



JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



STEVEN E. CHESTER  
DIRECTOR

October 7, 2004

Ms. Susan Carrington  
Vice President and Director  
Michigan Dioxin Initiative  
The Dow Chemical Company  
47 Building  
Midland, MI 48674

Dear Ms. Carrington:

**SUBJECT:** Approval of Interim Response Activity (IRA) Work Plan: Communications Portion of Remedial Investigation Revised Scope of Work, Tittabawassee River Sediments and Floodplain; The Dow Chemical Company (Dow), Midland; MID 000 724 724

Staff of the Michigan Department of Environmental Quality (MDEQ), Waste and Hazardous Materials Division (WHMD), has conducted a technical review of the IRA Work Plan: Communications portion of the Remedial Investigation Revised Scope of Work (SOW), Tittabawassee River Sediments and Floodplain, submitted by Dow on February 17, 2004, for corrective action beyond the facility boundary. The revised SOW was submitted by Dow in response to the December 12, 2003, Notice of Deficiency (NOD) and in accordance with the requirements of Condition XI.B.3. of the Hazardous Waste Management Facility Operating License (License) issued to Dow on June 12, 2003, under Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

Pursuant to Conditions XI.B.4. and XI.G. of the Operating License, the Chief of the WHMD has the option to modify and approve this IRA. The WHMD determined that significant modifications for approval were necessary to address issues raised in the NOD and meetings held since December 12, 2003, and to ensure consistency with the Operating License and applicable laws and regulations. The enclosed IRA Work Plan: Communications is approved as modified by the MDEQ. Prior to this approval, Mr. Ben Baker of Dow was afforded opportunities to review the approved as modified document on September 27 and October 5, 2004. As provided by Condition XI.B.4. of the Operating License, this document becomes an enforceable condition of the Operating License upon approval.

If you have any questions regarding this approval, please contact Mr. Al Taylor, Hazardous Waste Section (HWS), WHMD, at 517-335-4799 or by e-mail at [taylorab@michigan.gov](mailto:taylorab@michigan.gov); Ms. Cheryl Howe, HWS, WHMD, at 517-373-9881 or by e-mail at [howec@michigan.gov](mailto:howec@michigan.gov); or you may contact me.

Sincerely,

\Original Signed by\

George W. Bruchmann, Chief  
Waste and Hazardous Materials Division  
517-373-9523

Enclosure

cc/enc: Mr. Ben Baker, Dow  
Mr. Greg Rudloff, United States Environmental Protection Agency, Region 5  
Mr. Jim Sygo, Deputy Director, MDEQ  
Mr. Andrew Hogarth, MDEQ  
Ms. Liane Shekter Smith, MDEQ  
Mr. Steve Buda, MDEQ  
Ms. De Montgomery/Ms. Ginny Himich, MDEQ  
Mr. Steve Sliver, MDEQ/Corrective Action File  
Mr. Terry Walkington/Ms. Trisha Peters, MDEQ  
Ms. Brenda Brouillet, MDEQ  
Dr. Deborah MacKenzie-Taylor, MDEQ  
Mr. Al Taylor, MDEQ  
Ms. Cheryl Howe, MDEQ

# **IRA Work Plan: Communications**

Prepared for  
**The Dow Chemical Company**

47 Building

Midland, Michigan 48667

February 2004

Modified by the Michigan Department of Environmental Quality October 7, 2004

# Contents

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Section	Page
Acronyms and Abbreviations .....	iii
IRA: Communications .....	1
1. Introduction .....	1
2. Overall IRA Objectives .....	2
3. IRA Task Summary.....	2
3.1 Public Information Materials .....	2
3.2 Community Information Centers.....	2
3.3 Work Plan to Address the Disturbance and Management of Soils in Areas with Potential Dioxin/Furan Contamination (This portion of the IRA is being deferred for later review and approval.).....	3
3.4 Advisory Signage at Public Parks and Unofficial Public High Use Areas .....	3
4. Overall IRA Schedule .....	3
5. Contacts.....	4

## Figures

Site Location

## Appendices – Detailed Work Plans

- A Work Plan for Public Information Materials
- B Work Plan for Community Information Centers
- C Work Plan to Address the Disturbance and Management of Soils in Areas with Potential Dioxin/Furan Contamination (This portion of the IRA is being deferred for later review and approval.)
- D Work Plan for Advisory Signage at Public Parks, Unofficial Public High Use Areas, and Public Access Fishing Areas

# Acronyms and Abbreviations

Dow	The Dow Chemical Company
IRA	Interim Response Activity
MDEQ	Michigan Department of Environmental Quality

# IRA: Communications

## 1. Introduction

This work plan describes an Interim Response Activity (IRA) for developing communications mechanisms to inform the public of the activities associated with The Dow Chemical Company's (Dow's) offsite corrective action work for Midland area soils and the Tittabawassee River and floodplain, as well as general information about dioxins/furans and steps to take to reduce the potential for exposure. This IRA is being implemented pursuant to Condition XI.B.3.(a) of the Hazardous Waste Facility Operating License issued to The Dow Chemical Company on June 12, 2003 by the Michigan Department of Environmental Quality (MDEQ) as well as the following MDEQ comments in the December 12, 2003, Notice of Deficiency:

- Comments #6 and #19 regarding development of public information materials
- Comments #5 and #20 regarding community information centers
- Comment #7 regarding disturbance of soils in areas with potential dioxin/furan contamination
- Comments #29 and #30 regarding advisory signage at public parks and unofficial public high use areas
- Comment #33 regarding management of contaminated dredged sediments and disturbed soil

This work plan presents the following information:

- The objectives of the IRA
- A description of the approach to the IRA
- A description of the IRA areas
- Identification of access needs and agreements
- Project schedules for implementation
- List of contacts
- Detailed work plans for each IRA task (included as appendices)

## 2. Overall IRA Objectives

In general, IRAs are short-term actions that are taken to control ongoing risk while site characterization is underway before a final remedy is selected and implemented. Part 201, Environmental Remediation, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, defines interim response activity as "the cleanup or removal of a released hazardous substance or the taking of other actions, prior to the implementation of a remedial action, as may be necessary to prevent, minimize, or mitigate injury to the public health, safety, or welfare, or to the environment. Interim response activity also includes, but is not limited to, measures to limit access, replacement of water supplies, and temporary relocation of people as determined to be necessary by the Department." (MCL 324.20101[1][u]).

Therefore, the primary objective of this IRA to identify and if necessary mitigate potential human exposures during this interim period prior to the implementation of the final remedy. More specifically, this IRA will:

- Provide information on the potential risks associated with exposure to dioxins/furans and practical measures that can be taken to mitigate those risks.
- Provide information about the activities associated with Dow's offsite corrective action work for Midland area soils and the Tittabawassee River and floodplain.
- Provide for notification to the public about the potential presence of dioxin/furan contaminated soils in the areas of concern.

## 3. IRA Task Summary

The following sections describe the individual tasks that will be completed as part of this IRA. Task Work Plans, in sufficient detail to be immediately implemented, are provided in Appendices A through D.

### 3.1 Public Information Materials

The primary objective of this IRA is to prepare public information materials that are easy-to-read and that contain relevant and accurate educational information about dioxins/furans and the corrective action process. The materials will include the locations or suspected locations of contaminated media (e.g., soils that exceed the generic residential criteria), and provide straight-forward recommendations to allow the public to make informed personal decisions for limiting potential exposures to existing contamination. The materials produced will be submitted to MDEQ for review and approval prior to distribution. The work plan for developing Public Information Materials is presented in Appendix A.

### 3.2 Community Information Centers

The primary objective of this IRA is to establish Community Information Centers in Midland and Saginaw Counties, Michigan, that will:

- Provide written information to the public about the activities associated with Dow's offsite corrective action work for Midland area soils and the Tittabawassee River and floodplain

- Be located in high-traffic areas of each city or township in or near the areas of concern
- Be open and accessible at convenient hours for the public

The work plan for Community Information Centers is presented in Appendix B.

### **3.3 Work Plan to Address the Disturbance and Management of Soils and Sediment in Areas with Potential Dioxin/Furan Contamination**

This portion of the IRA is being deferred for later review and approval.

### **3.4 Advisory Warning Signage at Public Parks, Unofficial Public High Use Areas, and Public Access Fishing Sites**

The primary objective of this IRA is to develop, place, and maintain signs advising the general public of the potential for exposure to dioxins and furans at public parks, unofficial public high use areas and public access fishing sites. Parks that have been identified by MDEQ for the placement of signs include Imerman Memorial Park, West Michigan Park, Freeland Festival Park, Caldwell Boat Launch, Center Road Boat Launch, Greenpoint Nature Center, and Shiawassee National Wildlife Refuge. MDEQ has also identified "unofficial high public use" areas for placement of signs, including Dice Road pumping station, Smith's Crossing area, Dow-owned property along the Tittabawassee River that is accessible for fishing, and Germania Golf Course. The work plan for Advisory Signage at Public Parks, Unofficial Public High Use Areas, and Public Access Fishing Sites is presented in Appendix D.

## **4. Overall IRA Schedule**

The IRA will be implemented immediately upon approval by the MDEQ and completed by December 1, 2004, unless otherwise specified in this IRA. Dow will provide monthly progress reports on the implementation of the Communications IRA to the Chief of the WHMD.

## 5. Contacts

The following contacts are identified for this IRA.

### Dow

Ben Baker  
Senior Environmental Project Leader  
47 Building  
Midland, MI 48667  
Telephone: 989-636-0787

### CH2M HILL

Gary Dyke  
Project Manager  
1111 Washington Street  
Midland MI, 48640

### MDEQ

Cheryl Howe  
Senior Environmental Engineer  
Michigan Department of Environmental Quality  
Waste and Hazardous Materials Division  
P.O. Box 30241  
Lansing, MI 48909  
Telephone: 517-373-9881

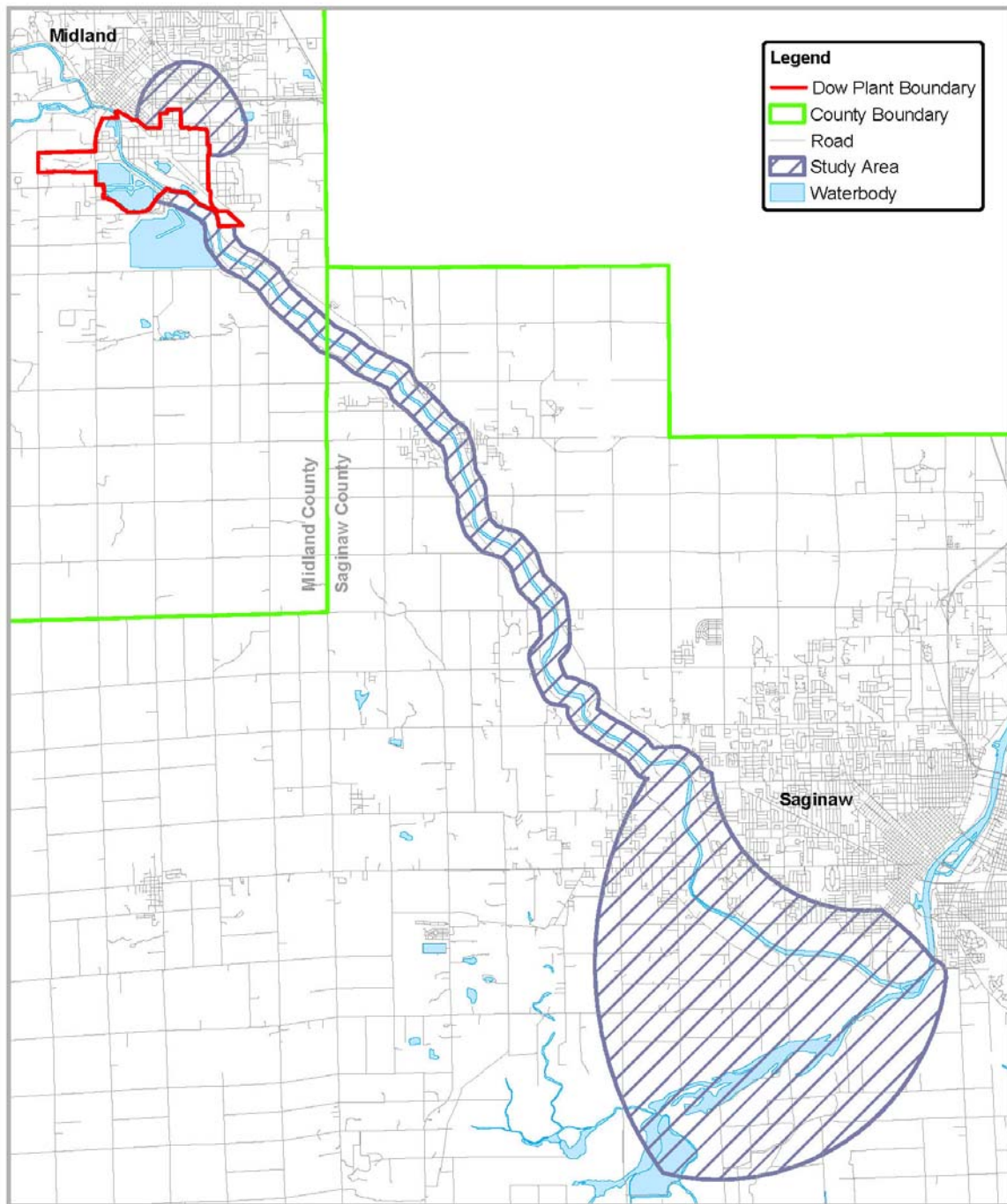


Figure 1  
Site Location  
Communications IRA  
Dow Midland Offsite Corrective Action Program

**Appendix A**  
**Work Plan for Public Information Materials**

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# **IRA Work Plan: Communications**

## **Work Plan for Public Information Materials**

Prepared for  
**The Dow Chemical Company**

47 Building  
Midland, Michigan 48667

February 2004

# Contents

---

Section	Page
Acronyms and Abbreviations .....	iii
Work Plan for Public Information Materials .....	1
1. Objectives .....	1
2. Description of Approach .....	1
2.1 Approach for Developing Materials .....	1
2.2 Informational Material to be Developed .....	2
2.3 Distribution of Informational Materials .....	4
3. Schedule .....	5
Figure	
C-1 Site Location	

# Acronyms and Abbreviations

ATSDR/CDC	Agency for Toxic Substance and Disease Registry/Centers for Disease Control and Prevention
Dow	The Dow Chemical Company
IRA	Interim Response Activity
MDA	Michigan Department of Agriculture
MDCH	Michigan Department of Community Health
MDEQ	Michigan Department of Environmental Quality
USEPA	U.S. Environmental Protection Agency
WIN	Saginaw Bay Watershed Initiative Network

# Work Plan for Public Information Materials

## 1. Objectives

This work plan is part of an Interim Response Activity (IRA) for developing communications mechanisms to inform the public of the activities associated with The Dow Chemical Company's (Dow's) offsite corrective action work for Midland area soils and the Tittabawassee River and floodplain, as well as to provide general information about dioxins/furans and steps to take to reduce the potential for exposure. The IRA is being implemented pursuant to Condition XI.B.3.(a) of the Hazardous Waste Facility Operating License issued to Dow on June 12, 2003, by the Michigan Department of Environmental Quality (MDEQ) and addresses the following MDEQ comments in the December 12, 2003, Notice of Deficiency:

- Comments # 6 and #19 regarding development of public information materials

The primary objective of this Work Plan for Public Information Materials is to prepare public information materials that are easy to read and contain relevant and accurate educational information about dioxins and furans and the corrective action process. The materials will include the locations or suspected locations of contaminated media (e.g., soils that exceed the generic residential criteria), and provide straight-forward recommendations to assist the public in making informed personal decisions for limiting potential exposures to existing contamination. The public information materials prepared for this IRA will be reviewed and approved by MDEQ prior to distribution.

## 2. Description of Approach

### 2.1 Approach for Developing Materials

Public information materials are best prepared and distributed by a third-party organization to enhance community acceptance, provide resource management, and lead a process that is acceptable to stakeholders. This organization should have the following characteristics:

- Represent a broad range of interests
- Be a local organization with knowledge of local issues affecting the community
- Have a reputation for integrity on issues affecting the community

Dow recommends the Saginaw Bay Watershed Initiative Network (WIN) because it is an established multistakeholder organization whose mission is consistent with this work.

WIN is a voluntary, nonregulatory partnership created to enhance the quality of life in the Saginaw Bay Watershed by creating regional networks of on-the-ground projects that demonstrate sustainability. The networks consist of communities, conservation groups, foundations, and businesses working together to enhance the Saginaw Bay Watershed and create a more sustainable future for all of its inhabitants. WIN has brought people and resources together to balance environmental, economic, social, recreational, and historic priorities, and to leverage ideas and resources toward a common goal—the greater good of future generations. WIN has launched projects to protect habitat, improve access to the bay, foster nature-based tourism, inform people about nonpoint source pollution and support sustainable agriculture. Additional information about WIN is available at: <http://www.saginawbaywin.org/> or by contacting:

Saginaw Bay Watershed Initiative Network  
Mike Kelly  
Project Coordinator  
PO Box 111  
Auburn, MI 48611  
(989) 662-6024  
Toll-Free: 1-877-ASK-4WIN  
Fax: 989-662-6065  
E-mail: [kellym@conservationfund.org](mailto:kellym@conservationfund.org)

Upon approval of the IRA: Communications Work Plan, Dow will formally request WIN (or other mutually agreed upon party) to assume this role and develop a specific proposal. This proposal will include the process for developing these materials, and specify that MDEQ review and approval or approval with modifications of the materials will be required prior to distribution. In the event of a disagreement, WIN and MDEQ will informally use their best efforts to resolve the conflict. If the conflict cannot be resolved, the MDEQ will approve the document with any necessary modifications.

## 2.2 Informational Materials to be Developed

The public informational materials that will be prepared will consist of a series of easy-to-read pamphlets with a coordinated look, size, and approach. The series will include, but is not limited to, the following pamphlets:

- Backgrounder: Dioxins and Furans
- Backgrounder: Corrective Action Process
- Backgrounder: Health Questions - Dioxins and Furans
- Guidance: Reducing Exposure at Homes
- Guidance: Reducing Exposure during Recreational Activities
- Guidance: Reducing Exposure from Agricultural Activities
- Guidance: Reducing Exposure for Workers Who Have Contact with Contaminated Media
- Guidance: Management of Disturbed Soils and Dredged Sediments
- Guidance: How Regulations Affect Impacted Property Owners
- Fish Advisory for the Saginaw Bay Watershed
- Wild Game Advisory for the Tittabawassee River Watershed

The content of these advisories will be consistent with advisories and informational materials that have already been published by the MDEQ, Michigan Department of Agriculture (MDA), and Michigan Department of Community Health (MDCH). In addition to the publications noted above, the following resources will be used to provide source material for the materials to be developed:

- MDEQ
- MDCH
- MDA
- MDNR
- U.S. Environmental Protection Agency (USEPA)
- Agency for Toxic Substances and Disease Registry (ATSDR)/Centers for Disease Control and Prevention (CDC)
- World Health Organization
- Other Governmental Organizations

The general content of these pamphlets is described in the following sections. Each pamphlet will also include maps and/or descriptions of the general locations of known and suspected dioxin/furan contaminated media for the Midland area soils and Tittabawassee River and floodplain. Areas that are known or suspected to contain dioxins/furans at levels that exceed the generic residential criteria in soil will be identified on maps at a scale that is readily useable for the general public to make informed personal decisions.

#### **Backgrounder: Dioxin and Furans**

This pamphlet will provide generally accepted information from the scientific community describing what dioxins and furans are, how they are created, the likely major sources of the dioxins in the areas of concern, and the general properties of this class of compounds. The information will be presented in a simple, easy-to-understand manner such that the basic properties can be understood by the general public.

#### **Backgrounder: Corrective Action Process**

This pamphlet will provide information on the corrective action process as required under the Dow Operating License and Michigan Part 111 and Part 201. The pamphlet will provide examples of how the process works as well as a graphical representation of the process such as a flow chart and/or example timeline.

#### **Backgrounder: Dioxins and Furans Health Questions**

This pamphlet will provide information generally accepted in the scientific community that provides answers to questions on health effects associated with exposure to dioxins and furans. The primary sources of this information will include the USEPA; the MDEQ, MDCH and MDA; ATSDR/CDC; other governmental organizations, and the World Health Organization. These public health and environmental protection agencies have summarized the generally accepted scientific information on the health effects of dioxins and furans including any uncertain or controversial issues.

#### **Guidance: Reducing Exposure at Homes**

This pamphlet will provide practical guidance for reducing potential exposures to dioxins and furans at homes located in the Areas of Concern.

#### **Guidance: Reducing Exposure during Recreational Activities**

This pamphlet will provide practical guidance for reducing potential exposures to dioxins and furans during recreational activities in the Areas of Concern (e.g., in parks, on or in the Tittabawassee River).

#### **Guidance: Reducing Exposure from Agricultural Activities**

This pamphlet will provide guidance for reducing potential exposures from agricultural activities in the Tittabawassee River Floodplain. Guidance will be consistent with the MDA publication "Food, Farming and Gardening Guidelines for Minimizing Dioxin Exposure." Information will also be provided on how to take measures to reduce dust during farming operations, such as use of no-till methods, limiting dioxin-contaminated feed sources for livestock, and other appropriate farming practices that will reduce exposures. Information will also be provided about Michigan's Conservation Reserve Enhancement Program (CREP) program as contained in the MDA publication "*About CREP: A Unique Program and Opportunity*" whereby farmers can take cropland out of production or other similar program that would be coordinated by Dow. Information will also be provided on obtaining technical and other assistance from Dow through the Extension Service to change to appropriate farming practices that decrease the potential for direct and indirect exposure to contaminants.

**Guidance: Reducing Exposure for Workers Who Have Contact with Contaminated Media**

This pamphlet will provide general information describing practical steps that workers can take to reduce exposures to soils and other media potentially contaminated with dioxins and furans. The pamphlet will be targeted toward excavation and dust-generating activities in the Areas of Concern.

**Guidance: Management of Disturbed Soils and Dredged Sediments**

This pamphlet will provide general information describing the following:

- Methods for controlling or reducing potential dioxin exposure from contaminated soils and sediments.
- Regulatory restrictions on the movement of contaminated soils.
- Procedures for identifying needed permits, steps for completing permit applications, points of contact with the MDEQ for each type of permit, and identification of fees and time required for completion of each permit application process.
- Description of options for management of contaminated soils and sediments. These options may include procedures for relocation of soils on the property, or procedures for offsite disposal, including a list of appropriate disposal facilities.
- The name and phone number of a Dow contact person to assist affected local units of government and residents in obtaining technical and other assistance for the appropriate disposal/management of contaminated sediments and soils that are generated by dredging or soil movement activities in the Areas of Concern.

**Guidance: How Regulations Affect Impacted Property Owners**

This pamphlet will provide general information describing the regulatory responsibilities of Dow to address off-site contamination and the limited obligations of owners/occupants of property onto which contamination has migrated.

**Fish Advisory for Saginaw Bay Watershed**

This pamphlet will provide information regarding potential exposures resulting from the consumption of fish caught in the Saginaw Bay watershed. Information presented will be consistent with the MDCH publication "2004 Michigan Family Fish Consumption Guide: Important facts to know if you eat Michigan fish," but specific to the Tittabawassee River and the Saginaw Bay watershed.

**Wild Game Advisory for Tittabawassee River Watershed**

This pamphlet will provide information regarding potential exposures resulting from the consumption of wild game taken in the Saginaw Bay Watershed. Information presented will be consistent with the September 14, 2004, MDCH Wild Game Advisory.

## 2.3 Distribution of Public Information Materials

The Public Information Materials are intended for distribution by various methods. The method(s) that will be used include, but are not limited to, the following:

- Distribution at the Community Information Centers;

- Direct mailing or distribution of select pamphlets
- Placed on various web sites (e.g., Dow, MDEQ, MDCH, WIN)
- Other opportunities identified or specified by Dow or the MDEQ

### 3. Schedule

Work will be initiated upon approval of these IRA Work Plans by MDEQ. The schedule for the development of Public Information Materials is as follows:

- Dow to request WIN (or other third party) to participate and develop proposal (estimated time for letter to organization is 2 weeks)
- Development of WIN (or other third party) proposal including a prioritized list for production of pamphlets (estimated at 4 weeks)
- MDEQ review and approval of the WIN (or other third party) proposal (estimated review and approval time is 3 weeks)
- Preparation of draft informational materials. Dow or WIN (or other third party) will submit the highest priority pamphlets (Backgrounder: Dioxins and Furans Health Questions; Guidance: Reducing Exposure at Homes; Guidance: Reducing Exposure from Agricultural Activities) for MDEQ review and approval or approval with modifications within 3 weeks of MDEQ's approval of the third party proposal (estimated to complete all pamphlets at 10 to 12 weeks).
- MDEQ review and final approval of informational materials (estimated time of 3 weeks for review, modification, and approval process)
- Printing and publication of pamphlets (estimated at 2 to 3 weeks)

**Appendix B**  
**Work Plan for Community Information Centers**

# **IRA Work Plan: Communications**

## **Work Plan for Community Information Centers**

Prepared for  
**The Dow Chemical Company**

47 Building  
Midland, Michigan 48667

February 2004

# Contents

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Section	Page
Acronyms and Abbreviations.....	iii
Work Plan for Community Information Centers.....	1
1. Objectives.....	1
2. Description of IRA Approach.....	1
3. Access Needs and Agreements.....	3
4. Schedule.....	3
 Figures	
B-1 Locations of the proposed Community Information Centers	

# Acronyms and Abbreviations

ATSDR	Agency for Toxic Substance and Disease Registry
Dow	The Dow Chemical Company
IRA	Interim Response Activity
MDA	Michigan Department of Agriculture
MDCH	Michigan Department of Community Health
MDEQ	Michigan Department of Environmental Quality

# Work Plan for Community Information Centers

## 1. Objectives

This work plan is part of an Interim Response Activity (IRA) for developing communications mechanisms to inform the public of the activities associated with The Dow Chemical Company's (Dow's) offsite corrective action work for Midland area soils and the Tittabawassee River and floodplain, as well as provide simple, clear and accurate information that will allow the public to make informed personal decisions regarding potential exposure to existing contamination. The IRA is being implemented pursuant to Condition XI.B.3.(a) of the Hazardous Waste Facility Operating License issued to Dow on June 12, 2003, by the Michigan Department of Environmental Quality (MDEQ) and addresses the following MDEQ comments in the December 12, 2003, Notice of Deficiency:

- Comments #5 and #20 regarding community information centers

The primary objective of this Work Plan for Community Information Centers is to establish Community Information Centers in Midland and Saginaw Counties, Michigan, that will:

- Provide written materials to the public about the activities associated with Dow's offsite corrective action work for Midland area soils and the Tittabawassee River and floodplain
- Be located in high-traffic areas of each city or township in or near the Areas of Concern
- Be open and accessible at convenient hours for the public

## 2. Description of IRA Approach

The Community Information Centers will be established to inform the public about the contamination and the activities associated with Dow's offsite corrective action work for contamination of the Tittabawassee River and floodplain and in Midland. The Community Information Centers will be located in public buildings (city or township hall or library) that are readily accessible and open at hours that are convenient for the public to use them. Community Information Centers are proposed for the following locations:

### **Saginaw County**

- Saginaw Township Library, 3100 N. Center Road
- Thomas Township at the Thomas Township Library, 8207 Shields Drive
- James Township at the township hall, 6060 Swan Creek Road
- Tittabawassee Township at the township hall, 145 S. Second Street in Freeland
- City of Saginaw (at a location to be determined)

### **Midland County**

- Ingersoll Township, Midland Township and City of Midland at the Grace A. Dow Memorial Library, 1710 W. St. Andrews Street, Midland

Figure 1 shows the locations of the proposed Community Information Centers.

The following tasks will be completed to achieve the work plan objectives:

**Task 1.** Identify and purchase rack system(s) to hold information materials. The rack system will vary depending on the needs and locations available in each facility. The rack systems will be placed in a prominent location in each public building designated for a Community Information Center.

**Task 2.** Design signage to place above or beside the wall racks to identify the location as a "Community Information Center for Dow Off-Site Corrective Action for Dioxin/Furan Contamination."

**Task 3.** Obtain final (MDEQ reviewed and approved) information materials that are prepared as part of IRA: Communications – Work Plan for Public Information Materials.

**Task 4.** Work with MDEQ to determine what additional information materials besides those produced under Task 3 above will be placed in the Community Information Centers. In addition, materials will also include, but are not necessarily limited to, the following regulatory documents:

- "Soil Movement Advisory for Private, Public, and Commercial Projects," MDEQ, Michigan Department of Agriculture (MDA), and Michigan Department of Community Health (MDCH)
- "Food, Farming and Gardening Guidelines for Minimizing Dioxin Exposure," MDA
- "2003 Michigan Family Fish Consumption Guide: Important facts to know if you eat Michigan fish," MDCH
- Wild Game Advisory issued September 14, 2004, MDCH
- "Dioxins Fact Sheet," MDCH, MDEQ, MDA
- "Toxicological Profile for Chlorinated Dibenzop-dioxins (CDDs)," Agency for Toxic Substance and Disease Registry (ATSDR)
- "Public Health Statement for Chlorinated Dibenzop-dioxins (CDDs)," ATSDR
- Q & A documents (EPA, World Health Organization, or MDEQ)

**Task 5.** Work with contacts in each of the Community Information Centers to gain approval and install the racks and to distribute the information materials.

**Task 6.** Work with contacts in each of the Community Information Centers to restock the racks with public information materials, as needed.

### 3. Access Needs and Agreements

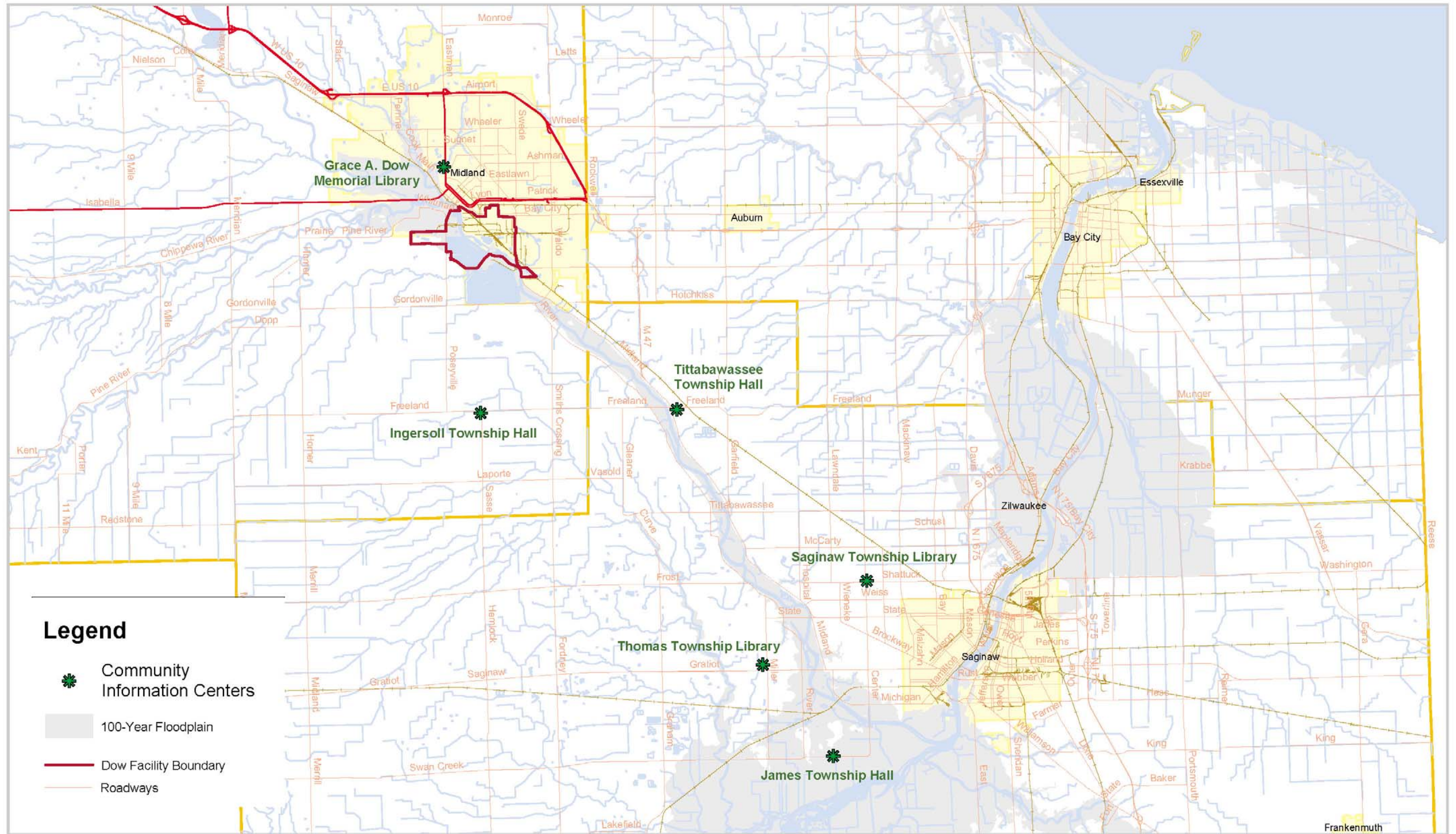
Access will need to be obtained from the townships and Midland in order to set up the Community Information Centers. The following is the list of contacts:

First Name	Last Name	Title	Telephone	Address	City	State	Zip
George	Olson	Saginaw Township Supervisor	989-791-9815	4980 Shattuck	Saginaw	MI	48603
Robert	Weise	Thomas Township Supervisor	989-781-0290	249 N. Miller	Saginaw	MI	48609
Leonard	Ballosh	James Township Supervisor	989-781-1353	6060 Swan Creek	Saginaw	MI	48609
Kenneth	Kasper	Tittabawassee Township Supervisor	989-695-9512	145 S. Second St. P.O. Box 158	Freeland	MI	48623
Curtis	Shaffner	Ingersoll Township Supervisor	989-835-5289	4400 E. Brooks Rd.	Midland	MI	48640
Karl	Tomion	Midland City Manager	989-837-3301	333 W. Ellsworth	Midland	MI	48640
Tari	Dusek	Director - Thomas Township Library	989-781-3770	8207 Shields Drive	Saginaw	MI	48609
Melissa	Barnard	Grace A. Dow Memorial Library	989-837-3431	1710 W. St. Andrews	Midland	MI	48640
Alice	Houlihan	Saginaw Township Library	989-799-2771	3100 N. Center	Saginaw	MI	48603

Dow has obtained permission from three townships to place Community Information Centers in their township hall (James and Tittabawassee Townships) or library (Thomas Township). Documents relating to the Dow Michigan Operations License and associated Corrective Actions are already located at the Grace A. Dow Library in Midland and at the Saginaw Township Library in Saginaw. Dow will seek permission from these libraries to add these additional informational materials to the depositories. Dow will also contact the City of Saginaw to seek permission to place informational materials at a location to be determined.

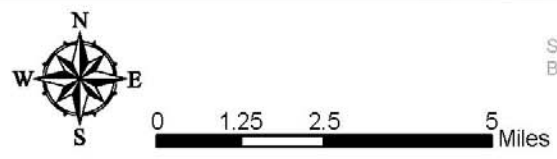
### 4. Schedule

The date for completion of the Community Information Centers is December 1, 2004. At that time, the locations will be approved and the racks will be in place and ready to stock with appropriate materials.



**Legend**

- Community Information Centers
- 100-Year Floodplain
- Dow Facility Boundary
- Roadways



Source Information:  
Base mapping from State of Michigan Center for Geographic Information, Geographic Data Library.

**Figure B-1**  
**Location of Community Information Centers**  
Interim Remedial Actions: Communications Work Plan  
Dow Midland Offsite Corrective Action Program

**Appendix C**  
**Work Plan to Address the Disturbance**  
**and Management of Soils in Areas with**  
**Potential Dioxin/Furan Contamination**

(This portion of the IRA is being deferred for later  
review and approval.)

**Appendix D**  
**Work Plan for Advisory Signage at Public Parks,  
Unofficial Public High Use Areas, and Public  
Access Fishing Sites**

# **IRA Work Plan: Communications**

## **Work Plan for Advisory Signage at Public Parks, Unofficial Public High Use Areas, and Public Access Fishing Sites**

Prepared for  
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Midland, Michigan 48667

February 2004

# Contents

---

Section	Page
Acronyms and Abbreviations .....	iii
Work Plan for Advisory Signage at Public Parks, Unofficial Public High Use Areas, and Public Access Fishing Sites.....	1
1. Objectives.....	1
2. Description of Approach.....	1
3. Access Needs and Agreements .....	2
4. Schedule.....	2

# Acronyms and Abbreviations

Dow	The Dow Chemical Company
IRA	Interim Response Activity
MDCH	Michigan Department of Community Health
MDEQ	Michigan Department of Environmental Quality

# Work Plan for Advisory Signage at Public Parks, Unofficial High Public Use Areas, and Public Access Fishing Sites

## 1. Objectives

The primary objective of this Work Plan is to develop and place signs that inform the public of contaminated media (e.g., sediments, soils, fish) in areas that are used by the public. These signs will be developed and located to provide simple, clear and accurate information that will allow the public to make informed personal decisions regarding potential exposure to existing contamination. The signs and related information will be located at areas where there is potential for exposure of the public to contamination.

Parks that have been identified by MDEQ for the placement of signs include: Imerman Memorial Park, West Michigan Park, Freeland Festival Park, Greenpoint Nature Center, Shiawassee National Wildlife Refuge, Caldwell Boat Launch, and Center Road Boat Launch.

Unofficial high public use areas that MDEQ has identified for placement of signs include: Dice Road pumping station, Dow riverfront property along Saginaw, Midland, and River Roads, Smith's Crossing area, and Germania Golf Course.

Additional public use areas for the placement of signs may be identified by Dow or the MDEQ at any time during the corrective action process.

This work plan is part of an Interim Response Activity (IRA) for developing communications mechanisms to inform the public of the activities associated with The Dow Chemical Company's (Dow's) offsite corrective action work for Midland area soils and the Tittabawassee River and floodplain, as well as general information about dioxins/furans and steps to take to reduce the potential for exposure. The IRA is being implemented pursuant to Condition XI.B.3.(a) of the Hazardous Waste Facility Operating License issued to Dow on June 12, 2003, by the Michigan Department of Environmental Quality (MDEQ) and to address MDEQ comments in the December 12, 2003, Notice of Deficiency, comments #29 and #30 regarding advisory signage at public parks, unofficial high public use areas, and public access fishing sites.

## 2. Description of Approach

The following process will be used to achieve the objective stated above.

MDEQ and Michigan Department of Community Health (MDCH) are best suited to address this issue and will determine the content, design, and placement of the signs. To facilitate and expedite placement of the signage, Dow will establish an escrow account to fund the development, fabrication, location, installation and maintenance of signs, and other costs incurred by the MDEQ and/or MDCH for implementation and administration of this IRA on behalf of Dow.

The approach to providing signs will involve the following steps:

1. MDEQ and MDCH will consult with local units of government to develop the content, design and placement of signs.
2. Dow will meet with MDEQ to determine the funding level for the escrow account. Dow will establish the escrow account and fund it to a level that is adequate to reimburse the MDEQ and MDCH for staff time, materials, contractual services and other costs required to implement this IRA on behalf of Dow.
3. An escrow agreement will be put in place and will contain a mechanism for the disbursement of funds from the escrow account to the MDEQ, once a cost estimate to implement the IRA has been developed and the MDEQ has approved this IRA. An example escrow agreement is contained in Attachment 1.

### 3. Access Needs and Agreements

Access to private property or public rights of way will be obtained by MDEQ, MDCH, or their contractor(s), as necessary. Dow will provide access to their property for placement of signs as appropriate.

### 4. Schedule

The basic components of the schedule include the following:

- Within 2 weeks following approval of this IRA Work Plan, Dow will participate in a meeting set up by the MDEQ to discuss the cost estimate, establishment of the escrow account, and the final language of the escrow agreement.
- Set up escrow account as soon as practicable but not later than 30 days after the initial MDEQ meeting.

The schedule for development and placement of the signs will be determined by MDEQ and is not part of this work plan.

**ATTACHMENT 1  
SAMPLE FORM ESCROW AGREEMENT**

This agreement is made on \_\_\_\_\_, 2004, by The Dow Chemical Company ("Dow"), and [Bank] \_\_\_\_\_ ("Escrow Agent"), for the benefit of the Michigan Department of Environmental Quality ("MDEQ") and concerns the payment for certain activities related to Dow's Interim Remedial Action Plan ("Plan"), dated \_\_\_\_\_, approved by MDEQ on \_\_\_\_\_, 2004, a copy of which is in Exhibit A, upon the following terms and conditions.

1. Escrow Agent's Duties. Escrow Agent shall hold in trust all money provide to it by Dow and make disbursements of such money to MDEQ as set forth herein.
2. Dow's Duties. Dow has delivered into escrow with Escrow Agent the sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) in certified funds in compliance with the terms of the Plan, which funds will be placed in a designated Escrow Account.
3. Delivery of Money to MDEQ. If MDEQ expends funds on the development, fabrication, location, installation and maintenance of signs, and other costs incurred for implementation and administration of the Plan on behalf of Dow as provided for in Section \_\_\_ of the Plan and provides Escrow Agent with receipts or other proof of the costs incurred in such activities by or on behalf of MDEQ, Escrow Agent shall reimburse MDEQ for such costs from the escrow account, to the extent the escrow account has sufficient funds.
4. If there are not sufficient funds in the escrow account to cover costs incurred, a mechanism will be established for Dow to provide additional funds.
5. Refund of Money to Dow. If any funds remain in the escrow account upon a determination by the MDEQ that corrective action has been completed, any remaining funds shall be provided to Dow, unless the parties otherwise modify this agreement in writing.
6. Reliance by Escrow Agent. Escrow Agent shall not be responsible for the authenticity of any document or signature and may rely exclusively on, and shall be protected when acting on, any notice, affidavit, request, consent, instruction, check, or other document believed by it in good faith to be genuine, to be signed or presented by the proper person, duly authorized, or properly made. Escrow Agent shall have no responsibility except for the performance of its express duties stated in this agreement, and no additional duties shall be inferred or implied under this agreement.
7. Fees. Escrow Agent shall be paid a fee of \$\_\_\_\_\_, which shall be paid by \_\_\_\_\_ on the effective date of this agreement.
8. Effective Date. This agreement shall become effective as of the last date on which the parties listed below have signed this agreement.

THE DOW CHEMICAL COMPANY

Dated: \_\_\_\_\_

ESCROW AGENT:

Dated: \_\_\_\_\_