

Attachment F
IRA Work Plan: Center Road Boat Launch

IRA Work Plan: Center Road Boat Launch

Prepared for
The Dow Chemical Company

47 Building
Midland, Michigan, 48667

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CH2MHILL

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Acronyms and Abbreviations

Dow	The Dow Chemical Company
IRA	Interim Response Activity
MDCH	Michigan Department of Community Health
MDEQ	Michigan Department of Environmental Quality
O&M	Operations and Maintenance
RCRA	Resource Conservation and Recovery Act
SOW	Statement of Work

IRA Work Plan: Center Road Boat Launch

1. Introduction

On June 12, 2003, The Dow Chemical Company's (Dow) Midland Plant was issued a Resource Conservation and Recovery Act (RCRA) Operating License (the "License") by the Michigan Department of Environmental Quality (MDEQ). The License governs Dow's hazardous waste management activities at the Midland Plant, and also contains requirements for RCRA Corrective Action both onsite and offsite. The offsite provisions contained in Sections XI.B. and XI.G. of the License are the basis for this work plan.

This work plan describes the Interim Response Activities (IRAs) that will be implemented at the Center Road Boat Launch. The Center Road Boat Launch is located on the Tittabawassee River in Saginaw Township (Figure 1). This facility was not investigated as part of recent studies by MDEQ, *FINAL REPORT, Phase II Tittabawassee/Saginaw River, Dioxin Flood Plain Sampling Study, June 2003*, yet this report did recommend elimination of potential exposures in public areas in the floodplain such as parks and boat launches. Any interim response activities will be developed in consultation with township officials and MDEQ.

2. Site Location and Description

The Center Road Boat Launch is located in Saginaw County on Center Road south of Michigan Road (Figure 1). Figure 2 is a recent aerial photo showing site features such as parking lots, roads, boat launch areas, etc. The park area is approximately 5-acres in size and consists of a parking lot leading to a boat launch ramp in the river. There is also handicap access via a small wooden platform deck which overlooks the river edge. There are no permanent buildings at the site.

3. Description of Planned Interim Response Activities

On completion of discussions with officials responsible for this park, the following IRAs have been identified for implementation at the park to reduce potential exposure to soil and sediment:

- Gravel Cover: The area around the boat launch will be covered with an appropriate material such as crushed stone or rip rap to limit potential exposures to soils and sediments.
- Signage: Signs advising the general public of the potential for exposure to dioxins and furans in soils and sediments will be posted within Center Road Boat Launch. MDEQ, Michigan Department of Community Health (MDCH) and Saginaw Township will determine the content, design, and arrange for the installation of the proposed warning signs. Development of signage will be completed in accordance with the work plan entitled: "Interim Response Activity: Communications."

- **Bank Stabilization:** Bank erosion by the handicap platform will be stabilized to minimize additional erosion by placement of fabric and large rip rap. Trees that are severely leaning toward the river will be trimmed or removed to prevent further erosion and bank damage
- **Access Restrictions:** Fencing along the southeast side of the boat launch will be improved to minimize access to areas toward Center Road Bridge (work has already been completed).
- **Cover:** The river access point at the outhwest side of the handicap platform will have stone placed to cover exposed soil. The majority of the park is either paved or covered with gravel. However, grassy locations outside the paved and graveled areas that may be used for other recreational activities (e.g., picnicking) will be inspected in the spring to determine if the placement of additional cover materials is appropriate. Photographs will be taken during the inspection to document areas where exposed soils are present. Vegetative cover would be added in areas used by the public to limit or eliminate the potential for direct contact with potentially contaminated soils. Following this evaluation, a work plan will be prepared and submitted to MDEQ for review and approval incorporating the following action:
 - Interim Cover Materials – These actions will include the placement of gravel, topsoil, and/or ground cover vegetation (such as grass) in specific locations identified following a site reconnaissance in the spring of 2004.

An Operations and Maintenance (O&M) plan will be implemented to maintain these actions. The O&M plan will include regular inspections and maintenance activities required to maintain the barriers. Details of the barrier installation as well as the inspection and maintenance plan will be submitted as part of a work plan.

Park officials have agreed to have these items completed as soon as feasible. Dow will reimburse the township for the costs incurred as a result of implementing these IRAs.

A brief report summarizing these IRAs will be submitted to MDEQ once they are completed.

4. Report and Schedule

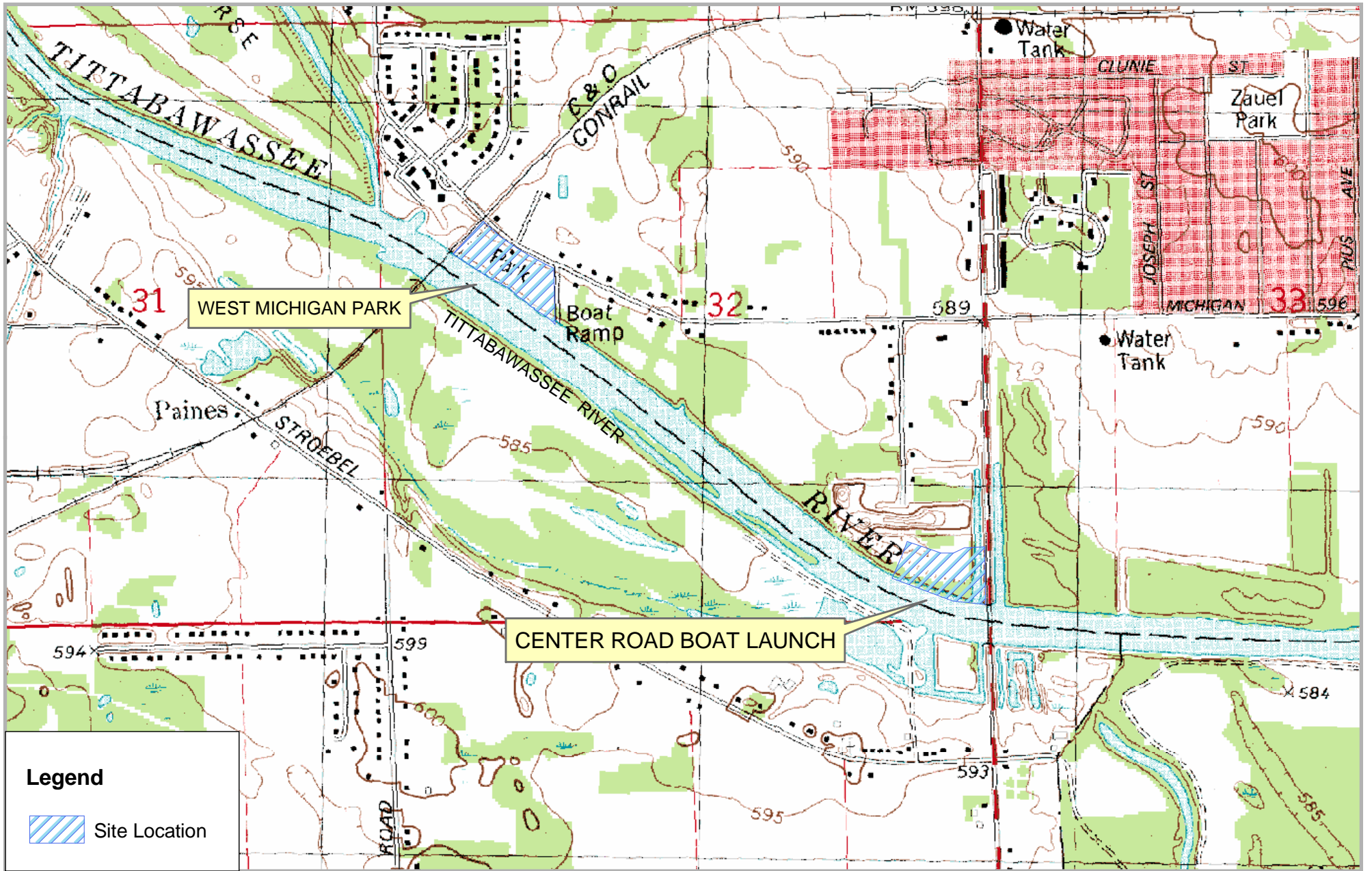
The estimated schedule is presented in Attachment G of the Statement of Work (SOW) for the Tittabawassee River Sediment and Floodplain and includes the following activities:

- Site reconnaissance survey in the spring of 2004 to identify specific areas requiring vegetative cover materials
- Preparation and submittal of work plan
- MDEQ approval
- Preparation and submittal of completion report
- O&M Plan


Implementation of these IRAs will commence in the spring of 2004. The schedule is subject to change based on flooding or other conditions that may directly affect implementation of the planned IRAs.

5. References

Michigan Department of Environmental Quality. 2003. Phase II Tittabawassee/Saginaw River Dioxin Flood Plain Sampling Study. June.



Legend

 Site Location

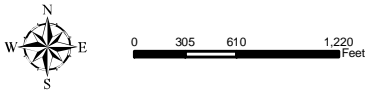


Figure 1
Location of Center Road Boat Launch
 Interim Response Activities Workplan: Center Road Boat Launch
 Dow Midland Offsite Corrective Action Program

File Path: C:\GIS\MXD\Figure1(crb).mxd



Legend

 Approximate Property Boundary



0 50 100 200 Feet

Note: 100 yr floodplain boundary is outside of the view of this diagram.

Figure 2
Features at Center Road Boat Launch

Interim Response Activities Workplan: Center Road Boat Launch
Dow Midland Offsite Corrective Action Program