

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

**Date:** Friday, October 19, 2007  
**From:** James Augustyn/Brian Schlieger

**Subject:** Tittabawassee River Project - Reach D  
Tittabawassee River Dioxin-Reach D  
Midland, MI  
Latitude: 43.6011000  
Longitude: -84.2386000

<b>POLREP No.:</b>	13	<b>Site #:</b>	B5KF
<b>Reporting Period:</b>	10-08-07 thru 10-15-07	<b>D.O. #:</b>	
<b>Start Date:</b>	7/9/2007	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	7/9/2007	<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>		<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>		<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>	MID980994354	<b>Contract #</b>	
<b>RCRIS ID #:</b>			

#### Site Description

On July 9, 2007, Dow's contractor began positioning equipment on a work barge to begin the preparation of driving temporary sheet piling in the river to delineate the area of highest dioxin contamination. Dow's contractor has completed construction on the HDPE sediment transport pipeline and has conducted hydrostatic testing of the line. The sediment transport line is approximately 9,000 feet long and will transport sediment slurry from the dredge area in the river to the Geo-Tube dewatering cell.

On-Scene Coordinator (OSC) Jim Augustyn is providing oversight with assistance from U.S. EPA's START Contractor, Weston Solutions, Inc.

#### Current Activities

The following activities have been completed by Dow during the period of October 8th through October 15th. Routine tasks such as dredging, raking of debris, excavation of sediment within contained turbidity barrier, stockpiling and dewatering of sediment, air monitoring, turbidity data collection and 24-hour composite water sampling from the settling pond for total suspended solids (TSS) analysis are performed daily.

To view an aerial photo that depicts current site progress, please visit the Document Section of this website and open the document titled "Reach D Project Progress Figure".

October 8th, Dow continued driving permanent sheet piling south of the 30" water main, installed permanent sheet piling adjacent to the water main and conducted a quality control (QC) survey of the dredged areas within the Northern turbidity barrier containment cell. Contractors collected the 32nd 24-hour composite sample for TSS analysis. The 24 hour discharge volume for 10/07/08 to 10/08/07 was 179,434 gallons. The 31st composite sample was collected on 10/07/07 and the discharge volume for 10/06/07 to 10/07/07 was 1,012,663 gallons.

October 9th, Dow began 'crossing' activities over the 30" water main with permanent sheet piling, and continued the driving of permanent sheet piling south of the 30" water main. Contractors collected the 33rd 24 hour composite sample for TSS analysis. The 24 hour discharge volume for 10/08/07 to 10/09/07 was 760,321 gallons.

October 10th, Dow completed 'crossing' activities over the 30" water main, installed protective winterization barrier (ice breaker) on the west side of the turbidity curtain that crosses the 30" main and continued driving permanent sheet piling between the 30" and 36" water mains to grade or 'ultimate refusal' elevations. Contractors conducted a QC survey within the Northern turbidity barrier containment cell to determine remaining quantities of materials for dredging/excavation and collected the 34th 24 hour composite sample for TSS analysis. The 24 hour discharge volume for 10/09/07 to 10/10/07 was 910,223 gallons.

October 11th, Dow began excavation of sediment and miscellaneous materials within the temporary turbidity barrier between both Dow bridges. Contractors installed a 35' double sheet piling to the temporary turbidity barrier immediately north of the 36" water main in preparation for installation of the turbidity curtain and assembled the turbidity curtain to meet dimensional openings. Contractors collected the 35th 24 hour composite sample for TSS analysis. The 24 hour discharge volume for 10/10/07 to 10/11/07 was 928,285 gallons.

October 12th, Dow installed a turbidity curtain over the 36" water main in addition to a protective barrier on the west side of the curtain. Began final excavation 'vacuum' pass within Northern containment cell and concentrated on 'setting' permanent sheet piling from the Dow Dam to the 36" water main. Contractors collected the 36th 24 hour composite sample for TSS analysis. The 24 hour discharge volume for 10/11/07 to 10/12/07 was 929,538 gallons.

October 13th, Dow continued final pass vacuum dredging within the Northern containment cell and continued excavation activities within the middle containment cell. Contractors also concentrated on driving permanent sheet piling between the 36" and 30" water mains to grade or 'ultimate refusal' and collected the 37th 24 hour composite sample for TSS analysis. The 24 hour discharge volume for 10/12/07 to 10/13/07 was 279,699 gallons.

October 15th, Dow completed final 'vacuum' pass within Northern containment cell and conducted post removal sampling. Contractors continued excavation activities within the middle containment cell. Contractors were unable to collect a composite TSS sample from the Reach D decant pond due to limited overnight discharge. On 10/14/07, contractors collected the 38th 24 hour composite sample for TSS analysis. The 24 discharge volume for 10/13/07 to 10/14/07 was 462,297 gallons and the 24 discharge volume for 10/14/07 to 10/15/07 was 40,804 gallons.

#### **Planned Removal Actions**

Sheet piling will be set, driven or cut down to established elevations to complete the installation of the turbidity barrier south of the downstream 'railroad' bridge, and north of the Dow dam.

Installation of permanent sheet piling will continue along the RGIS System downstream of the 'railroad' bridge, and north of the Dow dam.

#### **Next Steps**

Dow's contractors will continue setting and driving the temporary sheet piling turbidity barrier to complete containment in the removal area.

Dow will contract divers to 'torch cut' underwater the remaining historic flume piling located near the 36" water main. Divers will also inspect the 'footings' of both turbidity curtains over the water mains to confirm an adequate seal.

Pending results of the post-removal sampling, new riprap will be placed in the river against the new permanent sheet piling along the RGIS system.

#### **Disposition of Wastes**

To date, approximately 384 pieces (average length 10 to 12 feet) of historic flume piling have been extracted from the Reach D project area. The flume piling will be decontaminated and processed for metal reclamation.

Waste consisted of Reach D rip-rap, misc. debris and sediment from within the enclosed turbidity barrier. A total of 469 loads, estimated at 12 cubic yards per load, total cumulative volume 5,628 estimated cubic yards

7-31-07, 34 loads 8-01-07, 35 loads 8-02-07, 39 loads 8-03-07, 24 loads  
8-04-07, 11 loads 9-07-07, 04 loads 9-08-07, 07 loads 9-17-07, 17 loads  
9-18-07, 16 loads 9-19-07, 15 loads 9-20-07, 23 loads 9-24-07, 15 loads  
9-26-07, 22 loads 9-28-07, 24 loads 10-02-07, 13 loads 10-03-07, 13 loads  
10-04-07, 15 loads 10-05-07, 21 loads 10-08-07, 23 loads 10-09-07, 21 loads  
10-10-07, 22 loads 10-11-07, 22 loads 10-12-07, 17 loads 10-15-07, 36 loads

From 9-06-07 to 10-15-07 Reach D sediment dewatering activities have conveyed 26,204,637 gallons of water to Dow's waste water treatment plant (WWTP).

