

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

**Date:** Thursday, September 20, 2007

**From:** James Augustyn/Brian Schlieger, On-Scene Coordinator

<p><b>To:</b> Jason El-Zein, U.S. EPA Duty Officer, USCG Cheryl Howe, MDEQ Rick Karl, USEPA Steve Lucas, Dow Chemical Company Mark Durno, USEPA</p>	<p>David Chung, U.S. EPA Al Taylor, MDEQ Jeff Cahn, U.S. EPA Mark Johnson, U.S. EPA R5 Jim Sygo, MDEQ</p>
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**Subject:** Tittabawasse River Project Reach D  
Tittabawasse River Dioxin-Reach D  
Midland, MI  
Latitude: 43.6011  
Longitude: -84.2386

<b>POLREP No.:</b> 9	<b>Site #:</b> B5KF
<b>Reporting Period:</b> 9-12-07 thru 9-18-07	<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>Completion Date:</b>	<b>NPL Status:</b> Non NPL
<b>CERCLIS ID #:</b> MID980994354	<b>Incident Category:</b> Removal Action
<b>RCRIS ID #:</b>	<b>Contract #</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's contractors during the period of September 12 through Sept 18th, 2007. Routine tasks such as dredging within contained turbidity barrier, dredge line, booster pump operation, the monitoring of polymer addition for the Geo Tubes within Reach D containment cell, air monitoring, turbidity data collection from both upstream and downstream turbidity monitors 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".

Wednesday Sept 12, Dow's contractors continued the setting and driving of the temporary turbidity barrier sheet piling downstream of the 30" water main located south of the downstream 'railroad' bridge in addition to the driving of permanent sheet piling underneath the upstream 'pipe' bridge. Contractors continued construction of an access road under both bridges. Contractors collected the sixth 24-hour composite sample from the decant pond discharge meter and transferred the sample to Dow's waste water treatment plant (WWTP) lab for TSS analysis. The 24 hour discharge volume for 9/11/07 to 9/12/07 was 653,301 gallons.

Thursday Sept 13, Contractors cleared logs and trees from the breast of the Dow dam. Continued construction of an access road under both Dow bridges and the driving of permanent sheet piling between the bridges. A 3rd turbidity monitoring station was removed from the upstream 'pipe' bridge location and reinstalled downstream of the 30" underwater main crossing. Contractors collected the seventh 24-hour composite for TSS analysis. The 24 hour discharge volume for 9/12/07 to 9/13/07 was 648,027 gallons.

Friday Sept 14, Contractors began the installation of the temporary turbidity sheet piling immediately north of the Dow dam. Continued the driving of permanent piling beneath the upstream 'pipe bridge' and installation of permanent sheet piling between both Dow bridges. Contractors utilized a long reach excavator to rake the river bottom and remove areas of significant debris within the enclosed turbidity. The debris consisted of large rocks, bricks, concrete, asphalt, and wood. Contractors collected the eighth 24-hour composite sample for TSS analysis. The 24 hour discharge volume for 9/13/07 to 9/14/07 was 667,627 gallons.

Saturday Sept 15, Continued raking debris from the river bottom along the northeast portion of the upstream dredge area. The debris material is being staged on the access road, and allowed to dewater into the containment area prior to load-out to Dow's Salzburg Landfill. Contractors continued the installation of permanent sheet piling between both Dow bridges. Contractors collected the ninth 24-hour composite sample for TSS analysis. The 24 hour discharge volume for 9/14/07 to 9/15/07 was approximately 921,399 gallons.

Monday Sept 17, Continued raking debris from the river bottom along the northeast portion of the upstream dredge area and allowed the debris to dewater into the containment area prior to load out. Contractors began the load-out of staged debris. A total of 17 truckloads were transported to the Salzburg Landfill. Continued setting and driving of the temporary turbidity barrier sheet piling immediately north of the Dow dam, the driving of permanent sheet piling between both Dow bridges continued. Collected the eleventh 24-hour composite sample for TSS analysis. The tenth sample was collected on Sunday, Sept 16th, 2007. The 24 hour discharge volume to for 9/15/07 to 9/16/07 was 921,312 gallons. The 24 hour volume for 9/16/07 to 9/17/07 was 285,737 gallons; the decant pond was completely drawn down during this period to facilitate change-out of the Sump pump.

Tuesday Sept 18, Continued raking debris from the river bottom, continued the load-out of staged debris from the northeast portion of the upstream containment area. A total of 16 truckloads were transported to the Salzburg Landfill. Continued the setting and driving of temporary sheet piling immediately North of the Dow dam, and the driving of permanent sheet piling beneath the 'railroad' bridge. Contractors continued the driving of permanent sheet piling between both Dow bridges and at 1115 Hours the EPA's START contractor informed the construction field coordinator of a leaking hydraulic hose. Dow Contractors assessed a small hydraulic leak in a hose. The amount of fluid lost (estimated at less than 1 pint) was contained within the enclosed turbidity barrier between both Dow bridges and recovered with absorbent boom. Contractors

collected the twelfth 24-hour composite. The 24 hour discharge volume for 9/17/07 to 9/18/07 was 1,087,164 gallons.

### Planned Removal Actions

Dow's contractors will continue removing historic flume sheet piling north of the Dow Dam and within the enclosed middle section between both Dow bridges. Sheet piling will be driven down to established elevations to complete the installation of the middle section of the turbidity barrier.

Installation of permanent sheet piling will continue along the RGIS System within the middle section of the removal area.

### Next Steps

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

The installation of two sections of gunderboom particulate containment system (PCS) 'Turbidity Curtain' over a 30" and 36" underwater pipeline to complete temporary turbidity barrier south of downstream 'railroad bridge'.

### Estimated Costs \*

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
RST/START	\$160,000.00	\$62,000.00	\$98,000.00	61.25%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	\$160,000.00	\$62,000.00	\$98,000.00	61.25%

\* 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.

### Disposition of Wastes

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To date, approximately 249 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 and misc. debris near the RGIS system. A total of 220 loads, estimated at 12 cubic yards per load total volume 2,245 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

From 9-06-07 to 9-18-07 Reach D sediment dewatering activities have conveyed 8,002,035 gallons of water to Dow's waste water treatment plant (WWTP).

[www.epaossc.net/tittabawasseeDioxinReachD](http://www.epaossc.net/tittabawasseeDioxinReachD)