

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

Date: Tuesday, March 28, 2006
From: Sam Borries/ Josie Clark

Subject: Ruddiman Creek and Pond Remediation
Ruddiman Creek and Pond Remediation
2204 Wickham Street, Muskegon, MI
Latitude: 43.2142000
Longitude: -86.2831000

POLREP No.:	10	Site #:	GLNPO
Reporting Period:		D.O. #:	
Start Date:	8/8/2005	Response Authority:	
Mob Date:	8/8/2005	Response Type:	
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:	N/A	Contract #	
RCRIS ID #:	N/A		

Site Description

Refer to POLREP #1 (initial)

Current Activities

During this reporting period, GLDM completed re-dredging activities in grids 10 & 11 of Area 3 and met cleanup criteria per confirmation sampling results. GLDM completed the initial dredging of Area 2 and Area 1. Confirmation sampling results indicated that 7 of the 9 sampling grids require additional dredging activities. GLDM is currently dredging an additional 3 feet of sediment from grids 1-7 in Areas 1 & 2. The additional 3 foot cut was selected over the 2 foot work plan requirement to accommodate maximum dredge efficiency of the clamshell bucket. A heavy rain event on 3/13/06 created an apparent scour channel under the Ruddiman Pond outfall silt curtain barriers. The flood event also repositioned the outer most silt curtain up against turbidity monitoring station #1. The curtain has been repositioned and activities are underway to backfill the area where sediment was eroded due to water flow under the silt curtain barriers. The sediment that eroded during the storm event was not contaminated sediment to be removed as part of the ongoing dredging activities.

Jackson and Merkey Construction (J&M) has completed dredging and backfilling activities in Areas C and D. Area D was initially over excavated by one foot and immediately backfilled with sand after post excavation samples were collected. The over excavation and immediate backfill was necessary due to side slope instability. Initially a three foot layer of sand backfill with an underlying geotextile layer was placed into Area D3. However, the bottom material of the excavation would not support the weight of three feet of backfill and the initial three feet of sand sank into the bottom of the excavation. To accommodate the non-load bearing properties of this excavation and the remainder of Areas B,C and D, it was determined that only one foot of gravel or sand (depending on water depth) would be placed in these excavations along with an underlying geotextile membrane.

Areas C2 and D1 required no additional dredging per confirmation sampling. Areas C1 and C3 required additional excavation. Area C1 had an additional one foot of sediment removed and Area C3 had two feet of sediment removed. Post dredge sampling results confirmed C1 and C3 met cleanup criteria. Area C1, C2, C3 and D1 were backfilled with six inches of three inch stone with an underlying geotextile membrane. The access road along C2, C3 and Area D have been removed along with the mixing pit solidification area at C2. J&M are currently constructing an access road into Area B.

EQM has performed temporary seeding and mulching in Areas H, I, F, E2 and the Glenside Staging Pad area has been removed and restored.

Westshore completed post-dredge surveys of Area D, Area C and a pre-dredge survey of Area B. The volume of sediment removed from Ruddiman Creek as of 3/27/06 is approximately 12,222 cubic yards. The volume of sediment removed from Ruddiman Pond as of 3/27/06 is approximately 67,089

cubic yards. Approximately 125,500 tons of solidified sediment and 5,105,450 gallons of water have been treated and disposed.

Planned Removal Actions

GLDM will complete re-dredging activities in Pond Area 2 & 1, confirmation sampling and backfill. J&M Construction will resume dredging in Creek Area B utilizing the floating HDPE mats, a long reach excavator and the crawler carriers.

Next Steps

Complete dredging activities in Ruddiman Pond Area 2 & 1 followed by confirmatory sampling then determine what re-dredging (if any) should take place. Complete dredging in creek Area B, conduct confirmatory sampling and backfill. The floating HDPE mats will be removed and restoration activities will be completed.

Key Issues

none

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
Intramural Costs				
Total Site Costs	\$0.00	\$0.00	\$0.00	0.00%

* 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.

response.epa.gov/RuddimanCreek

POLREP #10 Last Updated 3/29/2006