of approximately 50 lineal feet of riverbank. There are 2 stream tubes, with each stream tube varying in size. The target clean-up goal in the riverbank soils is 5 mg/kg total PCBs and in-stream sediments is 1mg/kg total PCBs;
- Continued transportation and disposal of contaminated soils and sediments;

Estimated excavation depths and confirmation sampling results are found below for riverbank grids in BRSA 9 (Table 3), and Pine Creek confluence area stream tube grids (Table 4).

<b>BRSA 9 RIVERBANK GRID</b>	<b>TOTAL ESTIMATED EXCAVATION DEPTH (in)</b>	<b>FINAL CONFIRMATION TOTAL PCBs RESULT (mg/kg)</b>
1	6	< 0.035
2	6	0.42
3	6	2.5
Table 3. BRSA 9 Riverbank Grid Confirmatory Sampling Results		

<b>BRSA 9 STREAM TUBE</b>	<b>TOTAL ESTIMATED EXCAVATION DEPTH (in)</b>	<b>FINAL CONFIRMATION TOTAL PCBs RESULT (mg/kg)</b>
10C-42	12	0.83
10B-43	24	< 0.031
10B-44	24	< 0.030
10B-46	not excavated	not excavated
Table 4. BRSA 9 Stream Tube Confirmatory Sampling Results		

*Table Notes: Confirmatory sampling takes place immediately following excavation of contaminated soils and/or sediments in accordance with procedures outlined in the FSP and the TM for BRSA 4, 5, 6 & 9. Both documents can be found in the 'Documents' Section of the project website. Stream Tube grids are numbered consistent with the riverbank grid they are located adjacent to. A figure showing the location of both (preliminary) riverbank grids and stream tubes can be found on Figure 8 of the BRSA 4, 5, 6 & 9 TM.*

- Continued construction of coffer dam systems; and
- Completed removal of contaminated sediments and riverbank soils at Pine Creek / Kalamazoo River confluence (see photo), with the water level in the Pine Creek impoundment returning to normal.

**BRSA 7 & 8**

- Hydraulic dredging continues to construct a 'pilot channel' in front of temporary WCS (see photo). The 'pilot channel' will establish a new deep area in the river for the majority of river water to flow, which will enable removal and restoration operations on riverbanks;
- Removed stop logs from temporary WCS, with concurrence from MDEQ & MDNR, to lower water levels and allow better access for construction; and
- Maintenance and monitoring of turbidity curtain downstream of temporary WCS and old auxiliary spillway to control downstream turbidity (cloudiness in water caused by sand/dirt/clay particles) which may result from hydraulic dredging operations.

**OVERALL SITE**

- Transport/disposal of approximately 2480 tons of excavated soils to an EPA-approved landfill facility (see Section 2.1.4).
- Daily particulate monitoring (PM10) around the site perimeter with no sustained exceedance off site of particulates above the action level of 1.5 mg/m3;
- Turbidity control measures and monitoring in the Kalamazoo River downstream of project area (1 upstream monitor and 2 downstream monitors), with no sustained exceedance of the action level of 50 NTUs;
- Treatment of approximately 168,181 gallons of contact water from contaminated grids and contaminated soils staging pads in on-site WWTPs located in BRSA 6 & 9 (see Section 2.1.4). Sampling results from the WWTPs continues to confirm non-detect levels for total PCBs in treated water; and
- Monitoring of the temporary WCS.

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

See PolRep #1

**2.1.4 Progress Metrics**

Both quantities during the reporting period ('Quantity' column) and totals to date ('Total' column) are included in the table.

<b>Waste Stream</b>	<b>Medium</b>	<b>Quantity</b>	<b>Total</b>	<b>Manifest #</b>	<b>Treatment</b>	<b>Disposal</b>
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Cardboard	solid	20 lbs	1060 lbs	NA	recycling	Otsego Recycling Center
Plastic	solid	20 lbs	425 lbs	NA	recycling	Otsego Recycling Center
Steel	solid	0 lbs	12,240 lbs	various	recycling	Broken Arrow Recycling
Contaminated soil (< 50 ppm* PCBs)	solid	2480 tons (est)	29,152 tons (est)	various	disposal	Republic Ottawa County Farms Landfill, Coopersville, MI
Contaminated soil (> 50 ppm* PCBs)	solid	0 tons	103.91 tons	various	disposal	US Ecology Michigan, Belleville, MI
Contact water	liquid	168,181 gal	1,382,786 gal	NA	on-site WWTP	On-site reuse/discharge to Kalamazoo River

\*Note: 1 ppm = 1 mg/kg

## 2.2 Planning Section

### 2.2.1 Anticipated Activities

During the next reporting period, the following activities are expected to occur:

#### BRSAs 3 & 4

- Complete restoration with native plantings; and
- Continue irrigation of plantings.

#### BRSA 6

- Complete excavation of contaminated riverbank soils & in-stream sediments;
- Continue backfilling & restoration of excavated riverbank grids;
- Treat contact water from contaminated grids & contaminated soils staging pad;
- Begin removal of sheet pile coffer dams; and
- Transport contaminated soils & sediments for disposal.

#### BRSAs 7 & 8

- Continue hydraulic dredging of pilot channel;
- Begin drawdown of water levels by removing stop logs from temporary WCS;
- Continue monitoring & maintenance of dredging spoils fill area; and
- Begin access road construction along river banks.

#### BRSA 9

- Continue backfilling & restoration of excavated riverbank grids;
- Complete excavation of contaminated riverbank soils & in-stream sediments;
- Treat contact water from contaminated grids & contaminated soils staging pad; and
- Transport contaminated soils & sediments for disposal.

#### SITEWIDE

- Operate dust and turbidity control/monitoring systems; and
- Maintain/monitor temporary WCS.

### 2.2.1.1 Planned Response Activities

See Sections 2.2.1 & 2.2.1.2

### 2.2.1.2 Administrative Activities / Next Steps

- Wood Group (formerly AMEC-FW) held a final meeting to resolve outstanding issues and concerns on the draft TM for BRSAs 7 & 8 on October 4.
- On October 6, EPA requested that a final draft TM for BRSAs 7 & 8 be submitted for review by October 27.

### 2.2.2 Issues

None

## 2.3 Logistics Section

See PolRep #1

## 2.4 Finance Section

No information available at this time.

## 2.5 Other Command Staff

### 2.5.1 Safety Officer

A safety meeting is held prior to work start each day. The meeting is led by on-site safety officer(s) from Envirocon & Wood Group (formerly AMEC-FW).

### 2.5.2 Liaison Officer

### 2.5.3 Information Officer

- A tour was provided for 12 students from Western Michigan University, Department of Civil & Construction Engineering, on

October 3.

- A presentation was provided at for 'Otsego Seniors' at their monthly meeting on October 3 (see photo).

### 3. Participating Entities

#### 3.1 Unified Command

#### 3.2 Cooperating Agencies

See PolRep #1

### 4. Personnel On Site

On average, the following personnel were present on site during the reporting period:

US EPA - 1  
START - 1  
MDNR - 1  
MDEQ - 1  
Envirocon - 42  
White Lake Dock & Dredge, Inc. - 4  
SWAT - 2  
Wood Group (formerly AMEC-FW) - 3  
Spicer Group - 1

TOTAL: 56

### 5. Definition of Terms

AMEC-FW	AMEC Foster Wheeler
BRSA	Bank Removal and Stabilization Area
FSP	Field Sampling Plan
mg/kg	milligrams per kilogram
MDEQ	Michigan Department of Environmental Quality
MDNR	Michigan Department of Natural Resources
OSC	On Scene Coordinator
PCBs	Poly-chlorinated biphenyls
PolRep	Pollution Report
ppm	parts per million
PRP	Potentially Responsible Party
START	Superfund Technical Assessment & Response Team (US EPA contractor)
TM	Technical Memorandum
US EPA	United States Environmental Protection Agency
WCS	Water Control Structure
WWTP	Waste Water Treatment Plant

### 6. Additional sources of information

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

<http://www.epaosc.org/otsegodam>

[www.epa.gov/superfund/allied-paper-kalamazoo](http://www.epa.gov/superfund/allied-paper-kalamazoo)

#### 6.2 Reporting Schedule

The next PolRep will be generated on October 27.

### 7. Situational Reference Materials

No information available at this time.