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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #25**
Progress
Otsego Township Dam Area
059B
Otsego Township, MI
Latitude: 42.4601694 Longitude: -85.7199333

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From: Paul Ruesch, OSC
Date: 9/29/2017
Reporting Period: 9/15/2017 -9/29/2017

1. Introduction

1.1 Background

Site Number:	059B	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	4/6/2016
Response Authority:	CERCLA	**Response Type:**	PRP Oversight
Response Lead:	PRP	**Incident Category:**	Removal Action
NPL Status:	NPL	**Operable Unit:**	5
Mobilization Date:	8/1/2016	**Start Date:**	8/1/2016
Demob Date:		**Completion Date:**	
CERCLIS ID:	MID006007306	**RCRIS ID:**	
ERNS No.:		**State Notification:**	DEQ
FPN#:		**Reimbursable Account #:**	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 continues in BRSA 4. Removal operations continue in BRSA 6 and BRSA 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 4
- Completed removal and restoration of stabilization pad, staging area and access road off M-89.

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).

BRSA 6 RIVERBANK GRID	TOTAL ESTIMATED EXCAVATION DEPTH (in)	FINAL CONFIRMATION TOTAL PCBs RESULT (mg/kg)
16	41	0.41
20	44	0.35
21	46	0.57
22	21	0.69
23	15	0.14
24	20	0.22
25	12	1.0
26	24	1.9
27	24	0.097
28	36	< 0.028
29	40	< 0.029
30	37	0.047
31	37	< 0.029
32	46	< 0.035
33	TBD	TBD
34	36	0.23
35	36	< 0.061
36	TBD	TBD
37	24	0.24
38	24	1.6
39	24	4.8
40	24	< 0.054
41	24	0.25
42	24	0.57
43	24	0.28
44	24	0.49
45	24	1.1
46	36	2.80

Table 1. BRSA 6 Riverbank Grid Confirmatory Sampling Results

BRSA 6 STREAM TUBE	TOTAL ESTIMATED EXCAVATION DEPTH (in)	FINAL CONFIRMATION TOTAL PCBs RESULT (mg/kg)
14E-33	36	< 0.037
14E-34	36	< 0.033
14E-35	36	0.67
14E-36	36	< 0.032
12E-44	6	< 0.046
12E-45	6	< 0.064
12E-46	6	< 0.057
12E-47	6	< 0.068
12E-48	6	0.11

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 BRSAs 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 table 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; 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 9 (Table 3), and adjacent stream tube grids (Table 4).

BRSA 9 RIVERBANK GRID	TOTAL ESTIMATED EXCAVATION DEPTH (in)	FINAL CONFIRMATION TOTAL PCBs RESULT (mg/kg)
4	6	0.91
5	6	< 0.062
6	6	0.17
7	6	0.7
8	6	0.55
9	6	< 0.067
10	12	0.075
11	12	0.28
12	12	0.075
13	12	0.56
14	12	< 0.03
15	12	< 0.029
16	6	0.39
17	6	0.48
18	6	0.28
19	6	0.39
20	6	0.29
21	6	0.69
22	6	0.61
23	6	0.21
24	6	0.059
25	6	0.18
26	6	0.22
27	6	0.22
28	6	0.39
29	6	0.16

Table 3. BRSA 9 Riverbank Grid Confirmatory Sampling Results

BRSA 9 STREAM TUBE	TOTAL ESTIMATED EXCAVATION DEPTH (in)	FINAL CONFIRMATION TOTAL PCBs RESULT (mg/kg)
10C-39	12	0.81
10C-40	12	0.22
10C-41	12	0.61
10C-42	TBD	TBD
10B-43	TBD	TBD
10B-44	TBD	TBD
10B-45	24	0.18

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 BRSAs 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;
- Drained the Pine Creek impoundment to lower water levels and facilitate removal of contaminated soils (see photo);
- Commenced removal of contaminated riverbank soils & sediments at Pine Creek / Kalamazoo River confluence (see photo).

BRSAs 7 & 8

- Hydraulic dredging continues to construct a 'pilot channel' in front of temporary WCS. 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

- 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 5252 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 Kalamazoo River around the BRSA 3 - 9 excavation area (1 upstream monitor and 2 downstream monitors), with no sustained exceedance of the action level of 50 NTUs above upstream levels. Crews moved the downstream turbidity monitors further downstream (see photo) to monitor during hydraulic dredging operations in BRSA 7 & 8.
- Treatment of approximately 159,508 gallons of contact water from contaminated grids and contaminated soils staging pads in on-site WWTPs located in BRSAs 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.

Waste Stream	***Medium***	***Quantity***	***Total***	***Manifest #***	***Treatment***	***Disposal***
Cardboard	solid	50 lbs	1040 lbs	NA	recycling	Otsego Recycling Center
Plastic	solid	20 lbs	405 lbs	NA	recycling	Otsego Recycling Center
Steel	solid	1280 lbs	12,240 lbs	various	recycling	Broken Arrow Recycling
Contaminated soil (< 50 ppm* PCBs)	solid	5,252 tons (est)	26,672 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	159,508 gal	1,214,605 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
- Commence 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;
- Continue monitoring & maintenance of dredging spoils fill area; and
- Commence access road construction along river banks.

BRSA 9
- Remove temporary dam and restore area at Pine Creek confluence;
- 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
- AMEC-FW continues to hold meetings to resolve outstanding issues and concerns on the draft TM for BRSAs 7 & 8.

- An extension was requested and approved on September 29 for submission of the draft Operations, Monitoring & Maintenance Plan until October 27.

2.2.2 Issues

Crews worked extended hours during the reporting period to facilitate excavation of the contaminated sediments and soils at the Pine Creek / Kalamazoo River confluence. The boat ramp at the Michigan DNR launch was closed (see photo) as water levels were lowered in anticipation of project work. The work had to be completed before water levels rose up and over the Pine Creek water control structure at Jefferson Road.

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 & AMEC-FW.

2.5.2 Liaison Officer

2.5.3 Information Officer

- A tour was provided for a representative of the Allegan News on September 18. Articles appeared in the Plainwell & Otsego Union Enterprise September 21 and 28 editions.

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
Michigan DNR - 1
Michigan DEQ - 1
Envirocon - 42
Milbocker & Sons, Inc. - 3
White Lake Dock & Dredge, Inc. - 4
SWAT - 2
AMEC-FW - 3
Spicer Group - 1

TOTAL: 60

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

6.2 Reporting Schedule

The next PolRep will be generated on October 13.

7. Situational Reference Materials

No information available at this time.