United States Environmental Protection Agency
Region V
POLLUTION REPORT

Date: Friday, December 7, 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

POLREP No.:	16	**Site #:**	B5KF
Reporting Period:	11-19-07 - 12-02-07	**D.O. #:**	
Start Date:	7/9/2007	**Response Authority:**	CERCLA
Mob Date:	7/9/2007	**Response Type:**	Time-Critical
Demob Date:		**NPL Status:**	Non NPL
Completion Date:		**Incident Category:**	Removal Action
CERCLIS ID #:	MID980994354	**Contract #**	
RCRIS ID #:			

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 November 19th through December 2nd. 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 pending sampling loop 'freeze' issues.

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".

November 19th - Continuation of dredge, excavation/stockpiling and hauling of dewatered sediment and debris from within the last cell to Dow's Salzburg Landfill. QC surveys are conducted on a daily basis within the last cell to update dredge figure and determine remaining quantities of materials for dredging/excavation operations. Contractors continue demobilization activities of unnecessary equipment, supplies and personnel and have completed the torch cutting of the upstream permanent piling to finished elevations.

November 20th - Continuation of dredge, excavation/stockpiling and load out of dewatered sediment and debris from within the last cell. Additional land based excavation was performed in the Northern turbidity containment cell 'North cell' and along the 36" water main immediately north of the Dow Dam. Sections of an additional dredge boat were mobilized to the Reach D stockyard, and throughout the day contractors imported stone and began the installation of a crane pad on the Eastern access road at the North cell.

November 21st – Contractors continued excavation activities within the North cell, dredge boat activities continued within the last cell along with the load out of impacted rip-rap, clay, and misc.
debris. Contractors began the load out of materials excavated on 11-20-07 from within the North cell and the second portion of the additional dredge boat was mobilized to the Reach D stockyard.

November 22nd – Continuation of dredge activities within the last cell, and contractors completed the hauling of previously excavated materials from the North cell to the Salzburg Road Landfill. The Reach D geo-tube containment cell odor suppression system was deactivated due to frozen components. Dow's project team will continue to monitor for the presence of odor and alternate suppression methods (foam and gypsum) will remain available if application is deemed necessary.

November 23rd – Continuation of dredge boat activities within the last cell and the load out of previously excavated materials. Contractors began excavating a new sediment section along the 36" water main. Rip-rap was placed along the permanent sheet piling in the Northern section of the North cell to create a reinforcing buttress that will support the sheeting during the crane lift of the second dredge boat to be utilized within this cell.

November 24th – Contractors completed dredge boat activities and the hauling of previously excavated materials from within the last cell, and began the reconfiguration of the dredge conveyance line to the North cell area. Crane pad preparation continued along with the resurfacing of the Eastern access road. Dow contractors were unable to obtain a 24 hour TSS sample from the Reach D decant pond outfall due to the freezing of the sampling loop.

November 25th – Contractors repositioned the excavator barge within the last cell and commenced vacuum dredge activities and the assembly of the dredge conveyance line continued to the North cell. Dow contractors 'retired' geo-tubes one through six which entailed removing the piping header system and associated hoses from the tubes. Geo tubes seven and eight will remain in operation to receive dredged sediment from the river.

November 26th – Contractors continued the assembly of the dredge conveyance line to the North cell and vacuum dredge activities within the last cell.

November 27th through November 29th – Contractors continued vacuum dredge activities and collected post dredge confirmation samples within the last cell, prepared the second dredge boat mobilization to the North cell and utilized a 120 ton crane to place the second dredge boat within the North cell.

November 30th – Continuation of additional vacuum dredge activities and post dredge confirmation sampling within the last cell. Contractors began vacuum dredge activities within the North cell. Dow was unable to obtain a 24 hour Composite TSS sample from the Reach D outfall due to freezing components associated with the automated sampler.

December 1st through December 2nd – Contractors continued vacuum dredge activities and collected post dredge confirmation samples from within the North cell. Dow was unable to collect composite TSS samples from the Reach D decant pond outfall due to frozen components.

Planned Removal Actions

Dow plans to transport dredged sediment from the Geo tubes to the Salzburg Road Landfill in early 2008.

Dow will continue the demobilization of contractor personnel and equipment when no longer required

The temporary turbidity barrier will remain in place over the winter while post-removal sampling data is reviewed to determine the effectiveness of the removal action

After USEPA and MDEQ's review and approval of the post-removal analytical data, Dow will place rip rap along the length of the RIGS system, cover the removal area with 6 inches of fish gravel, and remove the temporary turbidity barrier.

Key Issues

USEPA and MDEQ completed a review of post-removal sample data for the Northern cell. Elevated levels of dioxin were still present in the cell. Dow agreed to perform supplemental work in this cell and submitted a Supplement Work Plan on November 27, 2007.

Dow completed the supplemental work on December 2nd and collected additional post-removal samples. USEPA and MDEQ are reviewing the new data to evaluate the supplemental work that was completed to reduce the dioxin levels in this area.

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 834 loads, estimated at either 12 or 20 cubic yards per load total volume 12,008 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
11-19-07, 24 loads	11-20-07, 15 loads
11-21-07, 09 loads	11-22-07, 14 loads
11-23-07, 19 loads	11-24-07, 11 loads
11-30-07, 02 loads	

From 9-06-07 to 12-02-07 Reach D sediment dewatering activities have conveyed 59,341,028 gallons of water to Dow's waste water treatment plant (WWTP).

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