

**Appendix B to the Consent Decree
Hudson River PCBs Site**

**Statement of Work (SOW) for Remedial Action
and
Operations, Maintenance and Monitoring**

December 2010

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1. Purpose and Scope

The purpose of this Statement of Work (SOW) is to set forth requirements for implementation of the remedial action (RA) set forth in the Record of Decision (ROD) for the Hudson River PCBs Superfund Site (Site), which was signed by the Administrator of the United States Environmental Protection Agency (EPA) and the Regional Administrator of EPA Region 2 on February 1, 2002, and Operation, Maintenance, and Monitoring (OM&M), as defined in Section IV of the Consent Decree. General Electric Company (GE) shall carry out this work in accordance with the Consent Decree (including the attachments to the Consent Decree, which include this SOW, as modified pursuant to Paragraph 15.b of the Consent Decree), the Remedial Action Work Plans described herein, and all other plans, specifications, schedules, and documents set forth or referenced in the Consent Decree and/or this SOW, as approved by EPA pursuant to the Consent Decree. GE shall also perform Phase 2 in accordance with any modifications that are required by EPA, through adaptive management (as described in Section 7, below), to the SOW, Remedial Action Work Plans, or any other plans, specifications, schedules or other documents.

Work done in accordance with this SOW, the submittals required by the SOW and approved by EPA, the Approved Design Documents (as defined in Section IV of the Consent Decree), and the remainder of the Consent Decree shall be deemed to be done in accordance with the ROD, subject to the proviso in Paragraph 6 of the Consent Decree.

This SOW includes the following attachments, which are a part of this SOW:

Attachment A: Critical Phase 2 Design Elements;

Attachment B: Phase 2 Remedial Action Monitoring Scope;

Attachment C: Phase 2 Performance Standards Compliance Plan Scope;

Attachment D: Phase 2 Remedial Action Community Health and Safety Program Scope;

Attachment E: Operation, Maintenance, and Monitoring Scope for Phase 2 of the Remedial Action; and

Attachment F: Certification Unit Completion Approval/Certification Forms.

The remainder of this SOW is organized into the following sections:

- Section 2 – Phase 1 of Remedial Action;
- Section 3 – Phase 2 of Remedial Action;
- Section 4 – Operation, Maintenance, and Monitoring;
- Section 5 – Progress Meetings, Completion Process, and Associated Reporting; and
- Section 6 – Schedule for Remedial Action Deliverables/Tasks.
- Section 7 – Adaptive Management

2. Phase 1 of Remedial Action

2.1 Phase 1 Facility Site Work Construction

The Phase 1 facility site work construction shall consist of activities to develop the property to be used for the sediment processing/transfer facility. The site work construction efforts shall be defined in the Phase 1 Final Design Report and shall generally consist of civil construction work to begin development of the site. The Phase 1 Final Design Report shall separately identify and segment the portions thereof that pertain to the Phase 1 facility site work construction, and shall specify an estimated duration for the performance of such work, to be used by GE in soliciting bids for the work, for EPA review and approval. This section of the SOW includes a description of contracting activities, a description of the development of a Remedial Action (RA) Work Plan for Facility Site Work Construction, and a summary of Phase 1 facility site work construction activities.

2.1.1 Contracting for Phase 1 Facility Site Work

GE shall complete the contracting activities described in this section to select and retain contractor(s) to assist in development of the RA Work Plan for Phase 1 Facility Site Work Construction and to perform the site work construction.

Bid Solicitation, Contractor Selection, and Issuance of Notice(s) of Award

GE shall solicit bids for the Phase 1 facility site work construction based on the facility site work design component identified in the Phase 1 Final Design Report. It is anticipated that plans and specifications which are ready for construction will be developed in Final Design for this construction component. Adequate time shall be provided for pre-qualified bidders to prepare bids for GE evaluation. Following receipt of bids, GE will review and evaluate the bids, select a contractor(s), and issue a Notice of Award to the successful bidder(s). However, GE will not issue a Notice of Award to a contractor until EPA has approved the portion of the Phase 1 Final Design Report that has been developed for the facility site work, GE has had sufficient time to review any design changes and solicit bid revisions, if necessary based on the EPA-approved Phase 1 Final Design Report, and the Consent Decree has been entered. Specifically, GE shall issue a Notice of Award to the selected facility site work construction contractor(s) within the latest of the following: 1) 80 days after GE's submission of the Phase 1 Final Design Report; 2) if bid revisions are not necessary, 15 days after EPA approval of the Phase 1 Final Design Report or the portion of that report that has been developed for the facility site work; 3) if bid revisions are necessary, 30 days after EPA approval of the Phase 1 Final Design Report or the portion of that report that has been developed for the facility site work, provided that no significant changes to the design are required; or 4) 10 days after entry of the Consent Decree by the court. If significant changes to the design are required, additional time for bid revisions may be necessary, and GE shall propose a revised schedule to EPA. Further, if GE does not receive any responsive bids, GE shall develop a plan to address that situation, shall discuss it with EPA, and if necessary shall propose a revised schedule for obtaining bids and issuing a Notice of Award. The Notice of Award will authorize the contractor(s) to assist GE in developing planning documents, including the RA Work Plan for Phase 1 Facility Site Work Construction.

Issuance of Notice to Proceed

Following issuance of the Notice of Award to the selected facility site work contractor(s), GE will enter into contract(s) with the selected contractor(s). Within 30 days after issuance of the Notice of Award to the selected contractor(s), GE shall issue a Notice to Proceed to the selected contractor(s). The Notice to Proceed will authorize the contractor(s) to order equipment and begin site work construction.

2.1.2 RA Work Plan for Phase 1 Facility Site Work Construction

Within 30 days after GE issues Notice(s) of Award to Phase 1 facility site work construction contractor(s), GE shall submit to EPA for review and approval an RA Work Plan for Phase 1 Facility Site Work Construction. In the event that GE issues Notices of Award for Phase 1 facility site work construction on different dates, the 30-day period shall begin on the date of the last such Notice of Award. The RA Work Plan for Phase 1 Facility Site Work Construction shall cover the component(s) of the Phase 1 Final Design Report pertaining to facility site work and shall be consistent with the Critical Phase 1 Design Elements and this SOW. The RA Work Plan for Phase 1 Facility Site Work Construction shall address the site work necessary for construction of the sediment processing/transfer facility, water treatment facilities, and ancillary and support facilities needed to implement Phase 1.

The RA Work Plan for Phase 1 Facility Site Work Construction shall include a description of the site work construction activities, monitoring requirements applicable to facility site work construction, equipment staging, compliance monitoring, and a site work construction schedule. The construction schedule shall describe the sequencing and reasonable durations for construction elements and account for seasonal limitations for construction in the Upper Hudson Work Area (e.g., frost conditions which could compromise construction quality such as rail bed installation and foundations, high water events, ambient temperature limitations for asphalt paving, etc.). This construction schedule will be integrated with the construction schedule for the processing equipment installation and remaining site work (described below).

The RA Work Plan for Phase 1 Facility Site Work Construction also shall include a worker Health and Safety Plan (HASP) and a site work Construction Quality Control/Quality Assurance Plan (CQAP) addressing the items required pursuant to Section 2.3.2.2.1 of this SOW that are relevant to this work. The RA Work Plan for Phase 1 Facility Site Work Construction may incorporate by reference those elements listed above which were provided in the Phase 1 Final Design Report.

2.1.3 Phase 1 Facility Site Work Construction

2.1.3.1 Pre-Construction Conference

Within 15 days of receiving EPA's approval of the RA Work Plan for Phase 1 Facility Site Work Construction and GE's issuance of all Notices to Proceed to Phase 1 facility site work construction contractor(s), GE shall conduct a Pre-Construction Conference attended by EPA, the State, and other persons authorized by EPA (including contractors) to discuss the site work construction at the sediment processing/transfer facility(ies). The agenda for each Pre-Construction Conference will include:

- The procedure to be used by GE for documenting and reporting inspection data and compliance with specifications and plans, including procedures and timelines for processing design changes and securing
- EPA review and approval of such changes as necessary.
- The procedure to be used for distributing and storing documents and reports.
- Work area security.
- Safety programs and requirements.
- The Construction Management Plan and discussion of any appropriate modifications of the Site Work CQAP to verify that site-specific considerations are addressed.
- Quality control and quality assurance procedures.
- Site tour to confirm access, laydown locations, and other issues (i.e., verify that the design criteria, plans, and specifications are understood).

GE shall transmit a written summary of the Pre-Construction Conference to EPA and the State within 7 days after the conference.

2.1.3.2 Construction Activities

GE shall initiate facility site work construction for the Phase 1 sediment processing/transfer facility(ies) in accordance with the schedule in the RA Work Plan for Phase 1 Facility Site Work Construction, as approved by EPA. GE shall complete that site work in accordance with the approved RA Work Plan for Phase 1 Facility Site Work Construction and the schedule therein (as described in Section 2.1.2 and as approved by EPA), subject to extensions for delays attributable to force majeure, as provided in Section XVIII of the Consent Decree, or for EPA-approved changes in the scope of this work. Record drawings for permanent facilities shall be submitted to EPA after completion of facility site work construction activities, in accordance with the schedule provided in the RA Work Plan for Phase 1 Facility Site Work Construction.

2.2 Phase 1 Processing Equipment Installation and Remaining Site Work

The Phase 1 processing equipment installation and remaining site work shall consist of activities to procure and install sediment dewatering and water treatment equipment necessary to process dredged sediment, as well as to complete remaining site work (if necessary) construction on the property to be used for sediment processing. The processing equipment installation and remaining site work efforts shall be defined in the Phase 1 Final Design Report along with an estimated duration for the performance of such work, to be used by GE in soliciting bids for the work. EPA will review and approve the estimated schedule for completion of this work. This section of the SOW includes a description of contracting activities, a description of the development of an RA Work Plan for Phase 1

Processing Equipment Installation, and a summary of Phase 1 processing equipment installation and remaining site work activities.

2.2.1 Contracting for Phase 1 Processing Equipment Installation and Remaining Site Work

GE shall complete the contracting activities described in this section to select and retain contractor(s) to assist in development of the RA Work Plan for Phase 1 Processing Equipment Installation and to install the sediment processing equipment and complete any remaining site work construction.

Bid Solicitation, Contractor Selection, and Issuance of Notice(s) of Award

GE shall solicit bids for the Phase 1 processing equipment installation and remaining site work based on the Phase 1 Final Design Report. The bidding and contractor selection process for this aspect of facility construction will be completed in conjunction with the bidding and contractor selection process for Phase 1 dredging and facility operations, described below in Section 2.3.1, and shall follow the same schedule set forth in Section 2.3.1. This process will culminate in the issuance of a Notice of Award to the contractor(s) selected to perform the Phase 1 processing equipment installation and remaining site work. The Notice of Award will authorize the contractor(s) to assist GE in developing planning documents, including the RA Work Plan for Phase 1 Processing Equipment Installation.

Issuance of Notice(s) to Proceed

Following issuance of the Notice of Award to the selected contractor(s) for processing equipment installation and remaining site work, GE will enter into contract(s) with the successful contractor(s). Within 60 days after issuance of the Notice of Award to the selected contractor(s), GE shall issue a Notice to Proceed to the selected contractor(s). The Notice to Proceed will authorize the contractor(s) to order equipment and begin installation of processing equipment and remaining site work construction.

2.2.2 RA Work Plan for Phase 1 Processing Equipment Installation

Within 30 days after GE issues its Notice of Award to the contractor(s) for Phase 1 processing equipment installation and remaining site work, GE shall submit to EPA for review and approval an RA Work Plan for Phase 1 Processing Equipment Installation (note that the term “and Remaining Site Work” has been removed from the title of this RA Work Plan, for ease of future reference). In the event that GE issues Notices of Award for Phase 1 processing equipment installation and remaining site work on different dates, the 30-day period shall begin on the date of the last such Notice of Award. The RA Work Plan for Phase 1 Processing Equipment

Installation shall cover the component(s) of the Phase 1 Final Design Report pertaining to the procurement and installation of sediment processing and water treatment equipment, as well as any remaining site work to complete the sediment processing/transfer facility, and it shall be consistent with the Critical Phase 1 Design Elements and this SOW.

The RA Work Plan for Phase 1 Processing Equipment Installation shall address the work necessary for the construction of necessary structures, the procurement and installation of the sediment processing/transfer and water treatment equipment, and ancillary and support equipment needed to

implement Phase 1, as well as any remaining site work. The RA Work Plan for Phase 1 Processing Equipment Installation shall describe the construction activities to be conducted to install the sediment processing and water treatment equipment and to complete any remaining site work at the Phase 1 processing facility, monitoring requirements applicable to processing equipment installation and remaining site work construction, equipment staging, compliance monitoring, and a construction schedule. The construction schedule shall describe the sequencing and reasonable durations for construction elements and account for seasonal limitations for construction in the Upper Hudson Work Area (e.g., frost conditions which could compromise construction quality such as building/equipment foundations, waterfront dredging, seasonal high water events, etc.). This processing equipment installation and remaining site work schedule will be integrated with the construction schedule for the site work (described above).

The RA Work Plan for Phase 1 Processing Equipment Installation also shall include a worker HASP and a CQAP that addresses the items required pursuant to Section 2.3.2.2.1 of this SOW that are relevant to this work. The RA Work Plan for Phase 1 Processing Equipment Installation may incorporate by reference those elements listed above which were provided in the Phase 1 Final Design Report.

2.2.3 Construction of Phase 1 Facility Equipment

2.2.3.1 Pre-Construction Conference

Within 15 days of receiving EPA's approval of the RA Work Plan for Phase 1 Processing Equipment Installation, and GE's issuance of all Notices to Proceed to Phase 1 processing equipment installation and remaining site work site work contractor(s), GE shall conduct a Pre-Construction Conference attended by EPA, the State, and other persons authorized by EPA (including contractors) to discuss the processing equipment procurement and installation and any remaining site work at the sediment processing/transfer facility. At this Pre-Construction Conference, GE shall address the same items listed in Section 2.1.3.1 above. GE shall transmit a written summary of the conference to EPA and the State within 7 days after the conference.

2.2.3.2 Construction Activities

GE shall initiate processing equipment installation and remaining site work at the Phase 1 sediment processing/transfer facility(ies) in accordance with the schedule in the RA Work Plan for Phase 1 Processing Equipment Installation, as approved by EPA. GE shall complete that work in accordance with the approved RA Work Plan for Phase 1 Processing Equipment Installation and the schedule therein (as described in Section 2.2.2 and as approved by EPA), subject to extensions for delays attributable to force majeure, as provided in Section XVIII of the Consent Decree, or for EPA-approved changes in the scope of and/or means and methods for this work. Record drawings for permanent facilities shall be submitted to EPA after completion of processing equipment installation and remaining site work, in accordance with the schedule provided in the RA Work Plan for Phase 1 Processing Equipment Installation.

2.3 Phase 1 Dredging and Facility Operations

The Phase 1 dredging and facility operations shall consist of activities to procure dredging equipment and perform the dredging, backfilling/capping, habitat reconstruction/replacement, dredged material transport, sediment processing, and rail loading. The dredging and facility operations shall be defined in the Phase 1 Final Design Report along with an estimated duration for the performance of such work, to be used by GE in soliciting bids for the work. EPA will review and approve the estimated schedule for completion of this work. This section of the SOW includes a description of contracting activities, a description of the development of the RA Work Plan for Phase 1 Dredging and Facility Operations and other plans that will apply to the dredging and facility operations, and a summary of Phase 1 dredging and facility operations.

2.3.1 Contracting for Phase 1 Dredging and Facility Operations

GE shall complete the contracting activities described in this section to select and retain contractor(s) to assist in development of the RA Work Plan for Phase 1 Dredging and Facility Operations and to implement dredging and facility operations.

Bid Solicitation, Contractor Selection, and Issuance of Notice(s) of Award

GE shall solicit bids for the Phase 1 dredging and facility operations based on the Phase 1 Final Design Report. The bidding and contractor selection process for this aspect of Phase 1 will be completed in conjunction with the bidding and contractor selection process for processing equipment installation and remaining site work (described above in Section 2.2.1). Adequate time shall be provided for pre-qualified bidders to prepare a proposal for GE evaluation. For this component of Phase 1, as well as the Phase 1 processing equipment installation and remaining site work, GE expects that contractors may submit bids with an alternate design from that specified in the Phase 1 Final Design Report. If GE decides to proceed with such alternate design, and if that alternate design is determined to represent a significant modification to the Phase 1 Final Design, then as soon as GE believes that it may want to recommend an alternate design to EPA, GE shall notify EPA of such alternate design and begin consulting with EPA with regard to such alternate design. GE shall submit the alternate design to EPA for review and approval within 75 days from submittal of the Phase 1 Final Design Report.

GE's proposal of an alternate design will include information that allows EPA to evaluate the extent to which such alternate design provides a demonstrable improvement over the approved Phase 1 Final Design, and the impacts the implementation of such alternate design would have on the dredging schedule relative to what the dredging schedule would have been under the approved Phase 1 Final Design. Following the aforementioned consultation between EPA and GE, EPA will notify GE as to whether the company may proceed with implementation of such alternate design.

Following receipt of bids, GE will review and evaluate the bids, select a contractor(s) and issue a Notice of Award to the selected contractor(s). However, GE will not issue a Notice of Award to a contractor until EPA has approved the Phase 1 Final Design Report (or the alternate design, if EPA has agreed that GE may proceed with the alternate design), GE has had sufficient time to review any design changes and

solicit bid revisions, if necessary, based on the EPA-approved Final Design Report, and the Consent Decree has been entered.

Specifically, GE shall issue a Notice of Award to the selected contractor(s) within the latest of the following: 1) 120 days after GE's submission of the Phase 1 Final Design Report; 2) if bid revisions are not necessary, 15 days after EPA approval of the Phase 1 Final Design Report (or the alternate design, if EPA has agreed that GE may proceed with the alternate design); 3) if bid revisions are necessary, 45 days after EPA approval of the Phase 1 Final Design Report (or the alternate design, if EPA has agreed that GE may proceed with the alternate design), provided that no significant changes to the design are required; or 4) 10 days after entry of the Consent Decree by the court. If significant changes to the design are required, additional time for bid revisions may be necessary, and GE shall propose a revised schedule to EPA. Further, if GE does not receive any responsive bids, GE shall develop a plan to address that situation, shall discuss it with EPA, and if necessary shall propose a revised schedule for obtaining bids and issuing a Notice of Award. The Notice of Award will authorize the contractor(s) to assist GE in developing planning documents, including the RA Work Plan for Phase 1 Dredging and Facility Operations.

Issuance of Notice to Proceed

Following issuance of the Notice of Award to the selected dredging and operations contractor(s), GE will enter into contract(s) with the selected contractor(s). Within 60 days after issuance of the Notice of Award to the selected contractor(s), GE shall issue a Notice to Proceed to the selected contractor(s). The Notice to Proceed will authorize the contractor(s) to order equipment and begin mobilization for dredging and operations.

2.3.2 Work Plans for Phase 1 Dredging and Facility Operations

2.3.2.1 Phase 1 RAM QAPP

Within 30 days after (a) submittal of the Phase 1 Final Design Report or (b) entry of the Consent Decree (whichever is later), GE shall submit a Phase 1 Remedial Action Monitoring Quality Assurance Project Plan (Phase 1 RAM QAPP) for GE's monitoring and sampling activities to be conducted during Phase 1 of the Remedial Action. The Phase 1 RAM QAPP shall address sample collection, analysis, and data handling activities for samples to be collected during Phase 1 of the RA. The Phase 1 RAM QAPP shall be consistent with the Phase 1 Remedial Action Monitoring Scope (RA Monitoring Scope). All sampling, analysis, and data assessment and monitoring shall be performed in accordance with the Consent Decree (including this SOW and the Phase 1 RA Monitoring Scope) and the EPA-approved Phase 1 RAM QAPP. All testing methods and procedures shall be documented and referenced to established methods or standards or alternate test methods approved by EPA for use in conducting the work. The objective of the Phase 1 RAM QAPP is to provide EPA and all parties involved with the collection and use of field data with a common written understanding of Phase 1 field sampling work. The Phase 1 RAM QAPP shall be written so a field sampling team unfamiliar with the Upper Hudson Work Area would be able to gather the samples and field information required.

The Phase 1 RAM QAPP shall include, but not be limited to, the following items:

- Data Quality Objectives (DQOs). The Phase 1 RAM QAPP shall include a detailed description of the DQOs developed in accordance with EPA QA/G-4 Guidance for the DQO Process and EPA Requirements for QA Project Plans (QA/R-5) (EPA/240/B-01/003, March 2001) (including why the data are being collected, how they will be used, what they will be compared to, and how they will be interpreted) to confirm that all data collected are relevant to the decision-making process, as well as to confirm that appropriate sampling and analytical techniques are selected.
- Sampling Location and Frequency. The Phase 1 RAM QAPP shall identify each matrix to be sampled and the constituents to be analyzed. Tables shall be used to clearly identify the number of samples, the type of sample (water, soil, etc.), and the number of quality control samples (duplicates, trip blanks, equipment blanks, etc.). Figures and/or maps shall be included to show the locations of existing or proposed sample points.
- Sample Designation. A sample numbering system shall be established for the project. The sample designation shall include the sample or location number, the sample round, the sample matrix (e.g., surface soil, ground water, soil boring), and the site name.
- Sampling Equipment and Procedures. Sampling procedures shall be clearly written in the Phase 1 RAM QAPP. Step-by-step instructions shall be included for each type of sampling to enable the field team to gather data that will meet the DQOs. The Phase 1 RAM QAPP shall identify the equipment to be used for sample collection activities, the material composition of such equipment (e.g., Teflon, stainless steel), and decontamination procedures.
- Sampling Handling and Analysis. A table shall be included that identifies sample preservation methods, types of sampling jars, shipping requirements, and holding times. Examples of paperwork such as traffic reports, chain-of-custody forms, packing slips, and sample tags filled out for each sample as well as instructions for filling out the paperwork shall be included. Field documentation methods including field notebooks and photographs shall be described.
- Testing and Analysis. The Phase 1 RAM QAPP shall include a detailed description of analysis and testing to be performed, including methods used.
- Schedule. The Phase 1 RAM QAPP shall include a schedule for performing specific tasks.
- Project Management. The Phase 1 RAM QAPP shall describe the project management, including the following items:
 - Title and approval sheet;
 - Table of contents and document control format;
 - Distribution list;
 - Project/task organization and schedule;
 - Problem definition/background;

- Project/task description;
- Quality objectives and criteria for measurement data;
- Special training requirements/certification; and
- Documentation and records (including electronic database and shapefiles).
- Measurement/Data Acquisition. The Phase 1 RAM QAPP shall include a description of the measurement and data acquisition procedures, including the following:
 - Sampling process design and rationale;
 - Sampling method requirements and SOPs;
 - Sample handling and custody requirements;
 - Archival procedures for sediment and fish samples and sample extracts;
 - Analytical method requirements and SOPs;
 - Quality control requirements for sampling and analysis;
 - Instrument/equipment testing, inspection, and maintenance requirements;
 - Instrument calibration and frequency;
 - Inspection/acceptance requirements for supplies and consumables;
 - Data acquisition requirements (non-direct measurements); and
- Data management.
- Assessment/Oversight. The Phase 1 RAM QAPP will describe the following:
 - Assessments and response actions; and -
 - Reports to management.
- Data Validation and Usability. The Phase 1 RAM QAPP will describe the following:
 - Data review, validation, and verification requirements (e.g., acceptance criteria) and procedures;
 - Validation and verification methods/procedures; and
 - Reconciliation with data quality objectives/usability assessment.

- Additional Quality Assurance/Quality Control (QA/QC) Procedures. To provide QA and maintain quality control with respect to all samples to be collected, GE shall comply with the requirements set forth in Paragraph 29 of the Consent Decree, as well as the following:
 - All laboratories utilized for analyses of samples must perform all analyses in accordance with the Phase 1 RA Monitoring Scope and the approved Phase 1 RAM QAPP.
 - All analytical data shall be verified, or verified and validated upon receipt from the laboratory, as required by the Phase 1 RA Monitoring Scope and the Phase 1 RAM QAPP.
 - GE shall submit to EPA, in accordance with the reporting requirements of the Phase 1 RA Monitoring Scope, a data validation report or reports containing the information required by the EPA-approved Phase 1 RAM QAPP.
 - Unless indicated otherwise in the EPA-approved Phase 1 RAM QAPP, GE shall require deliverables equivalent to Contract Laboratory Program (CLP) data packages from the laboratory(ies) for analytical data. EPA reserves the right to perform an independent data validation, data validation check, or qualification check on generated data.
 - GE shall insert a provision in its contract(s) with the laboratory(ies) utilized for analyses of samples, which will require the laboratory(ies) to grant access to EPA and its authorized representatives for the purpose of ensuring the accuracy of laboratory results related to the Site.
 - Upon request, GE shall provide EPA and/or the Federal Trustees for Natural Resources (Federal Trustees), or their authorized representatives, with duplicate and/or split samples of any material sampled, including calibration standard materials, in connection with the implementation of the Consent Decree, provided that there is a sufficient volume of material to split, or will allow EPA and the Federal Trustees, or their authorized representatives, to take such duplicate or split samples. EPA and the Federal Trustees shall provide copies of the results of the analysis of such samples to GE after such results have undergone QA/QC analysis. GE shall also allow the State of New York to collect split or duplicate samples of any such material, provided that the State agrees to provide GE with copies of the results of the analysis of such samples after those results have undergone QA/QC analysis.
 - Documentation shall be provided to EPA in an electronic database and shapefiles.

2.3.2.2 RA Work Plan for Phase 1 Dredging and Facility Operations

Within 60 days after GE issues its Notice of Award to the contractor(s) for Phase 1 dredging and facility operations, GE shall submit to EPA for review and approval an RA Work Plan for Phase 1 Dredging and Facility Operations. In the event that GE issues Notices of Award for Phase 1 dredging and facility operations on different dates, the 60-day period shall begin on the date of the last such Notice of Award. The RA Work Plan for Phase 1 Dredging and Facility Operations shall include those

components in the Phase 1 Final Design Report that pertain to Phase 1 dredging and sediment processing operations and shall include a detailed description of major remediation and construction activities, monitoring events, construction QA procedures, equipment staging, compliance monitoring, and construction schedule. The RA Work Plan for Phase 1 Dredging and Facility Operations shall also be consistent with the Critical Phase 1 Design Elements and this SOW. The construction schedule shall describe the sequencing and reasonable durations for construction elements and account for seasonal limitations for construction in the Upper Hudson Work Area (e.g., ice formation, safe working conditions such as water temperatures and flow conditions, etc.).

The RA Work Plan for Phase 1 Dredging and Facility Operations shall include the deliverables listed below in Sections 2.3.2.2.1 through 2.3.2.2.6 (unless GE has previously submitted a deliverable that is listed below, and such deliverable has been approved by EPA). The RA Work Plan for Phase 1 Dredging and Facility Operations shall contain an index specifying where each deliverable requirement is addressed (e.g., submitted as part of the RA Work Plan for Phase 1 Dredging and Facility Operations or in a final design document).

2.3.2.2.1 Phase 1 Dredging Construction Quality Control/Quality Assurance Plan

GE shall be responsible for QA/QC and shall establish and maintain an effective quality control system. The Phase 1 Dredging Construction Quality Control/Quality Assurance Plan (Phase 1 Dredging CQAP) shall identify personnel, procedures, controls, instructions, tests, records, and forms to be used for construction QA/QC purposes. The Phase 1 Dredging CQAP referenced herein shall describe the site-specific components of the performance methods and quality assurance program which shall confirm that Phase 1 meets the applicable design criteria, plans, and specifications. In addition, the Phase 2 Dredging CQAP (and any revisions and/or addenda thereto) submitted by GE pursuant to Section 3.1.1.1 below, shall include all site-specific components of the performance methods and quality assurance program to confirm that Phase 2 of the RA meets the Phase 2 design criteria, plans, and specifications. The Phase 1 Dredging CQAP shall contain the following elements to cover dredging and facility operations, both on-site and off-site, including work by contractors, subcontractors, designers of record, consultants, architect/engineers, fabricators, suppliers, and purchasing agents:

- Responsibilities and Authorities. The Phase 1 Dredging CQAP shall include the responsibilities and authorities of all organizations and key personnel involved in the construction of the RA.
- Qualifications of the Construction Quality Assurance (CQA) Officer. The Phase 1 Dredging CQAP shall establish the minimum training and experience of the CQA Officer and supporting inspection personnel, and shall include the name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a Phase 1 CQAP function.
- QC Organization. The Phase 1 Dredging CQAP shall describe the QC organization, including a chart showing lines of authority.
- Submittals. The Phase 1 Dredging CQAP shall include procedures for scheduling, reviewing, certifying, and managing submittals, including those of contractors, subcontractors, off-site

fabricators, suppliers, designers of record, consultants, architect engineers, and purchasing agents, dredged material transporters and disposal facilities.

- Performance Monitoring Requirements. The Phase 1 Dredging CQAP shall present the performance monitoring requirements to demonstrate that debris removal, sediment dredging and dewatering operations, transportation of dredged material, backfilling and cap placement and restoration techniques are implemented in accordance with the EPA-approved Phase 1 Final Design Report and the RA Work Plan for Phase 1 Dredging and Facility Operations.
- Inspection and Verification Activities. The Phase 1 Dredging CQAP shall establish the observations and tests that will be required to monitor the construction and/or installation of the components of the RA. The plan shall include the scope and frequency of each type of inspection to be conducted. Inspections shall be required to measure compliance with the EPA-approved Phase 1 Final Design Report and the RA Work Plan for Phase 1 Dredging and Facility Operations.
- Construction Deficiencies. The Phase 1 Dredging CQAP shall include procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall include methods to verify that identified deficiencies have been corrected.
- Documentation. Reporting requirements for Phase 1 CQAP activities shall be described in detail in the Phase 1 Dredging CQAP. This shall include such items as daily summary reports, inspection data sheets, problem identification and corrective measures reports, design acceptance reports, electronic submittals of database and shapefiles, and final documentation/storage. A description of the provisions for final storage of all records consistent with the requirements of the Consent Decree shall be included.
- EPA Approvals. The Phase 1 Dredging CQAP shall include procedures for obtaining EPA approvals and certifications of completion for individual CUs, as described below in Section 5.2.
- Field Changes. The Phase 1 Dredging CQAP shall describe procedures for processing design changes and securing EPA review and approval of such changes.
- Final Reporting. The Phase 1 Dredging CQAP shall identify all final Phase 1 CQAP documentation to be submitted to EPA in the Phase 1 Construction Completion Report or other deliverables and submissions.

2.3.2.2.2 Phase 1 Performance Standards Compliance Plan

The Phase 1 Performance Standards Compliance Plan shall set forth the actions that GE will implement to address the Engineering Performance Standards (EPS), the Quality of Life Performance Standards (QoLPS), the Substantive Requirements Applicable to Releases of Constituents not Subject to Performance Standards, the Substantive Requirements of State Pollutant Discharge Elimination System Permit for Potential Discharges to Champlain Canal (land cut above Lock 7), and the Substantive Requirements of State Pollutant Discharge Elimination System Permit for Potential Discharge to the

Hudson River. The Phase 1 Performance Standards Compliance Plan shall address, but not be limited to, monitoring activities (including monitoring contingencies), sampling and analysis, special studies, engineering contingencies, complaint procedures, mitigation measures, notification steps and reporting requirements. The Phase 1 Performance Standards Compliance Plan shall be consistent with the Phase 1 Performance Standards Compliance Plan Scope (PSCP Scope). If any items that are required to be included in the Phase 1 Performance Standards Compliance Plan are set forth in another EPA-approved document, such requirements may be incorporated by reference into the Phase 1 Performance Standards Compliance Plan.

2.3.2.2.3 Phase 1 Property Access Plan

The Phase 1 Property Access Plan shall identify the procedures that GE will follow (or has followed) to obtain access agreements, easements, or title, as the case may be, with respect to all properties to which access is needed for purposes of implementing dredging and facility operations, if such access has not already been obtained for Phase 1 Facility Site Work Construction or Phase 1 Processing Equipment Installation. The Phase 1 Property Access Plan (if needed) shall also describe any steps taken by GE before its submission of the Phase 1 Property Access Plan to obtain such access, easements, or title.

2.3.2.2.4 Phase 1 Transportation and Disposal Plan

The Phase 1 Transportation and Disposal Plan shall include the following information:

- Characteristics of waste/water/material to be transported;
- Destinations;
- Transportation modes;
- Routes;
- On-site traffic control and loading procedures;
- Recordkeeping;
- Health and safety; and
- Contingency plans for spills that occur in the Work Area.

2.3.2.2.5 Phase 1 Facility Operation and Maintenance Plan

The Phase 1 Facility Operation and Maintenance Plan shall address the operation and maintenance of the Phase 1 sediment processing/transfer facility, water treatment facilities, and ancillary and support facilities. The Phase 1 Facility Operation and Maintenance Plan shall include:

- A written description of the major elements of work involved at and around the project's facilities with emphasis on dredging and dredged sediment transport (hydraulic or scow)

operations, sediment dewatering and transfer operations, water treatment facilities, and environmental controls and protection measures.

- Operation and maintenance procedures required for critical machinery and equipment according to manufacturers' recommendations. This item shall include major daily, weekly, and monthly maintenance activities that will require shut-down of the equipment and a schedule for inspections that are required for specific equipment and machines.
- An operation schedule to include primary labor types (e.g., dredging, processing, monitoring, etc.), number of shifts and hours of operation, and estimated number of persons required on a daily basis.
- An Equipment Decontamination Plan for machinery and trucks that come into contact with PCBs or any other potential constituents of concern at the site and are leaving the site or otherwise need to be decontaminated (e.g., equipment leaving an exclusion zone).
- A Contingency Plan, along with the names and contacts of manufacturers and maintenance professionals for critical equipment related to Phase 1 activities. Emergency contact numbers for local, state and federal government organizations shall be cross-referenced to the appropriate RA document (i.e., Remedial Action Community Health and Safety Plan [RA CHASP], Remedial Action Health and Safety Plan [RA HASP]).
- Procedures for shutting down operations at the sediment processing facility for the off season (i.e., after processing of dredged sediments is completed for the season). Procedures for winterization of equipment, security and site access, demobilization of labor and equipment, and management of stormwater shall be included.

2.3.2.2.6 Updates to Phase 1 RA CHASP

To the extent necessary, GE shall update the Phase 1 RA CHASP submitted pursuant to the Remedial Design Administrative Order on Consent (RD AOC) (Index No. CERCLA-02-2003-2027). The RA CHASP update shall be consistent with the Phase 1 RA CHASP Scope. Upon approval by EPA, such update shall be incorporated into the Phase 1 RA CHASP.

2.3.2.3 RA HASP

To the extent necessary, GE shall update the RA HASP submitted pursuant to the RD AOC. Such update shall be submitted concurrently with the RA Work Plan for Phase 1 Dredging and Facility Operations. EPA will review GE's update to the RA HASP and may request modifications thereto. Such update shall be incorporated into the RA HASP upon its finalization by GE. GE shall provide EPA with a copy of the final update to the RA HASP.

2.3.3 Phase 1 Dredging Activities

GE shall implement Phase 1 of the RA in accordance with the Consent Decree, including, but not limited to, Paragraph 12.a of the Consent Decree.

2.3.3.1 Pre-Dredging Construction Conference

At least 15 days prior to the start of Phase 1 dredging and facility operations, GE shall conduct a Pre-Dredging Construction Conference with EPA, the State, and other persons authorized by EPA (including contractors). The agenda for the Pre-Dredging Construction Conference will include the following topics:

- Construction management, including but not limited to communications protocols and standing meetings.
- The procedure to be used by GE, its contractors, and other entities for documenting and reporting inspection data and compliance with specifications and plans, including procedures and timelines for processing design changes and securing EPA review and approval of such changes as necessary.
- The procedure to be used for distributing and storing documents and reports.
- Work area security.
- Safety programs and requirements.
- Quality control and quality assurance procedures (including process for modifications to the Phase 1 CQAP to verify that site-specific considerations are addressed).
- Site tour to confirm access, laydown space, and other issues (including an inspection of each facility, including temporary and ancillary facilities).

GE shall transmit a written summary of the conference to EPA and the State within 7 days after the conference.

2.3.3.2 Implementation of Phase 1 Dredging Activities

GE shall initiate Phase 1 dredging activities in accordance with the construction schedule included in the approved RA Work Plan for Phase 1 Dredging and Facility Operations (as described in Section 2.3.2.2) or upon completion of Phase 1 processing facility construction (including all site work and processing equipment installation), whichever is later, subject to extensions for delays attributable to force majeure, as provided in Section XVIII of the Consent Decree.

3. Phase 2 of Remedial Action

3.1 Work Plans and Associated Submittals for Phase 2

GE shall submit to EPA any necessary revisions and/or addenda to the approved Phase 2 design documents by February 15 of each year in which Phase 2 dredging will be performed (or by such alternate date as is agreed to by EPA and GE).

GE's Phase 2 design submittals shall be consistent with the Critical Phase 2 Design Elements (Phase 2 CDE) attached hereto as Attachment A, as such CDE may be modified through the adaptive management process set forth in Section 7, below.

For the Work to be performed in each construction year of Phase 2, GE shall submit by February 15 of each such year (or by such alternate date as is agreed to by GE and EPA), for EPA review and approval, an RA Work Plan for Phase 2 Dredging and Facility Operations (or, for any year after the first year of Phase 2, any necessary revisions and/or addenda to a previously approved RA Work Plan for Phase 2 Dredging and Facility Operations), along with any necessary revisions and/or addenda to the applicable approved design documents for Phase 2 (if such revisions and/or addenda have not already been submitted to EPA pursuant to the schedule referenced in the preceding paragraph).

3.1.1 RA Work Plans and Revisions to Design Documents for Phase 2 Dredging

Any revisions and/or addenda to the applicable approved design documents submitted by GE pursuant to this section shall, as appropriate, address, but not be limited to, the following project components:

- Construction specifications;
- Sediment processing facility design and operation;
- Dredging design;
- Resuspension control;
- Dredged material transport to processing facility;
- Sediment and water processing;
- Transportation for disposal or beneficial use;
- Disposal;
- Backfilling/capping; and

- Habitat replacement and reconstruction.

If experience during Phase 2 demonstrates that modifications to the previously approved Phase 2 design documents are necessary to achieve and maintain the Phase 2 Engineering and/or Quality of Life Performance Standards established by EPA, then if directed by EPA, GE shall submit, either during or between dredging seasons, as required by EPA, revisions and/or addenda to those previously approved Phase 2 design documents, subject to any applicable limitations on such changes that are set forth in Section 7 of this SOW.

The RA Work Plans for Phase 2 Dredging and Facility Operations (or RA Work Plan revisions or addenda) submitted by GE pursuant to this section shall comply with the respective requirements of Section 2.3.2.2 of this SOW, except that such work plans, revisions and/or addenda shall address the appropriate construction season of Phase 2 instead of Phase 1. Thus, such RA Work Plans or RA Work Plan revisions and/or addenda shall include a Phase 2 Dredging CQAP, a Phase 2 Performance Standards Compliance Plan (which shall be consistent with the Phase 2 Performance Standards Compliance Plan Scope which is attached hereto as Attachment C, as such PSCP Scope may be modified through the adaptive management process set forth in Section 7, below), a Phase 2 Property Access Plan, a Phase 2 Transportation and Disposal Plan, a Phase 2 Facility Operations and Maintenance Plan, and a Phase 2 CHASP (which shall be consistent with the Phase 2 Community Health and Safety Plan Scope which is attached as Attachment D, as such CHASP Scope may be modified through the adaptive management process set forth in Section 7, below) – all of which may include updates to the comparable Phase 1 plans. In addition, a Phase 2 RAM QAPP (or revisions or addenda to a previously approved RAM QAPP) shall be submitted, as necessary, along with each RA Work Plan for Phase 2 Dredging and Facility Operations. Such Phase 2 RAM QAPP (or revisions and/or addenda) shall contain the information specified in Section 2.3.2.1 above, and shall be consistent with the Phase 2 RAM Scope which is attached as Attachment B, as such RAM Scope may be modified through the adaptive management process. These submittals may include any previously proposed changes to the Phase 2 RD or Phase 2 of the RA, unless EPA previously disapproved those proposed changes.

3.1.2 RA Work Plan for Phase 2 Facility Construction (if necessary)

If Phase 2 will include the use of a sediment processing/transfer facility(ies) other than the facility used for Phase 1, GE shall also submit, at the same time as the documents described in Section 3.1.1, an RA Work Plan for Phase 2 Facility Construction. The RA Work Plan for Phase 2 Facility Construction shall comply with the requirements of Sections 2.1.2 and 2.2.2 above, except that such work plan shall address the sediment processing/transfer facility(ies) to be constructed for Phase 2 instead of the facility constructed for Phase 1. The RA Work Plan for Phase 2 Facility Construction shall state the year of Phase 2 in which such Phase 2 facility(ies) shall begin to be used, and include a schedule for construction of such facility(ies). The schedule shall allow sufficient time for construction and startup prior to the facility being required for use.

3.1.3 Update to RA HASP

To the extent necessary (and in accordance with Section 2.3.2.3 of this SOW), by February 15 of each year of Phase 2 of the RA (or by such alternate date as is agreed to by GE and EPA), GE shall update the RA HASP.

3.1.4 Phase 2 Facility Demobilization and Restoration Plan

In addition to the above plans, for any year of Phase 2 in which demobilization and/or restoration activities are scheduled for any sediment processing/transfer facility(ies) or other ancillary and/or support facilities, a Phase 2 Facility Demobilization and Restoration Plan shall be included with the RA Work Plan for such year. That Phase 2 Facility Demobilization and Restoration Plan shall address demobilization and restoration of such sediment processing/transfer facility(ies) and ancillary and support facilities and shall include:

- A detailed description of the steps to be taken for removal or demobilization (i.e., decontamination of equipment, cleanup of all contamination resulting from remedial operations, disposal of residual wastes, sampling of soils at the processing site(s), etc.) and a plan for restoring any properties on which project operations were conducted (e.g., removal of roads, railroad sidings, fences, signs, sumps, re-grading each property for drainage, topsoil and seed as applicable, disconnection of power, habitat restoration, etc.). The restoration of such properties shall be consistent with Paragraph 36.e of the Consent Decree. The Phase 2 Facility Demobilization and Restoration Plan shall include a decontamination plan specific to these activities.
- A preliminary schedule for removal, demobilization and site restoration indicating the duration of those activities.
- A Contingency Plan for obstacles or difficulties encountered during demobilization and site restoration.

3.2 Phase 2 Dredging Activities

GE shall implement Phase 2 of the RA in accordance with the Consent Decree, including, but not limited to, Paragraph 12.b of the Consent Decree.

3.2.1 Annual Construction Conference for Phase 2

At least 15 days prior to the start of dredging in each year of Phase 2, GE shall conduct a Construction Conference with EPA, the State, and other persons authorized by EPA (including contractors). The agenda for each Annual Conference will include the following topics:

- Construction management, including but not limited to communications protocols and standing meetings.

- The procedure to be used by GE, its contractors, and other entities for documenting and reporting inspection data, and compliance with specifications and plans, including procedures and timelines for processing design changes and securing EPA review and approval of such changes as necessary.
- The procedure to be used for distributing and storing documents and reports.
- Work area security.
- Safety programs and requirements.
- Quality control and quality assurance procedures (including process for modifications to the Phase 1 CQAP to verify that site-specific considerations are addressed).
- Site tour to confirm access, laydown space, and other issues (including an inspection of each facility, including temporary and ancillary facilities).

GE shall transmit a written summary of the conference to EPA and the State within 7 days after the conference.

3.2.2 Implementation of Phase 2 Dredging Activities

GE shall initiate each year of Phase 2 dredging activities in accordance with the construction schedule included in the approved RA Work Plan(s) for Phase 2 Dredging and Facility Operations (or in any approved revisions and/or addenda to a previously approved RA Work Plan for Phase 1 Dredging and Facility Operations), subject to extensions for delays attributable to force majeure, as provided in Section XVIII of the Consent Decree. GE shall complete and/or satisfy the following additional requirements for Phase 2 of the RA:

- Conduct activities required by the Consent Decree to seek property access agreements/acquisitions/ easements for ancillary facilities/support functions necessary to initiate each year of Phase 2 dredging in accordance with the schedule set forth in the RA Work Plan for Phase 2 Dredging and Facility Operations; and
- Complete construction of sufficient sediment processing/transfer facility capacity and any necessary ancillary or temporary facilities in sufficient time for each year of Phase 2 dredging activities to begin in accordance with the schedule set forth in the EPA-approved RA Work Plan for Phase 2 Dredging and Facility Operations. Record drawings shall be submitted to EPA after completion of facility construction activities, in accordance with the schedule provided in the RA Work Plan for Phase 2 Dredging and Facility Operations.

4. Operation, Maintenance, and Monitoring

4.1 Operation, Maintenance, and Monitoring Plan for Phase 1 Caps and Habitat Replacement/Reconstruction

Within 90 days after completion of the Phase 1 in-water work that occurs in the first construction season of remedial dredging, GE shall submit to EPA, for review and approval, an Operation, Maintenance, and Monitoring Plan for Phase 1 Caps and Habitat Replacement/Reconstruction (Phase 1 Cap/Habitat OM&M Plan). This plan shall specify the activities that GE shall perform for operation, maintenance, and monitoring (OM&M) of the caps installed in the areas dredged in Phase 1 and for OM&M of any habitat replacement/reconstruction measures installed in those areas in that construction season. This plan shall be consistent with Sections 3 and 4 of the Operation, Maintenance, and Monitoring Scope (OM&M Scope) that was attached to the Consent Decree as entered by the Court on November 2, 2006. The Phase 1 Cap/Habitat OM&M Plan shall also include the information specified in Section 2.3.2.1 of this SOW (relating to the RAM QAPP) where relevant to the scope of monitoring described in the Phase 1 Cap/Habitat OM&M Plan.

In addition, GE shall submit to EPA, for review and approval, within 90 days after completion of any additional habitat replacement/reconstruction measures that are installed in the Phase 1 dredge areas in 2011, an addendum to the Phase 1 Cap/Habitat OM&M Plan, which shall set forth the provisions for OM&M of those habitat replacement/reconstruction measures. This addendum shall meet the same requirements applicable to the Phase 1 Cap/Habitat OM&M Plan, as set forth above.

4.2 Operation, Maintenance, and Monitoring Plan for Phase 2 Caps and Habitat Replacement/Reconstruction

GE shall submit to EPA, for review and approval, on an annual basis during Phase 2, a Phase 2 Cap/Habitat OM&M Plan or an addendum to a previously approved Phase 2 Cap/Habitat OM&M Plan. This plan (or addendum) shall be submitted to EPA within 90 days after completion of field activities in each year of Phase 2. Each such plan (or addendum) shall specify the activities that GE shall perform for OM&M of the caps and habitat replacement/reconstruction measures installed in that construction season, and shall be consistent with Sections 3 and 4 of the Phase 2 OM&M Scope (which is attached to this SOW as Attachment E), as such Scope may be amended through the adaptive management process set forth in Section 7, below. Each Phase 2 Cap/Habitat OM&M Plan (or addendum) shall also include the information specified in Section 2.3.2.1 of this SOW (relating to the RAM QAPP) where relevant to the scope of monitoring described in the Phase 2 Cap/Habitat OM&M Plan. The annual Phase 2 Cap/Habitat OM&M Plan (or addendum) for a given year may incorporate by reference provisions from a previously approved Phase 2 Cap/Habitat OM&M Plan.

4.3 Water, Fish and Sediment Operation, Maintenance, and Monitoring Plan

By March 15 of the last year of Phase 2, GE shall submit to EPA, for review and approval, an Operation, Maintenance, and Monitoring Plan for Water, Fish and Sediment Monitoring. The Water,

Fish and Sediment OM&M Plan shall specify the water column, fish, and sediment monitoring programs that GE shall conduct under the Consent Decree, commencing upon completion of all remedial activities under the Consent Decree (excluding OM&M), to assess PCB levels in those media. This plan shall be consistent with Section 2 of the Phase 2 OM&M Scope (which is attached to this SOW as Attachment E), as such Scope may be modified through the adaptive management process. The Water, Fish and Sediment OM&M Plan shall also include the information specified in Section 2.3.2.1 of this SOW (relating to the RAM QAPP) where relevant to the scope of monitoring described in the Water, Fish and Sediment OM&M Plan.

In addition, GE shall update the RA HASP to address OM&M activities, and shall submit it to EPA simultaneously with the Water, Fish and Sediment OM&M Plan.

4.4 Implementation of Operation, Maintenance, and Monitoring Activities

GE shall commence and conduct implementation of OM&M for caps, habitat replacement/reconstruction, and water and fish monitoring in accordance with the schedules set forth in the approved OM&M Plans, as such plans may be modified in accordance with the attached OM&M Scope (Attachment E hereto) and through the adaptive management program set forth in Section 7 of this SOW.

5. Progress Meetings, Completion Process, and Associated Reporting

5.1 RA Progress Meetings

Throughout Phase 1 and Phase 2 of the RA, GE shall participate in regularly scheduled RA progress meetings with EPA, the State of New York, and their authorized representatives. The meetings shall be held weekly during construction of the sediment processing/transfer facility(ies) and during remedial dredging unless a less frequent schedule is agreed to by EPA. At a minimum, GE shall address the following at the RA progress meetings:

- General progress of construction with respect to RA schedule;
- Problems encountered (including, but not limited to, problems with compliance with one or more Performance Standards) and associated action items;
- Pending design, RA Work Plan, personnel or schedule changes requiring EPA review and approval;
- Results of any sediment sampling to assess post-dredging PCB levels and associated decisions and action items; and
- Issues related to community and worker health and safety.

5.2 Certification Unit-Specific Completion Approvals/Certifications

This section sets forth the approvals and certifications that will be prepared following completion of particular activities in each Certification Unit (CU). (A CU is described in Section 3.2 of the Phase 2 RA Monitoring Scope, which is Attachment B hereto.) This section 5.2 applies to Phase 2 of the RA. Section 5.2 of the September 2005 SOW shall continue to apply to CUs that were dredged in Phase 1 and for which EPA has not yet approved Final CU Construction Completion Certifications.

5.2.1 CU Dredging Completion Approvals

Following the completion of dredging and collection and analysis of post-dredging sediment samples within a given CU, GE shall review the information on the horizontal and vertical limits of removal and the results of the most recent round of post-dredging sediment sampling within the CU to determine whether the dredging in that CU has been completed in accordance with the applicable Final Design requirements and the requirements of the Phase 2 PSCP Scope (Attachment C hereto, Section 3), the Phase 2 Performance Standards Compliance Plan, and the Phase 2 CQAP, as such documents may be modified through the adaptive management process outlined in Section 7 of this SOW. Once GE has determined that dredging in the CU has been completed in accordance with those requirements, GE shall also determine whether and to what extent the CU will be backfilled or capped in accordance with the applicable Final Design requirements and the requirements of the Phase 2 PSCP Scope and the Phase 2 Performance Standards Compliance Plan. Upon making these determinations, GE shall complete the

form entitled “CU Dredging Completion Approval,” which is included in Attachment F hereto, and prepare the attachments referenced therein. GE shall then present that completed form to the EPA field representative for review and concurrence. If the EPA field representative agrees that dredging has been completed in accordance with the applicable Final Design requirements and the requirements of the Phase 2 PSCP Scope (Attachment C hereto, Section 3) and the Phase 2 Performance Standards Compliance Plan, as such documents may be modified through the adaptive management process outlined in Section 7 of this SOW, and that the specified plan for backfilling and/or capping conforms to the requirements in those documents, the EPA field representative will promptly indicate concurrence by initialing and signing the form where indicated. Once the CU Dredging Completion Approval form has been signed on behalf of both GE and EPA, no additional dredging activities will be required in that CU (subject to the pre- and post-certification reservations in Paragraphs 100 and 101 of the Consent Decree and the general reservations of rights in Paragraph 104 of the Consent Decree) and GE may proceed with the backfilling and/or capping activities as indicated on the form.

5.2.2 CU Backfill/Engineered Cap Completion Approvals

Following completion of backfilling and/or capping in a given CU, GE shall review the information on the installed backfill and/or cap to determine whether the backfill and/or cap has been installed in accordance with the applicable Final Design requirements for backfill and/or capping, as well as the applicable requirements of the Phase 2 PSCP Scope (Attachment C hereto, Section 3), the Phase 2 Performance Standards Compliance Plan, and the Phase 2 CQAP, as such documents may be modified through the adaptive management process outlined in Section 7 of this SOW. GE shall also prepare a record drawing of the installed backfill and/or cap. Once GE has determined that all backfilling and capping in the CU has been completed in accordance with the above requirements, GE shall complete the Phase 2 CU Backfill/Engineered Cap Completion Approval form, which is included in Attachment F hereto, and attach the record drawing thereto. GE shall then present that completed form to the EPA field representative for review and concurrence. If the EPA field representative agrees that all backfilling and capping in the CU has been completed in accordance with the above requirements, the EPA field representative will promptly indicate concurrence by initialing and signing the form where indicated. Once the Phase 2 CU Backfill/Engineered Cap Completion Approval form has been signed on behalf of both GE and EPA, no additional backfill placement or capping will be required in that CU (subject to the pre- and post-certification reservations in Paragraphs 100 and 101 of the Consent Decree and the general reservations of rights in Paragraph 104 of the Consent Decree).

5.2.3 Final CU Construction Completion Certifications

Following completion of all remedial construction activities in a given CU, including, but not limited to, the initial installation of active habitat replacement/reconstruction measures (if required under the Final Design), but excluding OM&M and adaptive management activities, GE shall review the habitat replacement/reconstruction measures installed (if any) to verify that they have been installed in accordance with the applicable Final Design requirements, with any modifications consistent with the Phase 1 or Phase 2 Final Design and with Section 2.7 of the Critical Phase 1 Design Elements or Section 2.7 of the attached Critical Phase 2 Design Elements (Attachment A hereto), as the case may be. GE shall also prepare record drawings (hard copy and electronic) of the location and type of habitat

replacement/reconstruction within that CU and of the final bathymetry and profile. Upon determining that all remedial construction activities in the CU (excluding OM&M and adaptive management) have been completed, GE shall complete the applicable Final CU Construction Completion Certification form, and attach the record drawings thereto. The Final CU Construction Completion Certification form set forth at Attachment F to the September 2005 Statement of Work shall be used for certification units that were dredged in Phase 1. The Final CU Construction Completion Certification form at Attachment F to this SOW shall be used for CU's dredged in Phase 2. GE shall present that completed form to the EPA field representative for review and concurrence. If the EPA field representative agrees that all remedial construction activities in the CU (excluding OM&M and adaptive management) have been completed in accordance with the applicable requirements, the EPA field representative will promptly indicate concurrence by initialing and signing the form where indicated. Once the applicable Final CU Construction Completion Certification form has been signed on behalf of both GE and EPA, no additional remedial activities will be required in that CU (excluding OM&M and adaptive management measures), subject to the pre- and post-certification reservations in Paragraphs 100 and 101 of the Consent Decree and the general reservations of rights in Paragraph 104 of the Consent Decree.

5.2.4 CU Completion Reports

Following the signing by both GE and EPA of the Final Phase 1 or Phase 2 CU Construction Completion Certification form for a given CU, GE shall prepare and submit to EPA a Phase 1 or a Phase 2 CU Completion Report, as the case may be. Each such Phase 1 report shall contain the information specified for such reports in Section 3.6 of the 2005 RA Monitoring Scope. Each such Phase 2 report shall contain the information specified for such reports in Section 3.6 of the RA Monitoring Scope that is Attachment B hereto.

5.3 Phase 1 Data Compilation and Evaluation Reports

GE shall submit to EPA a Phase 1 Data Compilation Report and Phase 1 Evaluation Report pursuant to Paragraph 13 of the Consent Decree.

5.4 Phase 1 Construction Completion Inspection(s) and Report(s)

Pursuant to Paragraph 56 of the Consent Decree, within 7 days after GE makes the preliminary determination that all "Phase 1 Field Activities" (as that term is defined in Paragraph 56.a of the Consent Decree) have been completed in accordance with the Consent Decree, GE shall schedule with EPA and the State a Pre-Final Phase 1 Construction Completion Inspection.

Within 15 days after completion of any activities that EPA requires GE to perform, pursuant to Paragraph 56 of the Consent Decree, in order to complete the Phase 1 Field Activities, GE shall schedule with EPA and the State a Final Phase 1 Construction Completion Inspection in accordance with Paragraph 56 of the Consent Decree.

GE shall submit a Phase 1 Construction Report (or Reports) in accordance with Paragraph 56 of the Consent Decree.

5.5 Phase 2 Annual Progress Reports

GE shall submit annual progress reports within 30 days of completion of work activities for each year of Phase 2 of the RA. The annual progress reports shall include the information required for the annual production progress reports as specified in Section 4.3 of the Phase 2 PSCP Scope (Attachment C hereto). The annual progress reports also shall include record drawings signed and stamped by a professional engineer registered in the State of New York, and other supporting documentation to demonstrate that the Phase 2 CQAP was followed. The report shall contain the following statement, signed by GE's Project Coordinator or a responsible corporate official of GE:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained in or accompanying this submission is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

5.6 Remedial Action Completion Inspection(s) and Report(s)

GE shall comply with the following requirements:

Pursuant to Paragraph 57 of the Consent Decree, within 15 days after GE makes the preliminary determination that the RA is complete, GE shall schedule with EPA and the State an RA Completion Pre-Final Inspection.

Within 15 days after completion of any activities that EPA requires GE to perform, pursuant to Paragraph 57 of the Consent Decree, to complete the RA, GE shall schedule with EPA and the State an RA Completion Final Inspection in accordance with Paragraph 57 of the Consent Decree.

GE shall submit a Remedial Action Report (or Reports) in accordance with Paragraph 57 of the Consent Decree.

5.7 Work Completion Inspection(s) and Report(s)

Pursuant to Paragraph 58 of the Consent Decree, within 30 days after GE concludes that the work, including OM&M, has been fully performed, GE shall schedule with EPA and the State a Pre-Certification Inspection of the Work.

Within 15 days after completion of any activities that EPA requires GE to perform, pursuant to Paragraph 58 of the Consent Decree, to complete the Work, GE shall schedule with EPA and the State a Final Inspection of the Work in accordance with Paragraph 58 of the Consent Decree.

GE shall submit a Work Completion Report (or Reports) in accordance with Paragraph 58 of the Consent Decree.

6. Schedule for Remedial Action Deliverables/Tasks

The schedule for submission of major deliverables to EPA and completion of key tasks is set forth in Table 1. The tasks and submissions listed in Table 1 and their respective due dates, as well as additional requirements, are described more fully in prior sections of this SOW. To the extent that there is any apparent conflict between the requirements or the due dates listed in Table 1 and those that are listed in prior sections, the requirements and the due dates set forth in the prior sections shall control. In computing any period of time under this SOW, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business on the next working day. In addition, all due dates specified in prior sections of this SOW and in Table 1 are subject to modification if GE proposes an alternate date in the preceding deliverable and EPA approves that alternate date.

7. Adaptive Management

7.1 Introduction

The Peer Review Panel said in its September 10, 2010 Final Peer Review Report that “[t]he challenges encountered during Phase 1, and the adaptations employed by EPA and GE to address those challenges, demonstrate the need for flexibility during Phase 2.” The Panel accordingly recommended that an adaptive management approach be employed in Phase 2 that includes “the annual reassessment of the EPS based on each prior year’s data,” and “routine reassessment of dredging operations, BMPs, and dredging performance with regard to the EPS.” The Panel recommended that adaptive management be applied not only to the EPS themselves but also to such project aspects as the dredge tolerance, the design dredge elevation, the dredge prisms, the annual productivity targets, and a variety of other aspects of the dredging design and operations. (See Peer Review Report at pp. iii, 6-7, 23-24, 32, 51-52, 79 and 84.)

Consistent with the Panel’s recommendations, this SOW includes an adaptive management approach that goes beyond the adaptive management process relating to habitat replacement/reconstruction measures (discussed in the Phase 2 OM&M Scope) and applies to the Phase 2 Engineering Performance Standards and Phase 2 Quality of Life Performance Standards, the various provisions of this SOW, including the attachments hereto, and other operational and design details. As the Peer Review Panel recommended, in a project of the complexity and duration of the Hudson River PCBs Site cleanup, EPA needs to be able to adapt to new information and make or require changes through adaptive management in order to achieve the expected benefits of the project.

Thus, over the course of Phase 2 and post-dredging OM&M, EPA will apply an adaptive management approach to the review and, as appropriate, modification of the Engineering Performance Standards, the Quality of Life Performance Standards, the Phase 2 remedial design, and monitoring, operational and other planning documents. The overall objective of the adaptive management approach will be to maintain or improve the efficiency of the project, mitigate short-term impacts as needed, and help ensure that the ROD remedy is successfully completed, that the work remains consistent with the ROD, and that the targets and objectives set forth in the ROD are met.

The issues and project elements that will be encompassed by the adaptive management program will include the EPS and QoLPS themselves as well as, among other things:

- determination or estimation of the depth of contamination
- development or revision of the dredge prisms
- dredge tolerance
- capping and backfilling
- controls and best management practices for limiting resuspension, air emissions and noise
- monitoring locations and methods

- operations at the processing facility
- OM&M activities.

7.2 Typical Information for Consideration under the Adaptive Management Process

Among the sources of information that will be considered in conducting adaptive management are:

- Bathymetric data
- Residuals data
- Comparisons of dredge prism design versus dredge cut lines and residuals data
- Dredging approaches employed
- Near-field and far-field water column data
- Data regarding potential sediment redistribution (*e.g.*, sediment trap studies, EPA/ERT surface sediment sampling)
- Air quality, light levels (at night), and noise data
- Nature and timing of sheen observations
- Nature and timing of resuspension controls and BMPs deployed
- River flows and site weather
- Vessel traffic and dredging activity reports
- Dredging locations and native sediment types
- Near-field buoy locations and sampling frequency
- River flow-specific time of travel data
- Areas and types of backfill and caps installed
- Percentage of dredged area capped after dredging, and the reasons therefor
- Validated hydrodynamic, sediment transport, PCB fate and transport, and bioaccumulation models of the Upper Hudson River
- Nature and focus of OM&M programs
- Design implementation activities related to conducting habitat replacement and reconstruction

- Fish Monitoring Program data
- Shoreline stabilization data

7.3 Implementation

The adaptive management implementation will involve an iterative review process by which successful design elements and/or RA activities and processes can be identified early in the construction process and built upon, while those that are unsuccessful (or less successful) can be identified and then refined, modified or eliminated, as appropriate, with the expectation of completing the ROD remedy and achieving RA objectives more efficiently.

In formulating questions and making decisions under the adaptive management program, the issues to be considered include, but are not limited to:

- Did the remedy process and construction techniques deliver results that were satisfactory to meet the project goals?
- Are process changes necessary to meet established project goals and could they be optimized?
- Was the technical implementation of the project components efficient and effective?
- Under what conditions were the techniques inefficient or ineffective, if any?
- Could the process benefit by changes?
- Could improvements be made to improve overall activity efficiency?
- Are the monitoring and measurement protocols reliable and sufficient?
- Could improvements be made to the techniques?
- Can the frequency or intensity of a support or construction technique or an associated sampling approach be optimized to meet project and adaptive management goals?
- Are there any overall lessons learned that could be applied to future operations?

Under the general adaptive management approach, there are two general management alternatives if RA objectives or performance criteria are not being met:

1. Continue data gathering and evaluate results for future evaluation and action; and
2. Initiate adaptive responses to correct deficiencies or implement improvements in performance to meet RA goals and objectives.

These alternatives may be used individually or in combination. Decisions regarding the need for adaptive responses and the choice of particular responses (including associated rationale) will be

documented as evaluations are completed and responses are implemented. Adaptive responses for each dredge year shall be summarized annually.

In general, there are two classes of adaptive responses —“field” and “additional”—as further described below:

Field Response Actions

Field response actions would be conducted to correct obvious deficiencies. These are actions that would be undertaken, as appropriate, at the time the condition is observed or within a period of several days to weeks or months following the observation. These response actions would be implemented on a near-term basis, after consultation with the review team. Documentation of actions taken and associated results will be provided as appropriate to support future annual Phase 2 RAWPs.

Additional or Modified Response Actions

Additional or modified response actions are those that are appropriately performed at some point after the condition is observed, typically in a timeframe that allows them to be implemented or applied in the following year. Such response actions will be documented annually in RAWPs.

In deciding whether an adaptive response should be made during a Phase 2 field season, EPA will consider whether the adaptive response is reasonably available from a practicability standpoint, recognizing that substitutions during a field season for major equipment approved in the Phase 2 Final Design Report or being used in Phase 2 may be impractical. (If necessary, more significant changes in equipment, operations, or processes may be required for subsequent seasons, provided that such changes are consistent with, and would not materially expand, the scope of the remedy selected in the ROD, and provided further that such changes do not require the use of equipment or technology that is not reasonably available.) What is considered “reasonably available” in a given situation, for the purposes of this paragraph, may depend on the circumstances and will need to take account of what is necessary to meet the objectives of the adaptive management approach as stated in Section 7.1, above, and in order for the project to be done in a way that does not jeopardize public health or safety. During Phase 2, EPA will consider any information that GE may submit regarding impacts to schedule and project costs when the Agency requires changes to (or reviews GE’s proposals, if any, for modification of) the EPA-approved Phase 2 Final Design Report based on field conditions or experience. This paragraph shall not be construed to affect or limit any rights EPA has under Paragraph 20 of the Consent Decree.

EPA and GE expect to work collaboratively on adaptively managing the project, and EPA will attempt to reach consensus with GE regarding any changes to be made in the future, through adaptive management, to the Phase 2 EPS, the Phase 2 QoLPS, or other project aspects. Where consensus is not achieved, EPA may require that such changes be made, provided that the changes are consistent with, and would not materially expand, the scope of the remedy selected in the ROD, and subject to: (i) the limitations herein; (ii) the limitations set forth in section 3.4 of the Phase 2 EPS with regard to changes that can be required by EPA to ensure compliance with the Percentage Capping Limits; and (iii) GE’s

right to invoke the dispute resolution procedures set forth in Section XIX, Paragraph 83 (record review), of the Consent Decree with regard to EPA's required changes (except that (A) GE may not invoke the dispute resolution procedures to challenge EPA's right to make changes to the Phase 2 EPS or the Phase 2 QoLPS; (B) if EPA, in its discretion, decides to raise one or both of the Percentage Capping Limits, GE may not invoke the dispute resolution procedures regarding that decision; and (C) GE may not invoke the dispute resolution procedures to dispute EPA's calculation of the *pro rata* reduction to make to the maximum limit on capping pursuant to footnote 10 of the Phase 2 EPS in the event that EPA, in its discretion, chooses to raise the backfilling threshold from an average concentration of 1 mg/kg Tri+ PCBs to 3.0 mg/kg Tri+ PCBs).

If EPA determines that GE needs to make a change or addition to a design document, work plan or other document in order to implement an adaptive response, EPA will so notify GE and direct GE to prepare and submit to EPA for review and approval such revisions and/or addenda to the relevant document within 30 days or such other period as may be specified by EPA. GE may invoke the dispute resolution procedures set forth in Section XIX of the Consent Decree with respect to EPA's determination of the need for changes or additions to a design document, work plan or other document to implement an adaptive response. Disputes regarding any adaptive management changes that are required or made by EPA pursuant to this SOW, including but not limited to any changes that EPA makes to the EPS or the QoLPS, and any changes or additions to a design document, work plan or other document to implement an adaptive response, shall be resolved pursuant to Paragraph 83 of the Consent Decree.

Sections 7.3.1 and 7.3.2, below, contain provisions that are specific to the adaptive management of the Phase 2 EPS and Phase 2 QoLPS and the actions that are needed in order to comply with those performance standards.

7.3.1 Engineering Performance Standards

7.3.1.1 Residuals Performance Standard

Sections 2.2.1 and 3.4 of the Phase 2 EPS set forth limits on the capping that may be allowed during Phase 2 of the remedy, and requirements regarding the tracking of those limits and adaptive responses to be taken in the event of exceedance of the limits.

Except as otherwise provided in footnote 10 of the Phase 2 EPS, EPA may use adaptive management to increase, but not decrease, the Percentage Capping Limits, the capping Evaluation Levels, and/or the capping Control Levels set forth in Sections 2.2.1 and 3.4 and Tables 3.4-2 and 3.4-3 of the Phase 2 EPS.

7.3.1.2 Resuspension Performance Standard

Sections 2 and 4 of the Phase 2 EPS set forth the Phase 2 Resuspension Standard and the types of Resuspension Standard exceedances that will trigger EPA's right to require GE to take certain categories of actions. In addition, Section 2.2.1 of the Phase 2 CDE sets forth a series of Best Management Practices to be applied to control resuspension. BMPs to control resuspension shall also be identified in the Phase 2 Final Design Report.

At the end of Year 1 of Phase 2 and following each succeeding dredging season, EPA will evaluate the components of the Resuspension Standard and decide whether to retain them unchanged or – if the available information indicates that this is needed in order to ensure that the goals of the ROD are met and/or that resuspension is constrained as appropriate – modify, eliminate or replace one or more of those components.

7.3.1.3 Productivity Performance Standard

Adaptive management shall be utilized by GE throughout the Phase 2 dredging program in an effort to improve productivity to the extent practicable, provided that any adaptive management adjustments that are made by GE to increase productivity shall not cause the dredging operations to exceed the Resuspension Standard, be contrary to any of the other performance standards, or come at the expense of the long-term goals of the project. In addition, GE shall not, without EPA approval, make any changes through adaptive management to improve productivity where such changes would be inconsistent with this Statement of Work (including the attachments hereto), the EPA-approved Phase 2 final design, or other EPA-approved work plans.

If the total volume of sediment dredged or processed in a dredging season, or shipped off-site by the end of the calendar year, is less than 350,000 cubic yards, then in the annual productivity summary report submitted in accordance with Section 5.3 of the Phase 2 EPS and Section 4.3 of the Phase 2 PSCP Scope, GE shall recommend, for EPA review and approval, adjustments to dredging, processing, sediment unloading, off-site shipment, or other project operations, as the case may be, in order to achieve the aforementioned targets in the following dredging season.

If EPA develops an areal productivity target, GE’s annual dredging reports shall compare the area dredged in the prior dredging season against the total areal target for that season, and shall recommend, for EPA review and approval, adjustments to the dredging operations to achieve the areal target for the following year if the area dredged in the prior dredging season was below the areal target.

7.3.2 Quality of Life Performance Standards

7.3.2.1 PCB Air Emissions

Adaptive management shall be utilized by GE throughout the Phase 2 dredging program in an effort to control PCB air emissions. Adaptive management decisions with respect to such emissions will be made by GE under circumstances where PCB air emissions are below the applicable Concern Levels.

In the event that monitoring (or modeling, if used to assess compliance at the receptor, with approval of the USEPA) shows an exceedance of the applicable Concern Level, but not the quality of life performance standard for PCBs in ambient air, GE shall adaptively manage the dredging operation to reduce PCB air emissions to below the applicable Concern Level. The adaptive management steps to be taken in such a case shall be at GE’s discretion and may include one or more of the BMPs set forth in Section 2.2.2 of the Phase 2 CDE.

In the event that monitoring (or modeling, if used to assess compliance at the receptor, with approval of the USEPA) shows an exceedance of the QoLPS for PCBs in ambient air for three consecutive days,

GE shall recommend, for EPA approval, adaptive management measures to reduce the PCB air emissions to below the standard. The adaptive management measures to be recommended by GE shall include one or more of the BMPs set forth at Section 2.2.2 of the Phase 2 CDE. EPA may either approve GE's recommended adaptive management measures, or direct GE to make adjustments other than those recommended in GE's report and which are different from the BMPs set forth at Section 2.2.2 of the Phase 2 CDE, subject to GE's right to invoke dispute resolution pursuant to Section XIX, Paragraph 83 (record review), of the Consent Decree with regard to EPA's required changes. If there is an exceedance of the QoLPS for PCBs in ambient air for three consecutive days, EPA also may require a slowdown or relocation of dredging operations, although, in general, a slowdown or relocation would only be required after all other applicable BMPs are considered and, as appropriate, implemented.

7.3.2.2 Noise

Adaptive management shall be utilized by GE throughout the dredging program in an effort to control noise. Adaptive management decisions will be made by GE under circumstances where neither the noise Control Level nor a noise standard are exceeded. Exceedances of the Control and Concern Levels for noise shall be addressed in accordance with Section 2.3 of the Phase 2 RA CHASP Scope.

In the event that monitoring (or modeling, if used to assess compliance at the receptor, with approval of the USEPA) shows an exceedance of the Control Level for noise, but not a noise standard, GE shall adaptively manage the relevant operations to reduce noise to below the Control Level. The adaptive management steps to be taken in such a case shall be at GE's discretion and may include one or more of the mitigation measures set forth in the Phase 2 RA CHASP.

In the event that monitoring (or modeling, if used to assess compliance at the receptor, with approval of the USEPA) shows an exceedance of a noise standard, GE shall recommend, for EPA approval, adaptive management measures to reduce the noise level to below the Concern Level. The adaptive management measures to be recommended by GE shall include one or more of the mitigation measures set forth in the Phase 2 RA CHASP. EPA may either approve GE's recommended adaptive management measures, or direct GE to make adjustments other than those recommended in GE's report and that are different from the mitigation measures set forth in the Phase 2 RA CHASP, subject to GE's right to invoke dispute resolution pursuant to Section XIX, Paragraph 83 (record review), of the Consent Decree with regard to EPA's required changes.

7.3.2.3 Odor

GE shall utilize adaptive management throughout the Phase 2 dredging program in order to comply with the QoLPS for odor. Exceedances of the odor standard shall be addressed in accordance with Section 2.2 of the Phase 2 RA CHASP Scope.

7.3.2.4 Lighting

GE shall utilize adaptive management throughout the Phase 2 dredging program in order to comply with the QoLPS for lighting. Exceedances of the lighting standard shall be addressed in accordance with Section 2.4 of the Phase 2 RA CHASP Scope.

7.3.2.5 Navigation

GE shall utilize adaptive management throughout the Phase 2 dredging program in order to comply with the QoLPS for navigation. Deviations from the navigation standard shall be addressed in accordance with Section 2.5 of the Phase 2 RA CHASP Scope.

Table 1

Summary Schedule for Statement of Work

#	Activity	Deadline
1	Issue Notice of Award to the Phase 1 Facility Site Work Construction contractor(s)	<p>The latest of:</p> <ul style="list-style-type: none"> • 15 days after EPA approval of the Phase 1 Final Design Report (or that portion of the Final Design that has been developed for Facility Site Work), if bid revisions (based on EPA-approved Phase 1 Final Design) are not necessary; • 30 days after EPA approval of the Phase 1 Final Design Report (or that portion of the Final Design that has been developed for Facility Site Work), if bid revisions (based on EPA-approved Phase 1 Final Design) are necessary and no significant changes to the design are required; • 80 days after GE’s submission of the Phase 1 Final Design Report; or • 10 days after entry of the Consent Decree. <p>If GE does not receive any responsive bids, GE shall develop a plan to address that situation, shall discuss it with EPA, and if necessary shall propose a revised schedule for obtaining bids and issuing a Notice of Award.</p>
2	Issue Notice to Proceed to the Phase 1 Facility Site Work Construction contractor(s)	30 days from Notice of Award to the Phase 1 Facility Site Work Construction contractor(s).
3	Submit Alternative Designs for Phase 1 Dredging and/or Phase 1 Processing Equipment Installation, Facility Operations, and Remaining Site Work (if warranted based on input from potential contractors).	75 days from GE’s submittal of Phase 1 Final Design Report
4	Issue Notice of Award to the contractors(s) for Phase 1 Dredging and Phase 1 Processing Equipment Installation, Facility Operations, and	<p>The latest of:</p> <ul style="list-style-type: none"> • 15 days after EPA approval of the Phase 1 Final

#	Activity	Deadline
	Remaining Site Work .	<p>Design Report, if bid revisions (based on EPA-approved Phase 1 Final Design) are not necessary;</p> <ul style="list-style-type: none"> • 45 days after EPA approval of the Phase 1 Final Design Report, if bid revisions (based on EPA-approved Phase 1 Final Design) are necessary and no significant changes to the design are required. • 120 days after GE’s submission of the Phase 1 Final Design Report; • 15 days after EPA approval of alternative designs recommended by GE (if necessary); or • 10 days after entry of the Consent Decree. <p>If GE does not receive any responsive bids, GE shall develop a plan to address that situation, shall discuss it with EPA, and if necessary shall propose a revised schedule for obtaining bids and issuing a Notice of Award.</p>
5	Issue Notice to Proceed to the contractor(s) for Phase 1 Dredging and Phase 1 Processing Equipment Installation, Facility Operations, and Remaining Site Work	60 days from Notice of Award to the contractor(s) for Phase 1 Dredging and Phase 1 Processing Equipment Installation, Facility Operations, and Remaining Site Work.
Work Plans for Phase 1		
6	Submit RA Work Plan for Phase 1 Facility Site Work Construction	Within 30 days after Notice of Award to the Phase 1 Facility Site Work Construction contractor(s).
7	Submit Phase 1 Remedial Action Monitoring QAPP	Within 30 days after the later of: (a) GE’s submission of the Phase 1 Final Design Report; or (b) entry of the Consent Decree
8	Submit RA Work Plan for Phase 1 Processing Equipment Installation and Remaining Site Work	Within 30 days after Notice of Award to the contractor(s) for Phase 1 Dredging and Phase 1 Processing Equipment Installation, Facility Operations, and Remaining Site Work.
9	Submit Remedial Action Work Plan for Phase 1 Dredging and Facility Operations	Within 60 days after Notice of Award to the contractor(s) for Phase 1 Dredging and Phase 1 Processing Equipment Installation, Facility Operations, and Remaining Site Work.
10	Submit update to Remedial Action Worker	Concurrently with submission of RA Work Plan for Phase 1

#	Activity	Deadline
	Health and Safety Plan	Dredging and Facility Operations.
11	Submit Phase 1 Facility Demobilization and Restoration Plan (if GE notifies EPA that it elects not to perform Phase 2 under the Consent Decree)	Within 30 days after GE notification regarding performance of Phase 2, in the event that GE elects not to perform Phase 2.
Phase 1 Construction and Dredging		
12	Hold Pre-Construction Conference for Phase 1 Facility Site Work Construction	Within 15 days of (a) receiving EPA's approval of the RA Work Plan for Phase 1 Facility Site Work Construction or (b) issuing Notice to Proceed to the Phase 1 Facility Site Work Construction contractor(s), whichever is later.
13	Initiate Phase 1 Facility Site Work Construction In accordance with the approved RA Work Plan for Phase 1 Facility	Site Work Construction and after issuing Notice to Proceed to the Phase 1 Facility Site Work Construction contractor(s).
14	Complete Phase 1 Facility Site Work Construction	In accordance with the approved RA Work Plan for Phase 1 Facility
15	Hold Pre-Construction Conference for Phase 1 Processing Equipment Installation and Remaining Site Work	Within 15 days of (a) EPA approval of the RA Work Plan for Phase 1 Processing Equipment Installation and Remaining Site Work or (b) issuing Notice to Proceed to the contractor(s) for Phase 1 Processing Equipment Installation and Remaining Site Work, whichever is later.
16	Initiate Phase 1 Processing Equipment Installation and Remaining Site Work	In accordance with the approved RA Work Plan for Phase 1 Processing Equipment Installation and Remaining Site Work and after issuing Notice to Proceed to the contractor(s) for Phase 1 Processing Equipment Installation and Remaining Site Work.
17	Complete Phase 1 Processing Equipment Installation and Remaining Site Work	In accordance with the approved RA Work Plan for Phase 1 Processing Equipment Installation and Remaining Site Work.
18	Hold Pre-Dredging Construction Conference for Phase 1 Dredging Activities	At least 15 days prior to the start of Phase 1 dredging and after

#	Activity	Deadline
		issuing Notice to Proceed to the Phase 1 Dredging and Facility Operations contractor(s).
19	Initiate Phase 1 Dredging Activities	In accordance with the construction schedule included in the approved RA Work Plan for Phase 1 Dredging and Facility Operations and upon completion of Phase 1 Facility Construction (including all Site Work and Processing Equipment Installation), whichever is later.
RA Work Plans and Contracting for Phase 2		
20	Submit RA Work Plan for Phase 2 Dredging and Facility Operations and Revisions and/or Addenda to the applicable Approved Design Documents, as needed, for Phase 2.	February 15 of each year in which Phase 2 dredging will be performed (or such other time as agreed to by EPA and Settling Defendant).
21	Submit update to RA Worker Health and Safety Plan to address Phase 2	Concurrently with submission of RA Work Plan for Phase 2 Dredging and Facility Operations.
Phase 2 Construction and Dredging		
22	Hold Annual Construction Conference for Phase 2	At least 15 days prior to the start of dredging for each year of Phase 2.
23	Initiate Phase 2 Dredging Activities	In accordance with the construction schedule included in the approved RA Work Plan for Phase 2 Dredging that is applicable to that construction year.
24	Complete any property access agreements/acquisitions/ easements for ancillary facilities/support functions necessary to initiate each year of Phase 2 dredging	In accordance with the schedule set forth in the RA Work Plan for Phase 2 Facility Construction.
25	Complete construction of sufficient sediment processing/transfer facility capacity and any necessary ancillary or “temporary” facilities for Phase 2	In accordance with the schedule set forth in the RA Work Plan for Phase 2 Facility Construction.

#	Activity	Deadline
Operation, Maintenance and Monitoring (OM&M)		
26	Submit OM&M Plan for Phase 1 Caps and Habitat Replacement/Reconstruction	Within 90 days after completion of Phase 1 in-water work that occurs in the first construction season (with an addendum to be submitted within 90 days after completion of any additional habitat replacement/reconstruction measures installed in Phase 1 areas in the following season).
27	Submit OM&M Plan for Phase 2 Caps and Habitat Replacement/Reconstruction	Annually, within 90 days after completion of each year's field activities.
28	Submit Water, Fish and Sediment OM&M Plan	By March 15 of the final year of Phase 2.
29	Initiate OM&M Activities	In accordance with the schedules in the approved OM&M Plans.
Progress Meetings, Inspections, Completion Process, and Reports		
30	Hold RA Progress Meetings	Weekly during remedial construction unless a less frequent schedule is agreed to by EPA and Settling Defendant.
31	Obtain Certification Unit (CU) Dredging Completion Approvals	After completion of dredging in each CU.
32	Obtain CU Backfill/Engineered Cap Completion Approvals	After completion of backfilling/capping in each CU
33	Obtain Final CU Construction Completion Certifications	After completion of all remedial construction activities (including habitat replacement/reconstruction installations) in each CU.
34	Submit CU Completion Reports	Following completion of all remedial activities (excluding OM&M) in each CU and obtaining of Final CU Construction Completion Certification for that CU.
35	Submit Phase 1 Data Compilation Report	Pursuant to Paragraph 13 of the Consent Decree
36	Submit GE Phase 1 Evaluation Report	Pursuant to Paragraph 13 of the Consent Decree.
37	Schedule Pre-Final Phase 1 Construction Completion Inspection	Within 7 days after GE makes the preliminary determination that all Phase 1 field activities have been completed.

#	Activity	Deadline
38	Schedule Final Phase 1 Construction Completion Inspection (if necessary)	Within 15 days after completion of any activities that EPA requires GE to perform, pursuant to Paragraph 56 of the Consent Decree, in order to complete the Phase 1 field activities.
39	Submit Phase 1 Construction Report	In accordance with Paragraph 56 of the Consent Decree
40	Submit Phase 2 Annual Progress Reports	Within 30 days of completion of work activities for each year of Phase 2 of the Remedial Action.
41	Schedule RA Completion Pre-Final Inspection	Within 15 days after GE makes the preliminary determination that the Remedial Action is complete.
42	Schedule RA Completion Final Inspection (if necessary)	Within 15 days after completion of any activities that EPA requires GE to perform, pursuant to Paragraph 57 of the Consent Decree, in order to complete the Remedial Action.
43	Submit Remedial Action Completion Report	In accordance with Paragraph 57 of the Consent Decree.
44	Schedule Pre-Certification Inspection of the Work	Within 30 days after GE concludes that the Work, including OM&M, has been fully performed.
45	Schedule Final Inspection of the Work (if necessary)	Within 15 days after completion of any activities that EPA requires GE to perform, pursuant to Paragraph 58 of the Consent Decree, in order to complete the Work.
46	Submit Work Completion Report	In accordance with Paragraph 58 of the Consent Decree.

Notes:

1. Acronyms:
 - a. EPA = United States Environmental Protection Agency
 - b. OM&M = Operation, Maintenance, and Monitoring
 - c. QAPP = Quality Assurance Project Plan
 - d. RA = Remedial Action
2. All days are calendar days as defined in Consent Decree.
3. Assumes EPA approval includes any public review and comment that the EPA deems necessary.
4. For purposes of this schedule, EPA approval of a deliverable means approval of the entire deliverable or, to the extent provided in Paragraph 47.b of the Consent Decree, approval of a portion of the deliverable. The Phase 1 Final Design Report will be segmented for approval of the Facility Site Work separate from Phase 1 Dredging, Processing Equipment Installation, and Facility Operations.
5. All deadlines may be extended upon approval of EPA.
6. The Phase 1 Final Design will contain a preliminary schedule for the completion of the work described in Items 16 and 19, which will be used by GE in soliciting bids for the work.