

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

**Date:** Tuesday, November 20, 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>	15	<b>Site #:</b>	B5KF
<b>Reporting Period:</b>	10-29-07 thru 11-18-07	<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>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 29th through November 18th. 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 29th/October 30th, Dow continued dredge and excavation activities within the former 30" water main cell. Load out of dewatered sediment to Dow's Salzburg Landfill and quality control (QC) surveys were conducted within 30" cell to determine remaining quantities of sediment for dredging/excavation.

October 31st, Dow continued dredge and excavation activities within the former 30" water main cell. Load out of dewatered sediment to Dow's Salzburg Landfill and QC surveys were conducted within 30" cell. Contractors began installation of another 'cut off wall' 20 feet North of the of the 36" water main cell. Contractors applied odor encapsulating foam for the first time on top of excavated sediment and debris stockpiled near the 30" cell.

November 1st - November 3rd, continuation of dredge activities, QC surveys, excavation and hauling of dewatered sediment to the Salzburg Landfill continued from within the 30" cell. On November 2nd additional post dredge sampling occurred within the northern containment cell utilizing a geo-probe mounted on marine barges. November 2nd and 3rd, odor encapsulating foam was utilized for the on top of freshly excavated sediment and debris near the 30" cell. New 'cut off wall' installation continued through this time period.

November 5th, contractors completed the installation of the new 'cut off wall' north of the 36" cell which entailed driving the sheet piling to ultimate refusal and began final vacuum pass in 30" cell.

November 6th, continuation of vacuum pass within the 30" cell and began excavation/stockpiling of sediment and debris from within the 36" cell.

November 7th, Dow completed final vacuum pass and QC survey within 30" cell, and continued excavation/stockpiling activities from within 36" cell. Load out of previous days excavated sediment and debris. Prior to contractors applying odor encapsulating foam on top of excavated sediment and debris, U.S. EPA START collected samples for lab analysis.

November 8th Continuation of dredge, excavation/stockpiling activities from within 36" cell. Load out of stockpiled dewatered sediment and debris. Dow personnel with contractors conducted post dredge sampling from within 30" cell.

November 9th – November 12th, Continuation of dredge, excavation/stockpiling activities from within 36" cell. Load out of stockpiled dewatered sediment and debris to Salzburg Landfill. Contractors began and completed the installation of the remaining proposed section of temporary turbidity barrier sheet piling north of the 36" cell.

November 13th contractors removed 'cut-off wall' immediately north of 36" cell to create a new larger 'Last Cell'. Dredge, excavation/stockpiling activities began in last cell in areas previously not dredged or excavated. Contractors continued load out of previous days stockpiled materials.

November 14th – November 18th, continuation of dredge, excavation/stockpiling and load out of dewatered sediment and debris from within last cell. QC surveys are conducted on a daily basis within the last cell to determine 'high spots' and remaining quantities of materials for dredging/excavation operations.

**Planned Removal Actions**

Dow's contractors will continue dredging activities and land based excavation within the final cell immediately north of the Dow Dam and south of the remaining 'cut off wall' (Reference Reach D Project Progress Figure) prior to final deposition in Dow's Salzburg Landfill. Post dredge sampling will follow completion of dredge and excavation activities.

Dow is in process of mobilization of a second dredge boat with an elongated dredge extension to perform additional vacuum passes within the northern Containment cell. In addition, land based excavation along a 120 yard section of permanent sheet piling will also be conducted. The final sections of the second dredge boat are tentatively to arrive on site Wednesday November 28, 2007. An additional round of post dredge sampling will follow the completion of dredging and excavation activities.

Dow will transport dredged sediment from the Geo tubes to the Salzburg Landfill at the completion of all dredge and excavation activities within the Reach D Tittabawassee Project area.

**Estimated Costs \***

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
RST/START	\$160,000.00	\$113,000.00	\$47,000.00	29.38%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	\$160,000.00	\$113,000.00	\$47,000.00	29.38%

\* 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**

To date, approximately 398 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. A total of 740 loads, estimated at either

12 or 20 cubic yards per load total volume 10,144 estimated cubic yards

7-31-07, 34 loads	8-01-07, 35 loads
8-02-07, 39 loads	8-03-07, 24 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	10-16-07, 04 loads
10-17-07, 18 loads	10-19-07, 31 loads
10-20-07, 02 loads	10-24-07, 13 loads
10-25-07, 07 loads	10-26-07, 06 loads
10-27-07, 08 loads	10-29-07, 07 loads
10-30-07, 10 loads	10-31-07, 18 loads
11-01-07, 14 loads	11-02-07, 08 loads
11-07-07, 06 loads	11-08-07, 16 loads
11-09-07, 07 loads	11-10-07, 04 loads
11-12-07, 14 loads	11-13-07, 07 loads
11-14-07, 06 loads	11-15-07, 13 loads
11-16-07, 12 loads	11-17-07, 13 loads

From 9-06-07 to 11-18-07 Reach D sediment dewatering activities have conveyed 46,847,015 gallons of water to Dow's waste water treatment plant (WWTP).

[response.epa.gov/tittabawasseeDioxinReachD](http://response.epa.gov/tittabawasseeDioxinReachD)

POLREP #15 Last Updated 12/7/2007