IN THE MATTER OF:

Respondent:
The Dow Chemical Company

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMOVAL ACTION

Docket No. V-W-11-C-969

Proceeding Under Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622
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I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("U.S. EPA") and The Dow Chemical Company ("Dow" or "Respondent"). This Settlement Agreement provides for Dow’s implementation of interim exposure control measures ("Controls") by taking non-time critical removal actions selected by U.S. EPA, and the reimbursement of certain response costs incurred by the United States at or in connection with addressing exposure to floodplain soils potentially contaminated with dioxin within portions of Exposure Units that are located in the Tittabawassee River, Saginaw River & Bay site, Michigan, as defined in the Administrative Order on Consent ("2010 AOC") entered in In The Matter of: The Dow Chemical Company, CERCLA Docket No. V-W-10-C-942, with an effective date of January 21, 2010.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622, as amended ("CERCLA"). This authority has been delegated to the Administrator of the U.S. EPA by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the Regional Administrators by U.S. EPA Delegation Nos. 14-14-A, 14-14-C and 14-14-D, and to the Director, Superfund Division, Region 5, by Regional Delegation Nos. 14-14-A, 14-14-C and 14-14-D.

3. U.S. EPA has notified the State of Michigan (the "State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

4. U.S. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of facts, conclusions of law, and determinations in Sections IV and V of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon U.S. EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent’s responsibilities under this Settlement Agreement.
6. Respondent is required to carry out all activities required by this Settlement Agreement.

7. Respondent shall ensure that its contractors, subcontractors, and representatives comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement.

III. DEFINITIONS

8. Unless otherwise expressly provided herein, terms used in this Settlement Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:


   b. “2010 SOW” shall mean the Statement of Work attached as Appendix A to the 2010 AOC.


   d. “Dioxin” or “dioxins” or “furan” or “furans” shall mean the seventeen chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans identified by the World Health Organization in The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds, and as set forth below:

<table>
<thead>
<tr>
<th>Congener (Full-Name)</th>
<th>Congener (Abbreviation)</th>
<th>CAS No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dioxins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,3,7,8-Tetrachlorodibenzo-p-dioxin</td>
<td>2,3,7,8-TCDD</td>
<td>1746-01-6</td>
</tr>
<tr>
<td>1,2,3,7,8-Pentachlorodibenzo-p-dioxin</td>
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<td>40321-76-4</td>
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<tr>
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<td>1,4-HxCDD</td>
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<tr>
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<td>1,6-HxCDD</td>
<td>57653-85-7</td>
</tr>
<tr>
<td>1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin</td>
<td>1,9-HxCDD</td>
<td>19408-74-3</td>
</tr>
<tr>
<td>1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin</td>
<td>1,4,8-HpCDD</td>
<td>35822-39-4</td>
</tr>
<tr>
<td>1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin</td>
<td>OCDD</td>
<td>3268-87-9</td>
</tr>
<tr>
<td>Furans</td>
<td>TCDF</td>
<td>TEQ</td>
</tr>
<tr>
<td>------------------------------</td>
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</tr>
<tr>
<td>2,3,7,8-Tetrachlorodibenzofuran</td>
<td>2,3,7,8-TCDF</td>
<td>51207-31-9</td>
</tr>
<tr>
<td>1,2,3,7,8-Pentachlorodibenzofuran</td>
<td>1,2,3,7,8-PCDF</td>
<td>57117-41-6</td>
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<tr>
<td>2,3,4,7,8-Pentachlorodibenzofuran</td>
<td>2,3,4,7,8-PCDF</td>
<td>57117-31-4</td>
</tr>
<tr>
<td>1,2,3,4,7,8-Hexachlorodibenzofuran</td>
<td>1,4-HxCDF</td>
<td>70648-26-9</td>
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<tr>
<td>1,2,3,6,7,8- Hexachlorodibenzofuran</td>
<td>1,6-HxCDF</td>
<td>57117-44-9</td>
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<tr>
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<td>1,2,3,4,6,7,8- Heptachlorodibenzofuran</td>
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<td>67562-39-4</td>
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<td>1,2,3,4,7,8,9- Heptachlorodibenzofuran</td>
<td>1,4,9-HpCDF</td>
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<tr>
<td>1,2,3,4,6,7,8,9-Octachlorodibenzofuran</td>
<td>OCDF</td>
<td>39001-02-0</td>
</tr>
</tbody>
</table>

Individual dioxins and furans are assessed using a toxic equivalency factor ("TEF"), which is an estimate of the relative toxicity of the compounds to 2,3,7,8-tetrachlorodibenzo-p-dioxin ("TCDD"). These converted concentrations are then added together to determine the "toxic equivalence concentration" ("TEQ") of the dioxin and furan compounds as a whole.


f. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXX.

g. "Future Response Costs" shall mean all costs, including direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement on or after the Effective Date.

h. "Interest" shall mean interest at the rate specified for interest on investments of the U.S. EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

i. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.
j. “Settlement Agreement” shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXIX). In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.


m. “Respondent” shall mean The Dow Chemical Company.

n. “Site”, for the purposes of this Settlement Agreement, shall mean those residential-use properties along the Tittabawassee River with floodplain soils potentially contaminated with dioxin that lie within Exposure Units (“EUs”) that are located within the Tittabawassee River, Saginaw River & Bay site, Michigan and that fall within the eligibility criteria defined in the EE/CA and the Action Memorandum for the Site. The Action Memorandum is attached as Attachment A to this Settlement Agreement. The EUs are generally depicted in Attachment B. The EE/CA and the Action Memorandum establish the following eligibility criteria for properties or portions of properties to fall within the Site definition: (a) The property or portion of property is located within or proximal to frequently flooded areas (generally the 8-year floodplain), or relocated soil from frequently flooded areas is present on the property; (b) there is active use of the property within the frequently flooded area(s) (determined through resident interview(s), a walk over inspection of the property, and the completion of a property assessment questionnaire); and (c) bare soil is present in the frequently flooded area(s) (identified during property assessment on-site survey). The Tittabawassee River, Saginaw River & Bay site, is defined in the 2010 AOC. The EUs which contain property parcels where removal activities are required as of the effective date of this Settlement Agreement are depicted on the maps and in the Table attached as Attachment C, and are listed as follows:

<table>
<thead>
<tr>
<th>EU010</th>
<th>EU011</th>
<th>EU004</th>
<th>EU006</th>
<th>EU007</th>
<th>EU008</th>
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<td>06-04</td>
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<td>08-06</td>
</tr>
<tr>
<td>10-05</td>
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<td>04-12</td>
<td>06-05</td>
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<td>08-08</td>
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<td>11-09</td>
<td>04-19</td>
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<td>06-09</td>
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<td>11-17</td>
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</tbody>
</table>
The Parties acknowledge that additional EUs, additional residential-use property parcels within the Tittabawassee River EUs, and additional residential-use properties along the Tittabawassee River that meet the existing eligibility criteria may be identified pursuant to Task 1.4 in the Statement of Work attached as Appendix A to the 2010 AOC ("2010 SOW") and may be added to the Site through amendment of the Action Memorandum by U.S. EPA. Any such properties that are added to the Site through amendment of the Action Memorandum shall be addressed through the Controls selected in the Action Memorandum and shall be addressed by Respondent under the terms of this Settlement Agreement.

o. "State" shall mean the State of Michigan.

p. "U.S. EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

q. "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); (4) any "hazardous material" under Rule 299.9203 of the Michigan Administrative Code, Mich. Admin. Code r. 299.9203; and (5) any "hazardous substance" as defined by Section 20101 of NREPA, Mich. Comp. Laws § 324.20101(1)(i).

r. "Work" shall mean all activities Respondent is required to perform under this Settlement Agreement.

IV. FINDINGS OF FACT

9. Based on available information, including the Administrative Record in this matter, U.S. EPA hereby finds that:

a. The Site encompasses the area described in Paragraph 8.n. of this Settlement Agreement. The Site is the location where Respondent has disposed of hazardous substances, pollutants, or contaminants, or where such materials have or may have come to be located.
b. The Dow Chemical Company is a Delaware corporation and its registered agent is The Corporation Trust Company with an address of Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware.

c. The Midland Plant began operations in 1897. The Midland Plant covers approximately 1,900 acres. The majority of the Midland Plant is located on the east side of the Tittabawassee River and south of the City of Midland.

d. The Tittabawassee River is a tributary to the Saginaw River, draining 2,600 square miles of land in the Saginaw River watershed. The Tittabawassee River flows south and east for a distance of approximately 80 miles to its confluence with the Shiawassee River approximately 22 miles southeast of Midland. Upstream of the Midland Plant, the Tittabawassee River flow is regulated by the Secord, Smallwood, Edenville, and Sanford dams. The current operation of the hydroelectric station at Sanford results in water releases from Sanford Dam during peak electricity usage periods to provide peaking power to Consumer’s Energy. Sanford Lake has limited flood storage capacity due to a narrow range of permitted lake levels. The Dow Dam is located adjacent to the Midland Plant. Below the Dow Dam, the river flow is free-flowing to its confluence with the Shiawassee and Saginaw Rivers. Tittabawassee River flow and water level fluctuate daily in response to releases from the Sanford Dam. The average and 100-year flood discharge for the Tittabawassee River based on data from 1937 to 1984 are approximately 1,700 cubic feet per second (“cfs”) and 45,000 cfs, respectively. The relatively large ratio between the 100-year flood discharge and the long-term average discharge (26.5) indicates that the river is “flashy,” or has a flow regime that is characterized by highly variable flows with a rapid rate of change.

e. The average monthly discharge from 1937 to 2003 for the Tittabawassee River 2,000 feet downstream of the Dow Dam ranged from approximately 600 cfs (in August) to 3,900 cfs (in March), with an average of 1,700 cfs. Discharge is typically highest in March and April during spring snowmelt and runoff. The maximum recorded historical crest of the Tittabawassee River occurred in 1986. A large storm in September 1986 produced up to 14 inches of rain in 12 hours. The discharge of the river near the Dow Dam reached nearly 40,000 cfs, and the river stage was 10 feet above flood stage at its crest (Deedler, Undated). Flows greater than 20,000 cfs have occurred in 22 of the 95 years between 1910 and 2004, with flows greater than 30,000 cfs occurring in 1912, 1916, 1946, 1948, and 1986. In March 2004, the river discharge reached approximately 24,000 cfs.

f. Portions of the Tittabawassee River floodplain are periodically inundated by floodwaters.

g. The Saginaw River is located within the Saginaw Bay and River watershed and drains over 6,300 square miles of land. It is formed by the confluence of the Tittabawassee River and the Shiawassee River just south of Saginaw, Michigan. The river itself is about 22.3 miles in length. Most of the Saginaw River flow originates in its major tributaries with 39 percent of flow contributed by the Tittabawassee River, 11 percent of flow contributed by the
Shiawassee River, 20 percent of flow contributed by the Flint River, 14 percent of flow contributed by the Cass River and 16 percent of flow contributed by other sources. Most of the rivers in the watershed, including the Cass and Flint Rivers, indirectly discharge into the Saginaw River. The Flint River discharges into the Shiawassee River approximately six miles upstream of the confluence of the Tittabawassee and Shiawassee Rivers. The Cass River also discharges into the Shiawassee River, approximately five miles downstream of the Flint River and about one mile upstream of the Tittabawassee/Shiawassee/Saginaw confluence.

h. The Saginaw River flows through Saginaw, Michigan and from there to Bay City, where the river discharges into Saginaw Bay in Lake Huron. Saginaw Bay water surface elevations and seiche effects (oscillations in water surface elevations caused by meteorological events) can affect Saginaw River water levels and flow rates for its entire length.

i. Over the time of its operation, the Midland Plant has produced over 1,000 different organic and inorganic chemicals. These chemicals include the manufacture of 24 chlorophenolic compounds since the 1930s.

j. Earlier in the history of the Midland Plant, wastes were discharged directly into the Tittabawassee River and, some time later, wastes were stored and partially treated in settling ponds prior to discharge to the River. Other wastes were disposed of at the Midland Plant either on land or by burning. Over time, changes in waste management practices included installation and operation of a modern wastewater treatment plant as well as use of incinerators instead of open burning. Changes in the wastewater treatment plant and subsequent incorporation of pollution controls into both the operations of and emissions from the incinerators have reduced or eliminated non-permitted releases and emissions from the Midland Plant.

k. Flooding of the Midland Plant property may have resulted in discharges to the Tittabawassee River of stored brines and untreated or partially treated process wastewaters. The primary source of furans and dioxins from the Midland Plant to the Tittabawassee River is believed to be historic releases of particulates in wastewaters to the River. The chlorine manufacturing process was the likely source of comparatively high furan toxicity equivalent ("TEQ") readings in and along the Tittabawassee River. Dioxins and furans would have been discharged directly to the Tittabawassee River. Some lesser percentage of dioxins and furans found in more recent sediments may be related to chlorophenol production that began in the mid-1930s.

l. Pursuant to Section 3006 of RCRA, 42 U.S.C. § 6926, the Administrator of U.S. EPA may authorize a State to administer the RCRA hazardous waste program in lieu of the federal program when the Administrator finds that the State program meets certain conditions. Any violation of regulations promulgated pursuant to Subtitle C (Sections 3001-3023 of RCRA, 42 U.S.C. §§ 6921-6939e) or of any state provision authorized pursuant to Section 3006 of RCRA, 42 U.S.C. § 6926, constitutes a violation of RCRA, subject to the assessment of civil penalties and issuance of compliance orders as provided in Section 3008 of RCRA,

m. MDEQ issued to Dow its current RCRA Hazardous Waste Management Facility Operating License for the Midland Plant, with an effective date of June 12, 2003, and an expiration date of June 12, 2013 (the “License”). Under its License, Dow has been conducting corrective action work including the implementation of Interim Response Activities (IRAs) for residential and other high use properties along the Tittabawassee River. These IRAs are identified in the January 19, 2005 Framework for an Agreement between the State of Michigan and the Dow Chemical Company.

n. Multiple rounds of sampling have been conducted at the Tittabawassee River, Saginaw River & Bay site under the License, and otherwise, including extensive sampling for dioxins and furans, which has identified TEQ levels ranging from non-detect to over 100,000 ppt. A list of over 200 other contaminants of interest have been sampled for, and have also been detected at the Tittabawassee River, Saginaw River & Bay site. A specific list of the other contaminants of interest is contained in Attachment G to Volume 1 of Dow’s December 1, 2006, “Remedial Investigation Work Plan (RIWP): Tittabawassee River and Upper Saginaw River and Floodplain Soils – Midland, Michigan.”

o. Sampling conducted under the License indicates that the dioxin/furan and other contamination in the Tittabawassee River adjacent to and downstream of Dow is associated with the Midland Plant. Soil samples collected upstream of the City of Midland did not contain elevated levels of dioxins or furans. Dioxin and furan concentrations from these sample locations are consistent with statewide background concentrations. Sampling within tributaries to the Tittabawassee River has not identified any significant sources of dioxins or furans. No significant sources of dioxins or furans are known within the City of Midland other than Dow. Dioxin/furan congener profile charts for Tittabawassee River sediments and floodplain soils downstream of the Midland Plant are similar amongst themselves and very different from sample locations upstream of the Midland Plant. Contamination within the Tittabawassee River floodplain downstream of the Midland Plant has been documented.

p. U.S. EPA’s and MDEQ’s understanding of potential hazardous substances in soils at the Site is based on various sampling, analysis, and studies regarding dioxin/furans and
other contaminants, in the Tittabawassee River, the Saginaw River, and the Saginaw Bay. The sampling, analysis, studies, and orders relied on by U.S. EPA and MDEQ include, but are not limited to, the sampling, analysis, studies, and orders listed in Attachment D to this Settlement Agreement.

q. EU010 and EU011 (Group A) were given third priority (after EU001 and EU002, where previous time critical removal actions were completed in 2008 and 2009, respectively) because the contaminant characteristics in the floodplain soil in these EU's seem to be unique. EU004, EU006, EU007, and EU008 (Group B) were given next priority. Both Groups A and B are largely made up of residential properties. Using questionnaires, interviews, and a property survey, which targeted property use and soil conditions in the 8-year floodplain (as well as areas where floodplain soil had been relocated), a property-by-property determination was made as to which parcels from these EU's qualified for inclusion in the Site. Assessments of properties in the remaining EU's will be conducted under the 2010 AOC.

r. Human access to the Site is generally available to the residents living on each parcel within EU properties. Human access to the Site is generally also unrestricted to people approaching the Site from the Tittabawassee River, except that access would require people to trespass on the EU properties. Wildlife in the area also has unrestricted access. The Site is also subject to flooding and erosion. This is particularly true during high stream flow events. This may result in the spread of dioxin contamination to other locations within the floodplain, as well as to downstream locations. This may also result in further contamination of fish and invertebrates within the river and at downstream locations, and contamination of animals in the floodplain.

s. On July 12, 2007, U.S. EPA and Dow entered into three separate Administrative Settlement Agreements and Orders on Consent (“AOC’s”) under the authority of Sections 104, 106(a), 107, and 122 of CERCLA. On November 15, 2007, U.S. EPA and Dow entered into a fourth AOC. On July 15, 2008, U.S. EPA and Dow entered into a fifth AOC. On February 27, 2009, U.S. EPA and Dow entered into a sixth AOC. The AOCs provide for CERCLA time critical removal actions to, among other things, remove certain contaminated bottom deposits, sediments, and/or soils in, or along, the Tittabawassee River in Midland County, Michigan, as well as in the Saginaw River in the City of Saginaw, Michigan. Pursuant to the above referenced AOCs, Dow has agreed to remove or has removed contaminated sediments in designated locations (including residential properties, property zoned for industrial use, and State-owned land), capped one contaminated upland area and fenced off another contaminated wetland area, removed contaminated soils in designated locations, including at residential properties and a municipal park, and cleaned the inside of occupied homes. U.S. EPA has provided, or will, provide Dow with notification of the completion of the above-referenced AOCs.


u. U.S. EPA OSWER Directive 9200.4-26, April 13, 1998, has generally selected 1 ppb as a cleanup level for dioxin for direct contact threat in residential soils at Superfund and RCRA cleanup sites. MDEQ has established a residential soil direct contact cleanup criterion for dioxin of .09 ppb. The MDEQ dioxin cleanup criterion is established in Part 201, which also allows for a different cleanup number to be developed and used based on site-specific and other information.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

10. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, U.S. EPA has determined that:

   a. The Tittabawassee River, Saginaw River & Bay site, in which the EU’s are located, is a “facility” as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

   b. The contamination found at the Site, as identified in the Findings of Fact above, includes a “hazardous substance” as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

   c. Respondent is a “person” as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

   d. Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is jointly and severally liable for performance of response action and for response costs incurred and to be incurred at the Site.

   i. Respondent is the “owner” and/or “operator” of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).

   ii. Respondent is the “owner” and/or “operator” of a facility at the time of disposal of hazardous substances at the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).

   e. The conditions described in the Findings of Fact above constitute an actual or threatened “release” of a hazardous substance from the facility into the “environment” as defined by Sections 101(22) and 101(8) of CERCLA, 42 U.S.C. §§ 9601(22) and 9601(8).
f. The conditions present at the Site constitute a threat to public health, welfare, or the environment based upon the factors set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended ("NCP"), 40 CFR §300.415(b)(2). These factors include, but are not limited to, the following:

i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants; this factor is present at the Site due to the existence of dioxins in surface floodplain soil within the Tittabawassee River, Saginaw River & Bay site.

ii. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate; this factor is present at the Site due to the existence of dioxins in surface floodplain soil and due to frequent flooding of the Site by the Tittabawassee River. This may result in the spread of dioxin contamination to other locations within the floodplain, as well as to off-site and downstream locations.

iii. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; this factor is present at the Site due to the existence of dioxins in surface floodplain soil and due to frequent flooding of the Site by the Tittabawassee River over the last 110 years. Frequent flooding enhances the threat of a release and migration of dioxins and furans to other areas in the floodplain and to the Tittabawassee and Saginaw Rivers. Frequent flooding also enhances the threat of continuing contamination of EU Site surfaces with dioxin from up-stream locations, again leading to direct contact threats.

g. The removal action required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be considered consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

11. Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the Administrative Record for this Site, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all attachments to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.
VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SCENE COORDINATOR

12. Respondent shall retain one or more contractors to perform the Work and shall notify U.S. EPA of the name(s) and qualifications of such contractor(s) within 5 business days of the Effective Date. Respondent shall also notify U.S. EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least 5 business days prior to commencement of such Work. U.S. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondent. If U.S. EPA disapproves of a selected contractor, Respondent shall retain a different contractor and shall notify U.S. EPA of that contractor’s name and qualifications within 3 business days of U.S. EPA’s disapproval. The contractor must demonstrate compliance with ANSI/ASQC E-4-1994, “Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs” (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor’s Quality Management Plan (“QMP”). The QMP should be prepared consistent with “EPA Requirements for Quality Management Plans (QA/R-2)” (EPA/240/B0-1/002), or equivalent documentation as required by U.S. EPA.

13. Respondent has designated Todd Konechne as its Project Coordinator who shall be responsible for administration of all actions by Respondent required by this Settlement Agreement. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. U.S. EPA retains the right to disapprove of the designated Project Coordinator. If U.S. EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify U.S. EPA of that person’s name, address, telephone number, and qualifications within 4 business days following U.S. EPA’s disapproval. Receipt by Respondent’ Project Coordinator of any notice or communication from U.S. EPA relating to this Settlement Agreement shall constitute receipt by Respondent.

14. U.S. EPA has designated Mary P. Logan of the Remedial Response Branch #1, Region 5, as its Remedial Project Manager/On-Scene Coordinator (“RPM/OSC”). Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to the RPM/OSC at: U.S. EPA, Mail Code SR-6J, 77 W. Jackson Blvd., Chicago, IL 60604. Respondent is encouraged to make its submissions to U.S. EPA on recycled paper (which includes significant post consumer waste paper content where possible) and using two-sided copies.

15. U.S. EPA and Respondent shall have the right, subject to Paragraph 12, to change their respective designated RPM/OSC or Project Coordinator. U.S. EPA shall notify the Respondent, and Respondent shall notify U.S. EPA, as early as possible before such a change is made, but in no case less than 24 hours before such a change. The initial notification may be made orally but it shall be promptly followed by a written notice.
VIII. WORK TO BE PERFORMED

16. Respondent shall perform, at a minimum, the following removal activities:

a. Develop property-specific plans for Controls at the specified property parcels within the Site that require removal actions, as identified in this Settlement Agreement. The property-specific plans shall be developed with input from the property owner. The Controls developed in each property-specific plan shall address all portions of the property that meet the eligibility criteria established in the Action Memorandum for the Site. The Controls developed in each property-specific plan shall consist of one or more control measures that were selected as acceptable options in the Action Memorandum for the Site. The Action Memorandum identified the following Controls as appropriate removal action activities:

i. A control barrier of gravel, stone, wood chips or soil shall be placed over exposed soils, paths, and walkways. If a soil control barrier is used, the soil shall be revegetated.

ii. Fire pits and recreational areas shall be relocated out of the Site or a control barrier shall be placed over exposed soils around these areas.

iii. Garden beds shall be relocated out of the Site or shall be raised to limit flooding.

b. Implement the Controls at each property in accordance with the approved property-specific plans.

c. Document completion of the Controls at each property in accordance with the reporting requirements of Paragraphs 21 and 22.

d. Conduct monitoring and maintenance of the Controls in accordance with the post-removal site control requirements of Paragraph 20.

17. Work Plan and Implementation.

a. Within 10 business days after the Effective Date, Respondent shall submit to U.S. EPA for approval a draft Work Plan for performing the removal action generally described in Paragraph 16 above. The draft Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Settlement Agreement.

b. U.S. EPA may approve, disapprove, require revisions to, or modify the draft Work Plan in whole or in part. If U.S. EPA requires revisions, Respondent shall submit a revised draft Work Plan within 7 business days of receipt of U.S. EPA’s notification of the required
revisions. Respondent shall implement the Work Plan as approved in writing by U.S. EPA in accordance with the schedule approved by U.S. EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement Agreement.

c. Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement. Respondent shall not commence implementation of the Work Plan developed hereunder until receiving written U.S. EPA approval pursuant to Paragraph 17(b).

18. Health and Safety Plan. Within 10 business days after the Effective Date, Respondent shall submit for U.S. EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-site work under this Settlement Agreement. This plan shall be prepared consistent with U.S. EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If U.S. EPA determines that it is appropriate, the plan shall also include contingency planning. Respondent shall incorporate all changes to the plan recommended by U.S. EPA and shall implement the plan during the pendency of the removal action.


a. Respondent shall use the Quality Assurance Project Plan ("QAPP") that has been developed pursuant to the 2010 AOC. Respondent shall use quality assurance, quality control, and chain of custody procedures for all treatability, design, compliance and monitoring samples in accordance with "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operation," EPA QA/R5 (EPA/240/B-01/003, March 2001); "Guidance for Quality Assurance Project Plans (QA/G5)" (EPA/600/R-98/018, February 1998), and subsequent amendments to such guidelines upon notification by U.S. EPA to Respondent of such amendment. Amended guidelines shall apply only to procedures conducted after such notification. All sampling and analyses performed pursuant to this Settlement Agreement shall conform to U.S. EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondent shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate U.S. EPA guidance. Respondent shall follow, as appropriate, "EPA Guidance for Quality Assurance Project Plans," EPA/QA/G-5, EPA/600/R-02/009 (December 2002), "EPA Requirements for Quality Assurance Project Plans," EPA/QA/R-5, EPA/240/B-01/003 (March 2001) and "Instructions on the Preparation of a Superfund Division Quality Assurance Project Plan," EPA Region 5, based on EPA QA/R-5, Revision 0 (June 2000), "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures" (OSWER Directive No. 9360.4-01, April 1, 1990), as guidance for QA/QC and sampling. Respondent shall only use laboratories that have a documented Quality System that complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), and "EPA Requirements for Quality Management Plans (QA/R-2)
b. Upon request by U.S. EPA, Respondent shall have such a laboratory analyze samples submitted by U.S. EPA for QA monitoring. Respondent shall provide to U.S. EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

c. Upon request by U.S. EPA, Respondent shall allow U.S. EPA or its authorized representatives to take split and/or duplicate samples. Respondent shall notify U.S. EPA not less than 3 business days in advance of any sample collection activity, unless shorter notice is agreed to by U.S. EPA. U.S. EPA shall have the right to take any additional samples that U.S. EPA deems necessary. Upon request, U.S. EPA shall allow Respondent to take split or duplicate samples of any samples it takes as part of its oversight of Respondent’s implementation of the Work.

20. Post-Removal Site Control. In accordance with the Work Plan schedule, or as otherwise directed by U.S. EPA, Respondent shall submit a proposal for post-removal site control consistent with Section 300.415(l) of the NCP and OSWER Directive No. 9360.2-02 and which shall include provisions for periodic monitoring of the Site, flood response activities for the Site, and maintenance of Controls, as necessary. In those cases where a previously implemented IRA is being relied upon as the Controls at the Site, those Controls will be monitored and maintained in accordance with this Paragraph. Upon U.S. EPA approval, Respondent shall implement such Controls and shall provide U.S. EPA with documentation of all post-removal site control arrangements.


a. Respondent shall submit a written progress report to U.S. EPA concerning actions undertaken pursuant to this Settlement Agreement every 30th day after the date of receipt of U.S. EPA’s approval of the Work Plan until termination of this Settlement Agreement, unless otherwise directed in writing by U.S. EPA. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems. Additionally, until termination of this Settlement Agreement, Respondent shall summarize the work conducted under this Settlement Agreement in the Annual Report required under Task 6.2 of the 2010 SOW.

b. Respondent shall submit three (3) copies of all plans, reports or other submissions required by this Settlement Agreement, or any approved work plan in electronic form and, upon request by U.S. EPA, Respondent shall submit such documents in paper copy form, as well. Respondent shall submit three (3) copies of all plans, reports or other submissions required by this Settlement Agreement, or any approved work plan directly to the Michigan Department of
Environmental Quality ("MDEQ") project coordinator for the Tittabawassee River, Saginaw River & Bay site as identified in the 2010 AOC.

c. If the Respondent owns real property at the Site where Work related to this Settlement Agreement will be performed, Respondent shall, at least 30 days prior to the conveyance of any interest in such property, give written notice to the transferee that the property is subject to this Settlement Agreement, and written notice to U.S. EPA and the State of the proposed conveyance, including the name and address of the transferee. Respondent also agrees to require that its successors provide the same notice to U.S. EPA, the State, and to any subsequent transferee that is required of Respondent in the immediately preceding sentence. Respondent further agrees to require its successors to comply with Sections IX (Site Access) and X (Access to Information).

22. Final Report. Within 90 calendar days after completion of all Work required by Section VIII of this Settlement Agreement, Respondent shall submit for U.S. EPA review a final report summarizing the actions taken to comply with this Settlement Agreement. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports" and with the guidance set forth in "Superfund Removal Procedures: Removal Response Reporting – POLREPS and OSC Reports" (OSWER Directive No. 9360.3-03, June 1, 1994). The final report shall include: 1) a good faith estimate of total costs or a statement of actual costs incurred in complying with this Settlement Agreement; 2) a listing of quantities and types of materials removed off-Site or handled on-Site; 3) a listing of the ultimate destination(s) of those materials; 4) a presentation of the final validated analytical results of all sampling and analyses performed; 5) and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

"Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

23. Off-Site Shipments.

a. Respondent shall, prior to any off-Site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility’s state and to the On-Scene Coordinator. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

i. Respondent shall include in the written notification the following information: 1) the name and location of the facility to which the Waste Material is to be shipped; 2) the type and quantity of the Waste Material to be shipped; 3) the expected schedule for the
shipment of the Waste Material; and 4) the method of transportation. Respondent shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

ii. The identity of the receiving facility and state will be determined by Respondent following the award of the contract for the removal action. Respondent shall provide the information required by this Paragraph 23(a) and 23(b) as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

b. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondent shall obtain U.S. EPA’s certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

IX. SITE ACCESS

24. If the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by the Respondent, then Respondent shall, commencing on the Effective Date, provide U.S. EPA, the State, and their representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.

25. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements to perform the Work required by this Settlement Agreement with each property owner in accordance with a schedule to be approved as part of the Work Plan, or as otherwise specified in writing by the RPM/OSC. Respondent shall immediately notify U.S. EPA if after using its best efforts it is unable to obtain such agreements. For purposes of this Paragraph, “best efforts” includes a first and second telephone call, certified letter, and then an in-person visit from Respondent to the present owner of the property, requesting a meeting be scheduled at the property to review the proposed actions and to obtain an access agreement and permission to permit Respondent and EPA, including its authorized representatives, access to the property to conduct the activities required under this Settlement Agreement. If best efforts are not successful, Respondent shall describe in writing its efforts to obtain access. U.S. EPA may then assist Respondent in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as U.S. EPA deems appropriate. Respondent shall reimburse U.S. EPA for all costs and attorney’s fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XV (Payment of Response Costs).
26. Notwithstanding any provision of this Settlement Agreement, U.S. EPA and the State retain all of their access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

X. ACCESS TO INFORMATION

27. Respondent shall provide to U.S. EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to U.S. EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

28. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to U.S. EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by U.S. EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to U.S. EPA, or if U.S. EPA has notified Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent.

29. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Respondent assert such a privilege in lieu of providing documents, it shall provide U.S. EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

30. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

31. Notwithstanding any provision of this Settlement Agreement, U.S. EPA retains all of its information gathering authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA and any other applicable statutes or regulations.
XI. RECORD RETENTION

32. Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary, consistent with the terms, conditions, and requirements of Section XV (Retention of Records) of the 2010 AOC. Respondent shall also instruct its contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work, consistent with the terms, conditions, and requirements of Section XV (Retention of Records) of the 2010 AOC.

33. At the conclusion of this document retention period, Respondent shall notify U.S. EPA at least 60 days prior to the destruction of any such records or documents, and, upon request by U.S. EPA, Respondent shall deliver any such records or documents to U.S. EPA. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent assert such a privilege, it shall provide U.S. EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

34. Each Respondent hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by U.S. EPA or the State or the filing of suit against it regarding the Site and that it has fully complied and will fully comply with any and all U.S. EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XII. COMPLIANCE WITH OTHER LAWS

35. Respondent shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable local, state, and federal laws and regulations except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 6921(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-Site actions required pursuant to this Settlement Agreement shall, to the extent practicable, as determined by U.S. EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Respondent shall identify ARARs in the Work Plan subject to U.S. EPA approval.
XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

36. In the event of any action or occurrence during performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the OSC or, in the event of his/her unavailability, the Regional Duty Officer, Emergency Response Branch, Region 5 at (312) 353-2318, of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and U.S. EPA takes such action instead, Respondent shall reimburse U.S. EPA all costs of the response action not inconsistent with the NCP pursuant to Section XV (Payment of Response Costs).

37. In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify the OSC at (312) 353-2318 and the National Response Center at (800) 424-8802. Respondent shall submit a written report to U.S. EPA within 7 business days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, et seq.

XIV. AUTHORITY OF ON-SCENE COORDINATOR

38. The RPM/OSC shall be responsible for overseeing Respondent’s implementation of this Settlement Agreement. The RPM/OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement Agreement, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

XV. PAYMENT OF RESPONSE COSTS


a. Respondent shall pay U.S. EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, U.S. EPA will send Respondent a bill requiring payment that consists of an Itemized Cost Summary. Respondent shall make all payments within 45 calendar days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 41 of this Settlement Agreement according to the following procedures.

   (i) If the payment amount demanded in the bill is for $10,000 or greater, payment shall be made to U.S. EPA by Electronic Funds Transfer (“EFT”) in accordance with
current EFT procedures to be provided to Respondent by U.S. EPA Region 5. Payment shall be accompanied by a statement identifying the name and address of the party(ies) making payment, the Site name, U.S. EPA Region 5, and the Site/Spill ID Number B5KF.

(ii) If the amount demanded in the bill is $10,000 or less, the Settling Respondent may in lieu of the procedures in subparagraph 39(a)(i) make all payments required by this Paragraph by a certified or cashier’s check or checks made payable to “EPA Hazardous Substance Superfund,” referencing the name and address of the party making the payment, and the EPA Site/Spill ID Number B5KF. Settling Respondent shall send the check(s) to:

U.S. EPA
Superfund Payments
Cincinnati Finance Center
P.O. Box 979076
St. Louis, MO 63197-9000

b. At the time of payment, Respondent shall send notice that payment has been made to the Director, Superfund Division, U.S. EPA Region 5, 77 West Jackson Blvd., Chicago, Illinois, 60604-3590 and to Jeffrey A. Cahn, Associate Regional Counsel, 77 West Jackson Boulevard, C-14J, Chicago, Illinois, 60604-3590, and to Catherine Garypie, Associate Regional Counsel, 77 West Jackson Boulevard, C-14J, Chicago, Illinois, 60604-3590.

c. The total amount paid by Respondent pursuant to Paragraph 39(a) shall be deposited by U.S. EPA in the Tittabawassee River, Saginaw River & Bay Site Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by U.S. EPA to the EPA Hazardous Substance Superfund.

40. In the event that the payments for Future Response Costs are not made within 45 days of Respondent’s receipt of a bill, Respondent shall pay Interest on the unpaid balance. The Interest on Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent’s failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XVIII.

41. Respondent may dispute all or part of a bill for Future Response Costs submitted under this Settlement Agreement, only if Respondent alleges that U.S. EPA has made an accounting error, or if Respondent alleges that a cost item is inconsistent with the NCP or outside the scope of this Settlement Agreement. If any dispute over costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Respondent shall pay the full amount of the uncontested costs to U.S. EPA as specified in Paragraph 39 on or before the due date. Within the same time period, Respondent shall pay the full amount of the contested costs into an interest-bearing escrow account. Respondent shall
simultaneously transmit a copy of both checks to the persons listed in Paragraph 39(b) above. Respondent shall ensure that the prevailing party or parties in the dispute shall receive the amount upon which they prevailed from the escrow funds plus interest within 20 calendar days after the dispute is resolved.

XVI. DISPUTE RESOLUTION

42. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

43. If Respondent objects to any U.S. EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, it shall notify U.S. EPA in writing of its objection(s) within 10 calendar days of such action, unless the objection(s) has/have been resolved informally. This written notice shall include a statement of the issues in dispute, the relevant facts upon which the dispute is based, all factual data, analysis or opinion supporting Respondent’s position, and all supporting documentation on which such party relies. U.S. EPA shall provide its Statement of Position, including supporting documentation, no later than 10 calendar days after receipt of the written notice of dispute. In the event that these 10-day time periods for exchange of written documents may cause a delay in the work, they shall be shortened upon, and in accordance with, notice by U.S. EPA. The time periods for exchange of written documents relating to disputes over billings for response costs may be extended at the sole discretion of U.S. EPA. An administrative record of any dispute under this Section shall be maintained by U.S. EPA. The record shall include the written notification of such dispute, and the U.S. EPA Statement of Position and all supporting documentation. Upon review of the administrative record, the Director of the Superfund Division, U.S. EPA Region 5, shall resolve the dispute consistent with the NCP and the terms of this Settlement Agreement.

44. Respondent’s obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with U.S. EPA’s decision, whichever occurs.

XVII. FORCE MAJEURE

45. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a force majeure. For purposes of this Settlement Agreement, a force majeure is defined as any event arising from causes beyond the control of Respondent, or of any entity controlled by Respondent, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondent’s
best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.

46. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondent shall notify U.S. EPA orally within 24 hours of when Respondent first knew that the event might cause a delay. Within 7 calendar days thereafter, Respondent shall provide to U.S. EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent’s rationale for attributing such delay to a *force majeure* event if it intends to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall be grounds for U.S. EPA to deny Respondent an extension of time for performance. Respondent shall have the burden of demonstrating by a preponderance of the evidence that the event is a *force majeure*, that the delay is warranted under the circumstances, and that best efforts were exercised to avoid and mitigate the effects of the delay.

47. If U.S. EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by U.S. EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If U.S. EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, U.S. EPA will notify Respondent in writing of its decision. If U.S. EPA agrees that the delay is attributable to a *force majeure* event, U.S. EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

**XVIII. STIPULATED PENALTIES**

48. Respondent shall be liable to U.S. EPA for stipulated penalties in the amounts set forth in Paragraphs 49 and 50 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVII (*Force Majeure*) or as otherwise approved by U.S. EPA. “Compliance” by Respondent shall include completion of the activities under this Settlement Agreement or any work plan or other plan approved under this Settlement Agreement identified below in accordance with all applicable requirements of this Settlement Agreement within the specified time schedules established by and approved under this Settlement Agreement.
49. Stipulated Penalty Amounts - Work.

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 49(b):

<table>
<thead>
<tr>
<th>Penalty Per Violation Per Day</th>
<th>Period of Noncompliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>$500</td>
<td>1st through 14th day</td>
</tr>
<tr>
<td>$1000</td>
<td>15th through 30th day</td>
</tr>
<tr>
<td>$2,500</td>
<td>31st day and beyond</td>
</tr>
</tbody>
</table>

b. Compliance Milestones

1. Respondent shall submit each of the plans required by this Settlement Agreement, including the Removal Work Plan in accordance with the schedules established in this Settlement Agreement.

2. Respondent shall complete each of the tasks required by the plans, including the Removal Work Plan in accordance with the schedules established in the plans, including the Removal Work Plan.

3. Respondent shall implement the Work as prescribed in this Settlement Agreement, and the plans, including the Removal Work Plan.

4. Respondent shall pay Future Response Costs as provided in this Settlement Agreement.

50. Stipulated Penalty Amounts - Reports. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports pursuant to Paragraphs 21, 22, 37, and 74:

<table>
<thead>
<tr>
<th>Penalty Per Violation Per Day</th>
<th>Period of Noncompliance</th>
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</thead>
<tbody>
<tr>
<td>$500</td>
<td>1st through 14th day</td>
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<tr>
<td>$1000</td>
<td>15th through 30th day</td>
</tr>
<tr>
<td>$2,500</td>
<td>31st day and beyond</td>
</tr>
</tbody>
</table>

51. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: 1) with respect to a deficient submission under Section VIII (Work to be Performed), during the period, if any, beginning on the 31st day after U.S. EPA's receipt of such submission until the date that U.S. EPA notifies Respondents of any deficiency; and 2) with respect to a decision by the Director of the Superfund Division, Region 5, under Paragraph 43 of Section XVI (Dispute
Resolution), during the period, if any, beginning on the 21st day after U.S. EPA submits its written statement of position until the date that the Director of the Superfund Division issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement. U.S. EPA shall consider Respondent’s good faith and best efforts in seeking to meet the terms and conditions of this Settlement Agreement and associated Work Plans and schedules.

52. Following U.S. EPA’s determination that Respondent has failed to comply with a requirement of this Settlement Agreement, U.S. EPA may give Respondent written notification of the failure and describe the noncompliance. U.S. EPA may send Respondent a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether U.S. EPA has notified Respondent of a violation.

53. All penalties accruing under this Section shall be due and payable to U.S. EPA within 30 days of Respondent’s receipt from U.S. EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XVI (Dispute Resolution). All payments to U.S. EPA under this Section shall be paid by certified or cashier’s check(s) made payable to “U.S. EPA Hazardous Substances Superfund,” shall be mailed to U.S. Environmental Protection Agency, Fines and Penalties, Cincinnati Finance Center, PO Box 979077, St. Louis, MO 63197-9000, shall indicate that the payment is for stipulated penalties, and shall reference the U.S. EPA Site/Spill ID Number B5KF, the U.S. EPA Docket Number, and the name and address of the party making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), shall be sent to U.S. EPA as provided in Paragraph 39(b).

54. The payment of penalties shall not alter in any way Respondent’s obligation to complete performance of the Work required under this Settlement Agreement.

55. Penalties shall continue to accrue during any dispute resolution period, but need not be paid until 20 days after the dispute is resolved by agreement or by receipt of U.S. EPA’s decision.

56. If Respondent fails to pay stipulated penalties when due, U.S. EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 52. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of U.S. EPA to seek any other remedies or sanctions available by virtue of Respondent’s violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(l) of CERCLA, 42 U.S.C. §§ 9506(b) and 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that U.S. EPA shall not seek civil penalties pursuant to Section 106(b) or 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of this Settlement Agreement. Should Respondent violate this Settlement Agreement or any portion thereof, U.S. EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. §9604, and/or may seek judicial
enforcement of this Settlement Agreement pursuant to Section 106 of CERCLA, 42 U.S.C. §9606. Notwithstanding any other provision of this Section, U.S. EPA may, in its unreviewable discretion, waive in writing any portion of stipulated penalties or interest that have accrued pursuant to this Settlement Agreement.

XIX. COVENANT NOT TO SUE BY U.S. EPA

57. In consideration of the actions that will be performed and the payments that will be made by Respondent under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, U.S. EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Respondent of all obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XV. This covenant not to sue extends only to Respondent and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS BY U.S. EPA

58. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of U.S. EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent U.S. EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement. U.S. EPA also reserves the right to take any other legal or equitable action as it deems appropriate and necessary, or to require the Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

59. The covenant not to sue set forth in Section XIX (Covenant Not To Sue By U.S. EPA) above does not pertain to any matters other than those expressly identified therein. U.S. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:

a. claims based on a failure by Respondent to meet a requirement of this Settlement Agreement;

b. liability for costs not included within the definition of Future Response Costs;

c. liability for performance of response action other than the Work;

d. criminal liability;
e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and

g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

**XXI. COVENANT NOT TO SUE BY RESPONDENT**

60. **Covenant Not to Sue the United States by Respondent.** Except as specifically provided in this Settlement Agreement, Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement Agreement, including but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claim arising out of the Work or arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Michigan Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or
c. any claim against the United States pursuant to CERCLA, 42 U.S.C. § 9601, et seq., relating to the Work or Future Response.

The covenant not to sue in this Paragraph 60 does not include, and Dow specifically reserves, its right to assert claims pursuant to CERCLA, 42 U.S.C. § 9601, et seq., relating to the Work or Future Response Costs against the Department of Defense, the Department of Commerce, and/or the General Services Administration, and their components, and the predecessors, successors and assigns of the foregoing, provided that the Department of Defense, the Department of Commerce, and/or the General Services Administration, and their components, and the predecessors, successors and assigns of the foregoing, have not each resolved their liability at the Site with U.S. EPA as of the time Respondent asserts such claims.

61. These covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 58(b), (c), and (e)-(g), but only to the extent that Respondent’s claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.
62. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

63. Respondent agrees not to seek judicial review of a decision to list the Site on the NPL at any time after the Effective Date of this Settlement Agreement based on a claim that changed site conditions that resulted from the performance of the Work in any way affected the basis for listing the Site.

XXII. OTHER CLAIMS

64. By issuance of this Settlement Agreement, the United States and U.S. EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or U.S. EPA shall not be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.

65. Except as expressly provided in Section XIX (Covenant Not to Sue by U.S. EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

66. No action or decision by U.S. EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXIII. CONTRIBUTION

67. a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and that Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), for “matters addressed” in this Settlement Agreement. The “matters addressed” in this Settlement Agreement are the Work and Future Response Costs.

b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42. U.S.C. § 9613(f)(3)(B), pursuant to which the Respondent has, as of the Effective Date, resolved its liability to the United States for the Work and Future Response Costs.

c. Nothing in this Settlement Agreement precludes the United States or Respondent from asserting any claims, causes of action, or demands for indemnification, contribution, or cost
recovery against any persons not Parties to this Settlement Agreement. Nothing herein diminishes the right of the United States, pursuant to Section 113(f)(2) and (3), 42 U.S.C. § 9613(f)(2) and (3), to pursue any such persons to obtain additional response costs or response action, and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2).

XXIV. INDEMNIFICATION

68. Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States. The Federal Tort Claims Act (28 U.S.C. §§ 2671, 2680) provides coverage for injury or loss of property, or injury or death caused by the negligent or wrongful act or omission of an employee of U.S. EPA while acting within the scope of his or her employment, under circumstances where U.S. EPA, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred.

69. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

70. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

XXV. MODIFICATIONS

71. The RPM/OSC may make modifications to any plan or schedule in writing or by oral direction. Any oral modification will be memorialized in writing by U.S. EPA promptly, but shall
have as its effective date the date of the RPM/OSC’s oral direction. Any other requirements of this Settlement Agreement may be modified in writing by mutual agreement of the parties.

72. If Respondent seeks permission to deviate from any approved work plan or schedule, Respondent’s Project Coordinator shall submit a written request to U.S. EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the RPM/OSC pursuant to Paragraph 71.

73. No informal advice, guidance, suggestion, or comment by the RPM/OSC or other U.S. EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXVI. NOTICE OF COMPLETION OF WORK

74. When U.S. EPA determines, after U.S. EPA’s review of the Final Report, that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including, e.g., post-removal site controls, payment of Future Response Costs, and record retention, U.S. EPA will provide written notice to Respondent. If U.S. EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, U.S. EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Work Plan if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the U.S. EPA notice. Failure by Respondent to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

XXVII. FINANCIAL ASSURANCE

75. Within 30 days of the Effective Date, Respondent shall establish and maintain financial security in the amount of $400,000 in one or more of the following forms:

a. A surety bond guaranteeing performance of the Work;

b. One or more irrevocable letters of credit equaling the total estimated cost of the Work;

c. A trust fund;

d. A guarantee to perform the Work by one or more parent corporations or subsidiaries, or by one or more unrelated corporations that have a substantial business relationship with at least one of Respondents; or
e. A demonstration that Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f). For these purposes, references in 40 C.F.R. § 264.143(f) to the "sum of current closure and post-closure costs estimates and the current plugging and abandonment costs estimates" shall mean the amount of financial security specified above. If Respondent seeks to provide a demonstration under 40 C.F.R. § 264.143(f) and has provided a similar demonstration at other RCRA or CERCLA sites, the amount for which it is providing financial assurance at those other sites should generally be added to the estimated costs of the Work for this Paragraph.

76. If Respondent seeks to demonstrate the ability to complete the Work through a guarantee by a third party pursuant to Paragraph 75(d) of this Section, Respondent shall demonstrate that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f). If Respondent seeks to demonstrate its ability to complete the Work by means of the financial test or the corporate guarantee pursuant to Paragraph 75(d) or (e) of this Section, Respondent shall resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the Effective Date. In the event that U.S. EPA determines at any time that the financial assurances provided pursuant to this Section are inadequate, Respondents shall, within 30 days of receipt of notice of U.S. EPA's determination, obtain and present to U.S. EPA for approval one of the other forms of financial assurance listed in Paragraph 75 of this Section. Respondent's inability to demonstrate financial ability to complete the Work shall not excuse performance of any activities required under this Settlement Agreement.

77. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 75 of this Section, Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to U.S. EPA, in accordance with the requirements of this Section, and may reduce the amount of the security upon approval by U.S. EPA. In the event of a dispute, Respondent may reduce the amount of the security in accordance with the written decision resolving the dispute.

78. Respondent may change the form of financial assurance provided under this Section at any time, upon notice to and approval by U.S. EPA, provided that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondent may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

**XXVIII. INSURANCE**

79. At least 7 days prior to commencing any on-Site work under this Settlement Agreement, Respondent shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of one-million dollars ($1,000,000), combined single limit. Within the same time period, Respondent shall provide U.S. EPA with certificates of such insurance. In addition, for the duration of the Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's
compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to U.S. EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXIX. SEVERABILITY/INTEGRATION/ATTACHMENTS

80. If a court issues an order that invalidates any provision of this Settlement Agreement or finds that Respondent has sufficient cause not to comply with one or more provisions of this Settlement Agreement, Respondent shall remain bound to comply with all provisions of this Settlement Agreement not invalidated or determined to be subject to a sufficient cause defense by the court's order.

81. This Settlement Agreement and its attachments constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following attachments are incorporated into this Settlement Agreement:

Attachment A – Action Memorandum

Attachment B – General Map of EU Locations

Attachment C – Map and table of EUs and property parcels within those EUs where removal activities are required

Attachment D – List of Studies

XXX. EFFECTIVE DATE

82. This Settlement Agreement shall be effective upon receipt by Respondent of a copy of this Settlement Agreement signed by the Director of the Superfund Division, U.S. EPA Region 5.
The undersigned representative of Respondent certifies he/she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the Respondent to this document.

IN THE MATTER OF:

The Dow Chemical Company
Midland, Michigan, 48667

Agreed this 19 day of May, 2011.

For Respondent: The Dow Chemical Company

By: [Signature]

Greg G. Cochran
Global Director, Remediation
IN THE MATTER OF:

The Dow Chemical Company
Midland, Michigan, 48667

It is so ORDERED and Agreed this 26 day of May, 2011.

By: [Signature]

Richard C. Karl, Director
Superfund Division
United States Environmental Protection Agency
Region 5
ATTACHMENT A

Action Memorandum
ATTACHMENT B

General Map of EU Locations
ATTACHMENT C

Maps and table of EUs and property parcels within those EUs where removal activities are required
EU locations where NTCRA is required as of May 2011:

<table>
<thead>
<tr>
<th>EU010</th>
<th>EU011</th>
<th>EU004</th>
<th>EU006</th>
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ATTACHMENT D

List of Studies
Appendix D
Administrative Settlement Agreement and Order on Consent
The Tittabawassee River/Saginaw River & Bay Site

-8/8/78 U.S. EPA Memo from F. Kover to J. Merenda re: “Interim Status Report 8EHQ-0778-0209”

-10/24/80 Science magazine “Trace Chemistries of Fire: A Source of Chlorinated Dioxins”


-11/5/84 Dow Chemical Company “Point Sources and Environmental Levels of 2378-TCDD (2,3,7,8-Tetrachlorobenzo-P-Dioxin) on the Midland Plant Site of the Dow Chemical Company and in the City of Midland, Michigan”

-April 1985 U.S. EPA Region 5 “Study of Dioxin & Other Toxic Pollutants B Midland, Michigan”

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