

**AMENDED STATEMENT OF WORK
FOR COMPLETION OF THE REMEDIAL DESIGN FOR
OPERABLE UNITS 2, 3, 4 AND 5 AT THE
LOWER FOX RIVER AND GREEN BAY SITE
BROWN, OUTAGAMIE, AND WINNEBAGO COUNTIES, WISCONSIN**

I. PURPOSE

This amended Statement of Work (“SOW”) modifies the previous SOW that accompanied the original settlement agreement and consent order for Remedial Design (“RD”) in this matter, and it sets forth revised and updated requirements for the Remedial Design for Operable Units (“OUs”) 2, 3, 4 and 5 for all components of the remedial action contained in the Records of Decision and the Record of Decision Amendment for OUs 2- 5 for the Fox River and Green Bay Site (the “Site”). The Record of Decision for OUs 1 and 2 at the Site was signed in December 2002 (the “2002 ROD”), and the original Record of Decision for OUs 3-5 at the Site was signed on June 30, 2003 (the “2003 ROD”). A Record of Decision Amendment, signed June 26, 2007 (the “2007 ROD Amendment”), modified certain aspects of the selected remedy for OUs 2-5. This modified SOW is designed to be consistent with the 2002 ROD, the 2003 ROD, and the 2007 ROD Amendment (collectively referred to herein as the “RODs”).

This SOW addresses only the Remedial Design for OUs 2-5. The remedial design and remedial action for OU 1 is being addressed under another Statement of Work and Consent Decree. Phase 1 of the remedial action in OUs 2-5 is being performed under a separate Statement of Work and Consent Decree. As noted in that Consent Decree, all

remaining elements of the remedy in OUs 2-5 will be performed as Phase 2 of the remedial action for OUs 2-5. The tasks and schedules in this SOW are intended to ensure completion of the Remedial Design as necessary to permit commencement of full-scale sediment remediation for Phase 2 of the OU 2-5 Remedial Action at the start of the 2009 construction season, such that sediment remediation occurs throughout the 2009 construction season.

Respondents, working collaboratively with WDNR and EPA (the “Response Agencies”) in an effort to expedite the overall remedial design schedule, as set forth herein, will complete the RD for OUs 2-5 consistent with the RODs, as discussed below, the Amended Settlement Agreement and Administrative Order on Consent (“Settlement Agreement”) to which this SOW is attached, and EPA Superfund Remedial Design and Remedial Action Guidance (OSWER Directive 9355.0-4A) for designing remedial actions. That Settlement Agreement and this SOW require the Respondents to design all remaining elements of the remedy for OUs 2-5 (but they do not require the Respondents to perform any aspects of the remedial action).

II. THE REMEDIAL DESIGN AND THE REMEDIAL ACTION

The Respondents shall design the remedy for OUs 2-5 as necessary to meet the Performance Standards and specifications set forth in the RODs, as discussed below. This modified SOW fully incorporates all elements of the 2007 Amended ROD into the Remedial Design process. The Remedial Design shall address the timing and

sequencing of events necessary to implement this complex, multi-year remedy for OUs 2-5 at the Site.

THE REMEDY IN OU2 (EXCLUDING DEPOSIT DD). This portion of the remedy was unchanged by the 2007 ROD Amendment. The selected remedy is Monitored Natural Recovery (“MNR”). An institutional control plan and a long-term monitoring plan for PCB levels and possibly mercury levels in water, sediment, and biota will be developed during RD.

THE REMEDY IN OU2 (DEPOSIT DD), OU3, OU4, AND OU5 (RIVER MOUTH). In these areas, the 2007 ROD Amendment and this Amended SOW adopt sediment dredging as the primary remedial approach for sediments exceeding the 1.0 ppm PCB Remedial Action Level (“RAL”), but permit the use of other alternative remedial approaches (i.e., a combination of dredging and capping, capping alone, and/or placement of a sand cover) if certain performance standards specified by the 2007 ROD Amendment are met. The short-term and long-term objectives of the Amended Remedy include: removing and containing PCB-contaminated sediment in each OU to meet the RAL performance standard and/or the SWAC goal upon construction completion, as set forth in the 2007 ROD Amendment; achieving further reductions in PCB surface water and sediment concentrations through natural recovery processes; achieving corresponding reductions in PCB levels in the water column and in fish tissue; and ensuring improvement in PCB levels in surface water at the Site through long-term operation and maintenance and institutional controls.

THE REMEDY IN OU5 (EXCLUDING THE RIVER MOUTH). This portion of the remedy was unchanged by the 2007 ROD Amendment. The selected remedy is MNR. An institutional control plan and a long-term monitoring plan for PCB levels and possibly mercury levels in water, sediment, and biota will be developed during RD.

III. SCOPE OF REMEDIAL DESIGN

Tasks completed under the previous SOW include the Remedial Design Work Plan, Review and Analysis of Existing Data, Pre-Design Sampling, and the Basis of Design Report. Additional tasks necessary to complete the Remedial Design follow below.

Following completion and approval of the Basis of Design Report, Respondents shall complete the Remedial Design and prepare construction plans and specifications to implement the Remedial Action at OUs 2-5, as described in the RODs and this SOW, and consistent with the approved Basis of Design Report. Such plans and specifications shall be submitted in accordance with the schedule set forth in Section V, below. All design plans and specifications shall be developed consistent with EPA's Superfund Remedial Design and Remedial Action Guidance (OSWER Directive No. 9355.0-4A), except as otherwise specified in this SOW, and shall demonstrate that the Remedial Action based on the final Remedial Design will meet the objectives of the Settlement Agreement and the RODs, including all Performance Standards.

Respondents will submit complete bound sets of all documents and 5 electronic copies in the form of a CD.

A. Preliminary Design (30%) for OUs 2-5

Respondents shall submit the Preliminary Design to the Response Agencies for review and approval when the OU 2-5 Remedial Design effort is approximately 30% complete.

The Preliminary Design submittal shall include or discuss, at a minimum, the following:

- Preliminary plans, drawings, and sketches, including design calculations;
- Determination of specific technologies for sediment capping, covering, dredging, dewatering, transportation and disposal of dredged sediments and associated wastewaters. These determinations will build upon previous engineering analyses;
- Results of completed studies and additional field sampling and analysis, if any, conducted after the Pre-Design sampling;
- Design assumptions and parameters, including design restrictions, process performance criteria, appropriate unit processes for the treatment train, and expected removal or treatment efficiencies for both the process and waste (concentration and volume), as applicable;
- An overview of the Construction Quality Assurance Project Plan (see Paragraph G below) including the proposed cleanup verification methods (i.e., probing methods) and

compliance with Applicable or Relevant and Appropriate Requirements (ARARs);

- An outline of required technical specifications;
- Potential siting/locations of processes/construction activity;
- Potential disposal locations based upon effectiveness, implementability and cost;
- An overview of expected operation, maintenance and monitoring requirements for the remedy; long-term monitoring requirements for surface water and biota; and institutional control requirements;
- An overview of real estate, easement, and permit requirements;
- A preliminary construction schedule, including contracting strategy;
- Incorporation of significant new information, to the extent available, from other projects at the Site (e.g., the OU 1 remedial action and Phase 1 of the remedial action in OUs 2-5).

The Preliminary Design should provide for any additional sampling, analysis, and/or pilot studies necessary to fill in any remaining site-specific data gaps, potentially including further delineation of the area and volume of sediments requiring remediation, further characterization of prospective disposal site(s) (including physical, chemical, and biological characteristics), or any other data necessary to complete design activities.

B. RD Work Plan Addendum

Respondents shall prepare and submit an RD Work Plan Addendum that conforms to the requirements of this SOW. Upon approval by the Response Agencies, the

Respondents shall implement the approved RD Work Plan, as revised by the approved RD Work Plan Addendum.

C. Intermediate Design (60%) for OUs 2-5

Respondents shall submit an Intermediate Design when the design effort is 60% complete. The Intermediate Design shall fully address all Response Agency comments on the Preliminary Design. Intermediate Design documents will build on those elements listed for the Preliminary Design (30%) documents, and will also include the following:

- Modifications to Plans in the Preliminary Design (30%) in response to the Response Agencies' comments;
- Development of required technical specifications;
- Capital and Operation and Maintenance Cost Estimates;
- A Project Schedule for the construction and implementation of the remedial action;
- Draft versions of the following supporting plans (see Paragraph G below):
 - a Community Health and Safety Plan
 - a Contingency Plan
 - a Construction Quality Assurance Project Plan
 - an Institutional Control Implementation and Assurance Plan
 - an Operation, Maintenance, and Monitoring Plan;
- A more detailed overview of a plan for long-term monitoring (see Paragraph G below), incorporating refinements since the Preliminary Design; and

- A draft Mitigation Plan, if it is necessary to restore habitats that will be physically impacted (not including the soft sediment deposits themselves).

D. Pre-Final Design (90%) for OUs 2-5

The Respondents shall submit the Pre-Final Design (90%) when the design effort is 90% complete. The Pre-Final Design shall fully address all Response Agency comments on the Intermediate Design (60%). The Pre-Final Design submittals shall include those elements listed for the Preliminary Design and Intermediate, as well as the following:

- A final Institutional Control Implementation and Assurance Plan;
- A final Community Health and Safety Plan;
- A final Contingency Plan;
- A final Construction Quality Assurance Project Plan including a Sediment Removal Verification / Capping and Covering Plan;
- A final Operation, Maintenance, and Monitoring Plan;
- A final Mitigation Plan (as described above);
- A draft Long-Term Monitoring Plan;
- A revised Capital and Operation and Maintenance Cost Estimate (which shall refine the cost estimates to reflect the detail presented in the Pre-Final Design); and
- A revised Project Schedule for the construction and implementation of the Remedial Action, which identifies timing for initiation and completion of all critical path tasks.

E. Final Design (100%) for OUs 2-5

The Respondents shall submit the Final Design when the design is 100% complete. Key portions of the Final Design that may need to be completed prior to the remainder of the Final Design – such as design plans for long-lead time elements of the remedial action – should be submitted as they are completed, subject to Response Agency approval of any necessary alternative sequencing of submissions and any related schedule adjustments necessary to achieve this goal. The Final Design shall fully address all Response Agency comments on the Pre-Final Design (90%) and shall include reproducible drawings and specifications suitable for bid advertisement. The Final Design submittals shall include final versions of the design components listed for the Pre-Final Design (although the proposed final version of the Long-Term Monitoring Plan may be submitted after all other portions of the Final Design, under the schedule specified by Section V of this SOW). The final Project Schedule included in the Final Design shall include specific dates for completion of the project and major milestones. Specific dates will assume and depend upon a defined start date and defined dates for receipt of agency approvals.

F. Remedial Design for Long Lead Time Elements of the Remedial Action

Most elements of the remedial action for OUs 2-5 shall be designed in the manner described above (i.e., through sequential development of a Preliminary Design, Intermediate Design, Pre-Final Design, and Final Design) in accordance with the general schedule set forth in Section V of this SOW (Deliverables Schedule). Certain other elements of the OU 2-5 remedial action that require long lead time planning shall be designed on an expedited basis, as necessary to permit commencement of full-scale

sediment remediation for Phase 2 of the OU 2-5 Remedial Action at the start of the 2009 construction season. For those design elements, the Respondents will need to accelerate pertinent portions of the design process to the greatest extent practicable consistent with the goals of the Remedial Design process and good engineering practices. Accelerated design requirements for long lead time elements of the remedial action are expected to include, but are not necessarily limited to: (i) design requirements for procurement of certain equipment (such as dewatering and water treatment equipment), including preparation of performance specifications and contracting bid packages; (ii) design requirements for staging site preparation work and associated infrastructure construction, including preparation of performance specifications and contracting bid packages; (iii) design requirements for disposal of dredged sediment, including all preparations for contracting; and (iv) design planning for any substantive requirements of permitting programs applicable to the project and site surveys (such as historical site investigations), including preparation of information to allow the Response Agencies to determine compliance with substantive requirements of permitting programs and all preparations for contracting. The RD Work Plan Addendum shall include a specific plan and schedule for designing all elements of Remedial Action that require long lead time planning. That plan and schedule shall be designed to permit commencement of full-scale sediment remediation for Phase 2 of the OU 2-5 Remedial Action at the start of the 2009 construction season.

G. Content of Supporting Plans

1. Community Health and Safety Plan (HSP)

Respondents shall develop and submit to the Response Agencies for review and approval a site-specific HSP designed to protect area residents from physical, chemical, and other hazards posed by any work at the Site during the RA.

2. Contingency Plan

Respondents shall develop and submit to the Response Agencies for review and approval a Contingency Plan that describes the procedures that will be followed in the event of an accident or emergency at the Site. The Contingency Plan will be incorporated into the Community HSP and CQAPP, as appropriate. The Contingency Plan shall include, at a minimum, the following:

- a. Name of the person or entity responsible for responding in the event of an emergency incident;
- b. Plan and date to meet with the local community, including local, State and Federal agencies involved in the Remedial Action, as well as local emergency squads and hospitals; and
- c. First aid medical information

3. Construction Quality Assurance Project Plan (CQAPP)

Respondents shall develop and submit to the Response Agencies for review and approval a CQAPP which describes the site-specific components of the quality assurance program that the Respondents shall use to ensure that the completed project meets or exceeds all design criteria, plans, and specifications. The CQAPP shall contain, at a minimum, the following elements:

- a. Responsibilities and authorities of all organizations and key personnel roles involved in the construction of the Remedial Action.
- b. Qualifications that will be required of the Quality Assurance Official to demonstrate that he/she possesses the training and experience necessary to fulfill his/her identified responsibilities.
- c. Protocols for the sampling and testing that shall be used to monitor the remedial action.
- d. Identification of proposed quality assurance sampling activities including the sample size, locations, frequency of testing, acceptance and rejection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation.
- e. Reporting requirements for CQAPP activities shall be described in detail in the CQAPP, including such items as daily summary reports, inspection data sheets, problem identification and corrective measures reports, design acceptance reports, and final documentation.

4. Sediment Removal Verification/Capping and Covering Plan

Respondents shall develop and submit a Sediment Removal Verification/Capping and Covering Plan as part of the CQAPP to the Response Agencies for review and approval. The purpose of the Sediment Removal Verification/Capping and Covering Plan is to provide a mechanism to ensure that performance standards for the Remedial Action are met. The Sediment Removal Verification/Capping and Covering Plan shall include, at a minimum:

- a. Quality Assurance Project Plan; and
- b. Field Sampling Plan.

5. Institutional Control Implementation and Assurance Plan

As part of the Remedial Design, and consistent with the 2007 ROD Amendment for OUs 2-5, Respondents must develop an Institutional Control Implementation and Assurance Plan (ICIAP). The ICIAP may include access restrictions, land use or water use restrictions, dredging moratoriums, fish consumption advisories, and/or domestic water supply restrictions. Land and water use restrictions and access restrictions may require local and/or state legislative action to prevent inappropriate use or development of contaminated areas.

6. Operation, Maintenance and Monitoring Plan (OMMP)

The Respondents shall prepare an Operation, Maintenance, and Long-Term Monitoring Plan that includes plans for operating, maintaining, and monitoring the integrity of the remedy once it has been constructed. Among other things, the OMMP shall include plans for long-term cap monitoring, cap enhancement and/or removal in response to cap degradation, and cap enhancement in response to changed water levels, consistent with the 2007 ROD Amendment.

7. Long-Term Monitoring Plan

The Respondents shall develop a Long-Term Monitoring Plan that specifies requirements for monitoring of surface water and biota to assess progress in achieving the Remedial Action Objectives.

V SUMMARY OF MAJOR DELIVERABLES / SCHEDULE

A summary of the project schedule and reporting requirements for each major element of the OU 2 - 5 Remedial Design is presented below. The Respondents shall adhere to the following schedule unless it is modified in writing by the Response Agencies' Project Coordinators.

Deliverables Schedule

<u>Deliverable</u>	<u>Due Dates</u>
Monthly Progress Reports	As described in the Settlement Agreement
Preliminary Design (30%)	<u>Due Date:</u> November 30, 2007 <u>Target Date for Agency Approval:</u> January 14, 2008
RD Work Plan Addendum	<u>Due Date:</u> December 31, 2007
Intermediate Design (60%)	<u>Target Date:</u> May 13, 2008 <u>Due Date:</u> No later than one hundred twenty (120) days after approval of the Preliminary Design. <u>Target Date for Agency Approval:</u> June 23, 2008
Pre-Final Design (90%)	<u>Target Date:</u> October 1, 2008 <u>Due Date:</u> No later than one hundred (100) days after approval of the Intermediate Design. <u>Target Date for Agency Approval:</u> October 31, 2008
Final Design (100%) (other than the Final Long-Term Monitoring Plan)	<u>Target Date:</u> December 30, 2008 <u>Due Date:</u> Sixty (60) days after approval of the Pre-Final Design.
Final Long-Term Monitoring Plan	<u>Target Date:</u> January 29, 2009 <u>Due Date:</u> Ninety (90) days after approval of the Pre-Final Design