United States Environmental Protection Agency
Region V
POLLUTION REPORT

Date: Friday, October 05, 2007
From: James Augustyn/Brian Schlieger, On-Scene Coordinator

To: Jason El-Zein, U.S. EPA
   Duty Officer, USCG
   Cheryl Howe, MDEQ
   Rick Karl, USEPA
   Steve Lucas, Dow Chemical Company
   Mark Durno, USEPA

From: David Chung, U.S. EPA
   Al Taylor, MDEQ
   Jeff Cahn, U.S. EPA
   Mark Johnson, U.S. EPA R5
   Jim Sygo, MDEQ

Subject: Tittabawassee River Project - Reach D
         Tittabawassee River Dioxin-Reach D
         Midland, MI
         Latitude: 43.6011
         Longitude: -84.2386

POLREP No.: 11
Reporting Period: 9/05/2007 - 10/01/07
Start Date: 7/9/2007
Mob Date: 7/9/2007
Completion Date: 7/9/2007
CERCLIS ID #: MID980994354
RCRIS ID #: Contract #

Site #: B5KF
D.O. #: 11
Response Authority: CERCLA
Response Type: Time-Critical
NPL Status: Non NPL
Incident Category: Removal Action

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 25th through Oct 1st, 2007. Routine tasks such as dredging, raking of debris, excavation of sediment within contained turbidity barrier North of upstream ‘piping’ bridge, stockpiling and dewatering of sediment in Northeast section of Reach D project area, 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".
Tuesday Sept 25th, Dow contractors began the driving of the temporary turbidity barrier sheet piling underneath the downstream ‘railroad’ bridge. Contractors moved one construction barge downstream to off-load equipment and perform maintenance activities on the crane. Collected the 19th 24-hour composite sample from the decant pond discharge meter and transferred the sample to Dow’s WWTP lab for TSS analysis. The 24 hour discharge volume for 9/24/07 to 9/25/07 was 934,152 gallons.

Wednesday Sept 26th, Dow contractors completed the extraction of historic flume piling downstream of the 36” water main and continued upstream toward the 30” water main. Both water mains are located south of downstream ‘railroad’ bridge. Contractors began installation of permanent sheet piling downstream of the 30” water main. Activities continued on temporary turbidity barrier sheet piling underneath ‘railroad’ bridge with the welding of additional lengths of sheet piling to the underlying sheets and driving them to established grade. Dow contractors conducted a quality control (QC) survey of dredged areas to date and collected the 20th 24-hour composite sample for TSS analysis. The 24 hour discharge volume for 9/25/07 to 9/26/07 was 927,560 gallons.

Thursday Sept 27th, due to the failure of the HDPE sediment transport pipeline booster pump cooling fan there was no hydraulic dredging activities and only maintenance work at the Reach D containment cell. Contractors continued the setting and driving of permanent sheet piling downstream of the 30” main and the welding of add-on pieces to the temporary turbidity barrier sheet piling underneath the ‘railroad’ bridge. Contractors removed the ‘suction head’ from the excavator staged on the barge within the northern turbidity barrier containment cell and installed a bucket to allow raking of debris and densely compacted materials on the river bottom.

Friday Sept 28th, Hydraulic dredging activities and containment cell activities resumed after the booster pump cooling fan was repaired. Dow contractors continued the setting and driving of permanent sheet piling and temporary turbidity sheet piling. Contractors collected the 21st and 22nd 24-hour composite sample for TSS analysis. The 24 hour discharge volume for 9/26/07 to 9/27/07 was 1,013,649 gallons. The 24 hour discharge volume for 9/27/07 to 9/28/07 was 116,481 gallons.

Saturday Sept 29th, Dow contractors loaded out historic flume piling to be decontaminated and sent for metal reclamation and continued the setting and driving of the temporary turbidity barrier. Collected the 23rd 24-hour composite sample for TSS analysis. The 24 hour discharge volume for 9/28/07 to 9/29/07 was 876,274 gallons.

**Planned Removal Actions**

Sheet piling will be set, driven or cut 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.

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**

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<th>Budgeted</th>
<th>Total To Date</th>
<th>Remaining</th>
<th>% Remaining</th>
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<td>RST/START</td>
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<td><strong>Total Site Costs</strong></td>
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* 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 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 portion of the Northern Turbidity barrier containment north of the upstream ‘piping’ bridge. A total of 266 loads, estimated at 12 cubic yards per load total volume 3,433 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

From 9-06-07 to 9-24-07 Reach D sediment dewatering activities have conveyed 12,755,146 gallons of water to Dow's waste water treatment plant (WWTP).