Appendix D

REMEDIAL DESIGN/REMEDIAL ACTION

STATEMENT OF WORK

OPERABLE UNIT 1

SAUGET AREA 2 SUPERFUND SITE

Sauget and Cahokia, St. Clair County, State of Illinois

EPA Region 5

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Purpose of the SOW. This Statement of Work (SOW) sets forth the procedures and requirements for implementing the Work.

1.2 Structure of the SOW

- Section 2 (Community Involvement) sets forth EPA's and Settling Defendants' (SDs') responsibilities for community involvement.
- Section 3 (Remedial Design) sets forth the process for developing the Remedial Design (RD), which includes the submission of specified primary deliverables.
- Section 4 (Remedial Action) sets forth requirements regarding the completion of the Remedial Action (RA), including primary deliverables related to completion of the RA.
- Section 5 (Reporting) sets forth SDs' reporting obligations.
- Section 6 (Deliverables) describes the content of the supporting deliverables and the general requirements regarding SDs' submission of, and EPA's review of, approval of, comment on, and/or modification of, the deliverables.
- Section 7 (Schedules) sets forth the schedule for submitting the primary deliverables, specifies the supporting deliverables that must accompany each primary deliverable, and sets forth the schedule of milestones regarding the completion of the RA.
- Section 8 (State Participation) addresses participation by the State of Illinois (State).
- Section 9 (References) provides a list of references, including URLs.

1.3 The scope of the remedy for the Sauget Area 2 Site includes the actions described in Section 1.4 of the Record of Decision (ROD), excluding Site P, which is governed by the Statement of Work in the entered consent decree in *United States v. Ameren Missouri*, Civil Action No. 19-231 (S.D. Ill. April 24, 2019). The selected remedy for OU1 of the Sauget Area 2 Site, in addition to the continued operation of the existing groundwater barrier wall and extraction system (described below), includes but is not limited to, the components listed below:

- For Site O: Alternative O2, which is a 35 IAC § 724 Compliant[1] Soil Cap Over Identified Waste Areas and Institutional and Access Controls;

[1] A 35 IAC § 724 compliant soil or crushed rock cap meets the performance standards of a RCRA Subtitle C cap, except with regard to the component requiring long-term minimization of migration of liquids. This component is not appropriate for the Sauget Area 2 Sites due to Site-specific conditions (*see* Section 2.10.2 of the Record of Decision).

- For Site Q North: Alternative QN2, which consists of 35 IAC § 724 Compliant Crushed Rock Cap over Dogleg Area, Vapor Intrusion Mitigation, and Institutional and Access Controls;

- For Site Q Central: Alternative QC3, which consists of In-Situ Soil Vapor Extraction (SVE) at Potentially Mobile Source Area (AT-Q32), 35 IAC § 724 Compliant Crushed Rock Cap Over Identified Waste Areas, Shoreline Erosion Protection, and Institutional and Access Controls;

- For Site Q South and Q South Ponds: Alternative QS3, which consists of Removal of Intact Drums at AT-Q35, 35 IAC § 724 Compliant Cap Over Identified Waste Areas, and Institutional and Access Controls;

- For Site R: Alternative R2, which consists of 35 IAC § 724 Compliant Soil Cap Over Entire Site and Institutional and Access Controls; and

- For Site S: Alternative S3, which consists of In-Situ SVE of Potentially Mobile Source Area, 35 IAC § 724 Compliant Soil Cap Over Entire Site, and Institutional and Access Controls.

The SDs shall implement the remedy selected in the ROD, which includes actions that address contaminated soils, sediments, surface water, and groundwater contamination source areas at the Sauget Area 2 Site, excluding Site P. In September of 2002, EPA issued a Unilateral Administrative Order (UAO) calling for the construction of a groundwater barrier wall and extraction system in Sauget Area 2 (referred to as the Groundwater Migration and Control System (GMCS), next to the Mississippi River as an early interim groundwater remedy for Sauget Area 2 OU2 to capture and treat area groundwater before it releases to the River.[2]

After initial start-up, the GMCS operated between December 1, 2004 and February 28, 2005 under the First Interim Operation Period (IOP # 1). During this IOP # 1, it was demonstrated that the original ROD performance standard of maintaining the groundwater elevations inside the barrier wall at an equal or lower elevation to the groundwater immediately outside of the barrier wall was not appropriate or achievable. Subsequent IOP # 2, IOP # 3, and IOP # 4 determined that the appropriate performance standard for the GMCS is to use the upgradient groundwater elevations to ensure that the GMCS pumps out the amount of groundwater that naturally flows into the U-shaped barrier wall. The revised

[2] In September 2002, EPA issued a CERLCA Section 106 unilateral administrative order requiring potentially responsible parties to install the Sauget Area 2 GMCS as an interim OU2 groundwater remedy for the Sauget Area 2 Site. This system is comprised of a 3,300 ft. long "U"-shaped, fully penetrating barrier wall located downgradient of Site R, Sauget Area 2, the former Clayton Chemical facility, Solutia's Krummrich plant, other facilities, and Sauget Area 1. The barrier wall extends from approximately three feet below ground surface down to the top of bedrock and includes three groundwater extraction wells on the upgradient side of the wall. The GMCS intercepts and captures an estimated 210 million gallons of contaminated groundwater a year, which is pumped to the American Bottoms Regional Water Treatment Facility (ABRTF) in Sauget. The groundwater is treated at the ABRTF and ultimately discharged to the Mississippi River pursuant to the terms and conditions of the ABRTF's National Discharge Pollutant Discharge Elimination System permit issued under the Clean Water Act.

performance standards for the operation of the GMCS are set forth in the February 24, 2010 Interim Operating Period # 4 report, which was approved by EPA on March 22, 2010. The revised GMCS operating performance standards specified in the IOP # 4 report approved by EPA pursuant to the September 2002 UAO are incorporated into this CD and SOW. SDs shall continue to implement the terms of September 2002 UAO, which continues in full force and effect. However, SDs may satisfy the reporting obligations of the September 2002 UAO through submission of the information required by the UAO as part of the monthly progress reports submitted under ¶ 5 of this SOW.

1.4 **Definitions**. The terms used in this SOW that are defined in CERCLA, in regulations promulgated under CERCLA, or in the Consent Decree (CD), have the meanings assigned to them in CERCLA, in such regulations, or in the CD, except that the term "Paragraph" or "¶" means a paragraph of the SOW, unless otherwise stated.

2. COMMUNITY INVOLVEMENT

2.1 Community Involvement Responsibilities

(a) EPA has the lead responsibility for developing and implementing community involvement activities at the Site. Previously, during the Remedial Investigation/Feasibility Study (RI/FS) phase, EPA developed a Community Involvement Plan (CIP) for the Site. Pursuant to 40 C.F.R. § 300.435(c), EPA shall review the existing CIP and determine whether it should be revised to describe further public involvement activities during the Work that are not already addressed or provided for in the existing CIP, including, if applicable, any Technical Assistance Grant (TAG), any use of the Technical Assistance Services for Communities (TASC) contract, and/or any Technical Assistance Plan (TAP).

(b) If requested by EPA, SDs shall support EPA's community involvement activities. This may include providing online access to initial submissions and updates of deliverables to (1) Community Advisory Groups, (2) Technical Assistance Grant recipients and their advisors, and (3) other entities to provide them with a reasonable opportunity for review and comment. EPA may describe in its CIP SDs' responsibilities for community involvement activities. All community involvement activities conducted by SDs at EPA's request are subject to EPA's oversight.

(c) **SDs' CI Coordinator**. If requested by EPA, SDs shall, within 15 days, designate and notify EPA of SDs' Community Involvement Coordinator (SDs' CI Coordinator). SDs may hire a contractor for this purpose. SDs' notice must include the name, title, and qualifications of the SDs' CI Coordinator. SDs' CI Coordinator is responsible for providing support regarding EPA's community involvement activities, including coordinating with EPA's CI Coordinator regarding responses to the public's inquiries about the Site.

2.2 SDs' Responsibilities for Technical Assistance

(a) If EPA requests, SDs shall arrange for a qualified community group to receive the services of a technical advisor(s) who can: (i) help group members understand Site cleanup issues (specifically, to interpret and comment on Site-related documents developed under this SOW); and (ii) share this information with others in the community. The technical advisor(s) will be independent from the SDs. SDs' TAP assistance will be limited to $50,000, except as provided in ¶ 2.2(d)(3), and will end when EPA issues the Certification of Work Completion under ¶ 4.8. SDs shall implement this requirement under a Technical Assistance Plan (TAP).

(b) If EPA requests, SDs shall cooperate with EPA in soliciting interest from community groups regarding a TAP at the Site. If more than one community group expresses an interest in a TAP, SDs shall cooperate with EPA in encouraging the groups to submit a single, joint application for a TAP.

(c) If EPA requests, SDs shall, within 30 days, submit a proposed TAP for EPA approval. The TAP must describe the SDs' plans for the qualified community group to receive independent technical assistance. The TAP must include the following elements:

(1) For SDs to arrange for publication of a notice in local media that they have received a Letter of Intent (LOI) to submit an application for a TAP. The notice should explain how other interested groups may also try to combine efforts with the community group or submit their own applications, by a reasonable specified deadline;

(2) For SDs to review the application(s) received and determine the eligibility of the community group(s). The proposed TAP must include eligibility criteria as follows:

(i) A community group is eligible if it is: (a) comprised of people who are affected by the release or threatened release at the Site, and (b) able to demonstrate its ability to manage TAP-related responsibilities adequately and responsibly.

(ii) A community group is ineligible if it is: (a) a potentially responsible party (PRP) at the Site, represents such a PRP, or receives money or services from a PRP (other than through the TAP); (b) affiliated with a national organization; (c) an academic institution; (d) a political subdivision; (e) a tribal government; (f) a group established or presently sustained by any of the above ineligible entities; or (g) a group in which any of the above ineligible entities is represented.

(3) For SDs to notify EPA of their determination on eligibility of the applicant group(s) to ensure that the determination is consistent with the SOW before notifying the group(s);

(4) If more than one community group submits a timely application, the SDs shall review each application and evaluate each application based on the following elements:

(i) The extent to which the group is representative of those persons affected by the Site; and

(ii) The effectiveness of the group's proposed system for managing TAP-related responsibilities, including its plans for working with its technical advisor and for sharing Site-related information with other members of the community.

(5) For SDs to document their evaluation of, and their selection of, a qualified community group, and to brief EPA regarding their evaluation process and choice. EPA may review SDs' evaluation process to determine whether the process satisfactorily follows the criteria in ¶ 2.2(c)(4). TAP assistance may be awarded to only one qualified group at a time;

(6) For SDs to notify all applicant(s) about SDs' decision;

(7) For SDs to designate a person (TAP Coordinator) to be their primary contact with the selected community group;

(8) A description of SDs' plans to implement the requirements of ¶ 2.2(d) (Agreement with Selected Community Group); and

(9) For SDs to submit quarterly progress reports regarding the implementation of the TAP.

(d) **Agreement with Selected Community Group**

(1) SDs shall negotiate an agreement with the selected community group that specifies the duties of SDs and the community group. The agreement must specify the activities that may be reimbursed under the TAP and the activities that may not be reimbursed under the TAP. The list of allowable activities must be consistent with 40 C.F.R. § 35.4070 (*e.g.,* obtaining the services of an advisor to help the group understand the nature of the environmental and public health hazards at the Site and the various stages of the response action, and communicating Site information to others in the community). The list of non-allowable activities must be consistent with 40 C.F.R. § 35.4075 (*e.g.,* activities related to litigation or political lobbying).

(2) The agreement must provide that SDs' review of the Community Group's recommended choice for Technical Advisor will be limited, consistent with 40 C.F.R. §§ 35.4190 and 35.4195, to criteria such as whether the advisor has relevant knowledge, academic training, and relevant experience as well as the ability to translate technical information into terms the community can understand.

(3) The agreement must provide that the Community Group is eligible for additional TAP assistance, if it can demonstrate that it has effectively managed its TAP responsibilities to date, and that at least three of the following 10 factors are satisfied:

(i) EPA expects that more than eight years (beginning with the initiation of the RI/FS) will pass before completion of construction will be achieved;

(ii) EPA requires treatability studies or evaluation of new and innovative technologies;

(iii) EPA reopens the ROD;

(iv) The public health assessment (or related activities) for the Site indicates the need for further health investigations and/or health-related activities;

(v) After SDs' selection of the Community Group for the TAP, EPA designates additional operable units at the Site;

(vi) EPA issues an Explanation of Significant Differences for the ROD;

(vii) After SDs' selection of the Community Group, a legislative or regulatory change results in significant new Site information;

(viii) Significant public concern about the Site exists, as evidenced, *e.g.*, by relatively large turnout at meetings, the need for multiple meetings, the need for numerous copies of documents to inform community members, *etc.*;

(ix) Any other factor that, in EPA's judgment, indicates that the Site is unusually complex; or

(x) An RI/FS costing at least $2 million was performed at the Site.

(4) SDs are entitled to retain any unobligated TAP funds upon EPA's Certification of RA Completion under ¶ 4.8.

(5) SDs shall submit a draft of the proposed agreement to EPA for its comments.

3. REMEDIAL DESIGN

3.1 RD Overall Strategy Plan. SDs shall submit a Remedial Design Overall Strategy Plan (RDOSP) for EPA approval. The Work required by this SOW is being grouped into five different specific projects (Specific Projects or SPs). Due to the size and differences in the RA within Site Q between the Northern and Central Sections vs. the Southern Section, Site Q is being split into five SPs. The five SPs are as follows:

SP O - Site O
SP Q N/C - Sites Q North and Q Central
SP Q S - Site Q South
SP R - Site R
SP S - Site S

In order to complete the RA at Sites O, R, Q S, and S, a substantial borrow pit for soil will need to be developed (up to 375,000 cubic yards). The design and construction of these SPs must be phased to efficiently utilize the manpower of both the SDs and EPA, as well as to manage multi-year truck traffic during construction. The RDOSP must include:

(a) A description of the overall management strategy for performing the RD and RA, including a proposal for phasing of the design and construction for each SP.

(b) A Borrow Source Plan (BSP), which will include a schedule, access, and traffic plan for the excavation and hauling of soil from the borrow pit location on the American Milling property, as well as an initial traffic plan for hauling the crushed rock for the SP Q N/C Site.

(c) A description of the responsibility and authority of all organizations and key personnel involved with the development of the RD.

3.2 Specific Project RD Work Plan (SPRDWP). SDs shall submit a Specific Project Remedial Design Work Plan (SPRDWP) for each of the SPs, for EPA approval, as set forth in the schedule of the RDOSP. The SPRDWP must include:

(a) Plans for implementing all RD activities identified in this SOW, in the RDOSP, or required by EPA to be conducted to develop the RD;

(b) A description of the proposed general approach to contracting, construction, operation, maintenance, and monitoring of the RA as necessary to implement the Work;

(c) Descriptions of any areas requiring clarification and/or anticipated problems (*e.g.,* data gaps);

(d) Description of any proposed pre-design investigation;

(e) Description of any proposed treatability study;

(f) Descriptions of any applicable permitting requirements and other regulatory requirements;

(g) Description of plans for obtaining access in connection with the Work, such as property acquisition, property leases, and/or easements; and

(h) All supporting deliverables required to accompany the SPRDWP as specified in the RD Schedule set forth in ¶ 7.2 (RD Schedule) and described in ¶ 6.7 (Supporting Deliverables).

(i) SDs shall meet regularly with EPA to discuss design issues as necessary, as directed or determined by EPA.

3.2.1 **Pre-Design Investigation**. The purpose of the Pre-Design Investigation (PDI) is to address data gaps by conducting additional field investigations.

(a) Where required by the Feasibility Study, the SDs shall submit a PDI Work Plan (PDIWP) for EPA approval. The PDIWP must include:

(1) An evaluation and summary of existing data and description of data gaps;

(2) A sampling plan including media to be sampled, contaminants or parameters for which sampling will be conducted, location (areal extent and depths), and number of samples; and

(3) Cross-references to QA/QC requirements set forth in the QAPP as described in ¶ 6.7(d).

(b) Following the PDI, SDs shall submit a PDI Evaluation Report. This report must include:

(1) Summary of the investigations performed;

(2) Summary of investigation results;

(3) Summary of validated data (*i.e.,* tables and graphics);

(4) Data validation reports and laboratory data reports;

(5) Narrative interpretation of data and results;

(6) Results of statistical and modeling analyses;

(7) Photographs documenting the work conducted; and

(8) Conclusions and recommendations for RD, including design parameters and criteria.

(c) EPA may require SDs to supplement the PDI Evaluation Report and/or to perform additional pre-design studies.

3.3 Pre-Final (80%) RD for each Specific Project. SDs shall submit a Pre-Final (80%) RD for each SP for EPA's comment. Each Pre-Final RD must include:

(a) A design criteria report, as described in the Remedial Design/Remedial Action Handbook, EPA 540/R-95/059 (June 1995);

(b) Preliminary drawings and specifications;

(c) Descriptions of permit requirements, if applicable;

(d) Preliminary Operation and Maintenance (O&M) Plan and O&M Manual;

(e) A description of how the RA will be implemented in a manner that minimizes environmental impacts in accordance with EPA's *Principles for Greener Cleanups* (Aug. 2009);

(f) A description of monitoring and control measures to protect human health and the environment, such as air monitoring and dust suppression, during the RA;

(g) Any proposed revisions to the RA Schedule that is set forth in ¶ 7.3 (RA Schedule); and

(h) All supporting deliverables required to accompany the Pre-Final RD as specified in the RD Schedule set forth in ¶ 7.2 (RD Schedule) and described in ¶ 6.7 (Supporting Deliverables).

3.4 Final (100%) RD for each Specific Project. SDs shall submit a Final (100%) RD for each SP for EPA approval. Each Final RD must include:

(a) Plans for implementing all RD activities identified in this SOW, in the SPRDWP, or required by EPA to be conducted to develop the RD;

(b) A description of the overall management strategy for performing the RA, including a proposal for phasing of design and construction, if applicable;

(c) A description of the proposed general approach to contracting, construction, operation, maintenance, and monitoring of the RA as necessary to implement the Work;

(d) A description of the responsibility and authority of all organizations and key personnel involved with the development of the RA;

(e) Descriptions of any applicable permitting requirements and other regulatory requirements;

(f) Description of plans for obtaining access in connection with the Work, such as property acquisition, property leases, and/or easements; and

(g) All supporting deliverables required to accompany the Final (100%) RD as specified in the RD Schedule set forth in ¶ 7.2 (RD Schedule) and described in ¶ 6.7 (Supporting Deliverables).

3.5 Meetings With EPA. SDs shall meet regularly with EPA to discuss design issues as necessary, as directed or determined by EPA.

4. REMEDIAL ACTION

4.1 Specific Project RA Work Plans. SDs shall submit a Specific Project RA Work Plan (SPRAWP) for EPA approval for each SP that includes:

(a) A proposed RA Construction Schedule in a Gantt chart;

(b) An updated health and safety plan that covers activities during the RA; and

(c) Plans for satisfying permitting requirements, if applicable, including obtaining permits for off-site activity and for satisfying substantive requirements of permits for on-site activity.

4.2 Meetings and Inspections

(a) **Preconstruction Conference**. SDs shall hold a preconstruction conference with EPA and others as directed or approved by EPA in connection with each Specific Project and as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995). SDs shall prepare minutes of the conference and shall distribute the minutes to all Parties.

(b) **Periodic Meetings**. During the construction portion of the RA (RA Construction), SDs shall meet regularly with EPA, and others as directed or determined by EPA, to discuss construction issues. SDs shall distribute an agenda and list of attendees to all Parties prior to each meeting. SDs shall prepare minutes of the meetings and shall distribute the minutes to all Parties.

(c) Inspections

(1) EPA or its representative shall conduct periodic inspections of the Work. At EPA's request, the Supervising Contractor or other designee shall accompany EPA or its representative during inspections.

(2) If requested, SDs shall provide personal protective equipment needed for EPA personnel and any oversight officials to perform their oversight duties.

(3) Upon notification by EPA of any deficiencies in the RA Construction, SDs shall take all necessary steps to correct the deficiencies and/or bring the RA Construction into compliance with the approved Final RD, any approved design changes, and/or the approved RAWP. If applicable, SDs shall comply with any schedule provided by EPA in its notice of deficiency.

4.3 Emergency Response and Reporting

(a) **Emergency Response and Reporting**. If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, SDs shall:

(1) Immediately take all appropriate action to prevent, abate, or minimize such release or threat of release;

(2) Immediately notify the authorized EPA officer (as specified in ¶ 4.3(c)) orally; and

(3) Take such actions in consultation with the authorized EPA officer and in accordance with all applicable provisions of the Health and Safety Plan, the Emergency Response Plan, and any other deliverable approved by EPA under the SOW.

(b) **Release Reporting**. Upon the occurrence of any event during performance of the Work that SDs are required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004, SDs shall immediately notify the authorized EPA officer orally.

(c) The "authorized EPA officer" for purposes of immediate oral notifications and consultations under ¶ 4.3(a) and ¶ 4.3(b) is the EPA Project Coordinator, the EPA Alternate Project Coordinator (if the EPA Project Coordinator is unavailable), or the EPA Emergency Response Branch, Region 5 (if neither EPA Project Coordinator is available).

(d) For any event covered by ¶ 4.3(a) and ¶ 4.3(b), SDs shall:

(1) Within 14 days after the onset of such event, submit a report to EPA describing the actions or events that occurred and the measures taken, and to be taken, in response thereto; and

(2) Within 30 days after the conclusion of such event, submit a report to EPA describing all actions taken in response to such event.

(e) The reporting requirements under ¶ 4.3 are in addition to the reporting required by CERCLA § 103 or EPCRA § 304.

4.4 Off-Site Shipments

(a) SDs may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. SDs will be deemed to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if SDs obtain a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).

(b) SDs may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, they provide notice to the appropriate state environmental official in the receiving facility's state and to the EPA Project Coordinator. This notice requirement will not apply to any off-Site shipments when the total quantity of all such shipments does not exceed 10 cubic yards. The notice must include the following information, if available:

(1) Name and location of the receiving facility;

(2) Type and quantity of Waste Material to be shipped;

(3) Schedule for the shipment; and

(4) Method of transportation. SDs also shall notify the state environmental official referenced above and the EPA Project Coordinator of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. SDs shall provide the notice after the award of the contract for RA construction and before the Waste Material is shipped.

(c) SDs may ship Investigation Derived Waste (IDW) from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, *EPA's Guide to Management of Investigation Derived Waste*, OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the ROD. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-site for treatability studies, are not subject to 40 C.F.R. § 300.440.

4.5 Certification of RA Construction

(a) For purposes of this Paragraph, "RA Construction" includes, for any RA that involves the construction and operation of a system to achieve Performance Standards (for example, groundwater or surface water restoration remedies), the construction of such system and the performance of all activities necessary for the system to function properly and as designed.

(b) **Inspection of Constructed Remedy**. SDs shall schedule an inspection to review the construction and operation of the system for each SP and to review whether the system is functioning properly and as designed. The inspection must be attended by SDs and EPA and/or their representatives. A re-inspection must be conducted if requested by EPA.

(c) **Shakedown Period**. There shall be a shakedown period of up to one year for EPA to review whether the remedy for each SP is functioning properly and performing as designed. SDs shall provide such information as EPA requests for such review.

(d) **Specific Project RA (SPRA) Report**. Following the shakedown period for each SP, SDs shall submit a Specific Project RA Report requesting EPA's determination that RA Construction has been completed for that SP. The SPRA Report must:

(1) Include statements by a registered professional engineer and by SDs' Project Coordinator that construction of the system is complete and that the system is functioning properly and as designed;

(2) Include a demonstration, and supporting documentation, that construction of the system is complete and that the system is functioning properly and as designed;

(3) Include as-built drawings signed and stamped by a registered professional engineer;

(4) Be prepared in accordance with Chapter 2 (Remedial Action Completion) of EPA's *Close Out Procedures for NPL Sites* guidance (May 2011), as supplemented by *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017); and

(5) Be certified in accordance with ¶ 6.5 (Certification).

(e) If EPA determines that a construction of a Special Project is not complete, EPA shall so notify SDs. EPA's notice must include a description of, and schedule for, the activities that SDs must perform to complete construction of a Specific Project. EPA's notice may include a schedule for completion of such activities or may require SDs to submit a proposed schedule for EPA approval. SDs shall

perform all activities described in the EPA notice in accordance with the EPA-approved schedule.

(f) If EPA determines, based on the initial or any subsequent SPRA Reports, that the overall RA Construction is complete for a Specific Project, EPA shall so notify SDs.

4.6 Periodic Review Support Plan (PRSP). SDs shall submit the PRSP for each SP for EPA approval. The PRSP addresses the studies and investigations that SDs shall conduct to support EPA's reviews of whether the RA is protective of human health and the environment in accordance with Section 121(c) of CERCLA, 42 U.S.C. § 9621(c) (also known as "Five Year Reviews"). SDs shall develop the plan in accordance with *Comprehensive Five-year Review Guidance*, OSWER 9355.7-03B-P (June 2001), and any other relevant five-year review guidance.

4.7 Certification of Work Completion for Each Specific Project

(a) **Work Completion Inspection**. SDs shall schedule an inspection for each SP for the purpose of obtaining EPA's Certification of Work Completion for each SP. The inspection must be attended by SDs and EPA and/or their representatives.

(b) **Work Completion Report**. Following the inspection, SDs shall submit a report to EPA requesting EPA's Certification of Work Completion for each SP. The report must:

(1) Include certifications by a registered professional engineer and by SDs' Project Coordinator that the Work, including all O&M activities, is complete; and

(2) Be certified in accordance with ¶ 6.5 (Certification). If the Monitoring Report submitted under ¶ 4.8(b) includes all elements required under ¶ 4.8(b) and the certifications required by this ¶ 4.7(b), then the Monitoring Report suffices to satisfy all requirements under ¶ 4.7(b).

(c) If EPA concludes that the Work for each SP is not complete, EPA shall so notify SDs. EPA's notice must include a description of the activities that SDs must perform to complete the Work on that SP. EPA's notice must include specifications and a schedule for such activities or must require SDs to submit specifications and a schedule for EPA approval. SDs shall perform all activities described in the notice or in the EPA-approved specifications and schedule.

(d) If EPA concludes, based on the initial or any subsequent report requesting Certification of Work Completion, that the Work for the SP is complete, EPA shall so certify in writing to SDs. Issuance of the Certification of Work Completion does not affect the following continuing obligations:

(1) Activities under the Periodic Review Support Plan;

(2) Obligations under Sections VIII (Property Requirements), XX (Retention of Records), and XIX (Access to Information) of the CD;

(3) Institutional Controls obligations as provided in the ICIAP; and

(4) Reimbursement of EPA's Future Response Costs under Section X (Payments for Response Costs) of the CD.

4.8 Certification of RA Completion

(a) **RA Completion Inspection**. For purposes of this Paragraph, the RA is "Complete" when it has been fully performed and the Performance Standards have been achieved. SDs shall schedule an inspection for the purpose of obtaining EPA's Certification of RA Completion. The inspection must be attended by SDs and EPA and/or their representatives.

(b) **RA Report/Monitoring Report**. Following the inspection, SDs shall submit a "RA Report/Monitoring Report" to EPA requesting EPA's Certification of RA Completion. The report must:

(1) Include certifications by a registered professional engineer and by SD's Project Coordinator that the RA is complete;

(2) Include as-built drawings signed and stamped by a registered professional engineer;

(3) Be prepared in accordance with Chapter 2 (Remedial Action Completion) of EPA's *Close Out Procedures for NPL Sites* guidance (May 2011), as supplemented by *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017);

(4) Contain monitoring data to demonstrate that Performance Standards have been achieved; and

(5) Be certified in accordance with ¶ 6.5 (Certification).

(c) If EPA concludes that the RA is not Complete, EPA shall so notify SDs. EPA's notice must include a description of any deficiencies. EPA's notice may include a schedule for addressing such deficiencies or may require SDs to submit a schedule for EPA approval. SDs shall perform all activities described in the notice in accordance with the EPA-approved schedule.

(d) If EPA concludes, based on the initial or any subsequent RA Report/Monitoring Report requesting Certification of RA Completion, that the RA is Complete, EPA shall so certify to SDs. This certification will constitute the Certification of RA Completion for purposes of the CD, including Paragraph 43 (Insurance) of the CD.

5. REPORTING

5.1 **Progress Reports**. Commencing with the month following lodging of the CD and until EPA approves the RA Construction Completion, SDs shall submit progress reports to EPA on a monthly basis, or as otherwise requested by EPA. The reports must cover all activities that took place during the prior reporting period, including:

(a) The actions that have been taken toward achieving compliance with the CD;

(b) A summary of all results of sampling, tests, and all other data received or generated by SDs;

(c) A description of all deliverables that SDs submitted to EPA;

(d) A description of all activities relating to RA Construction that are scheduled for the next six weeks;

(e) An updated RA Construction Schedule, together with information regarding percentage of completion, delays encountered or anticipated that may affect the future schedule for implementation of the Work, and a description of efforts made to mitigate those delays or anticipated delays;

(f) A description of any modifications to the work plans or other schedules that SDs have proposed or that have been approved by EPA; and

(g) A description of all activities undertaken in support of the Community Involvement Plan (CIP) during the reporting period and those to be undertaken in the next six weeks.

5.2 **Notice of Progress Report Schedule Changes**. If the schedule for any activity described in the Progress Reports, including activities required to be described under ¶ 5.1(d), changes, SDs shall notify EPA of such change at least 7 days before performance of the activity.

6. DELIVERABLES

6.1 **Applicability**. SDs shall submit deliverables for EPA approval or for EPA comment as specified in the SOW. If neither is specified, the deliverable does not require EPA's approval or comment. Paragraphs 6.2 (In Writing) through 6.4 (Technical Specifications) apply to all deliverables. Paragraph 6.5 (Certification) applies to any deliverable that are required to be certified. Paragraph 6.6 (Approval of Deliverables) applies to any deliverable that is required to be submitted for EPA approval.

6.2 **In Writing**. As provided in ¶ 94 of the CD, all deliverables under this SOW must be in writing unless otherwise specified.

6.3 **General Requirements for Deliverables**. All deliverables must be submitted by the deadlines in the RD Schedule or RA Schedule, as applicable. SDs shall submit all deliverables to EPA in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in ¶ 6.4. All other deliverables shall be submitted to EPA in the electronic form specified by the EPA Project Coordinator. If any deliverable include maps, drawings, or other exhibits that are larger than 8.5" by 11," SDs shall also provide EPA with paper copies of such exhibits, SDs shall submit two hard copies, as well as electronic forms of all deliverables to EPA.

6.4 **Technical Specifications**

(a) Sampling and monitoring data should be submitted in standard Electronic Data Deliverable (EDD) format. Other delivery methods may be allowed if direct electronic submission presents a significant burden or as technology changes.

(b) If specifically requested by the EPA's project coordinator, spatial data, including spatially-referenced data and geospatial data, should be submitted: (1) in the ESRI File Geodatabase format; and (2) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may be included as an option but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at https://edg.epa.gov/EME/.

(c) Each file must include an attribute name for each site unit or sub-unit submitted. Consult https://www.epa.gov/geospatial/geospatial-policies-and-standards for further available guidance on attribute identification and naming.

(d) Spatial data submitted by SDs do not, and are not intended to, define the boundaries of the Site.

6.5 **Certification**. All deliverables that require compliance with this Paragraph 6.5 must be signed by the SDs' Project Coordinator, or other responsible official of SDs, and must contain the following statement:

> 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 assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that

the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

6.6 Approval of Deliverables

(a) Initial Submissions

(1) After review of any deliverable that is required to be submitted for EPA approval under the CD or the SOW, EPA shall: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.

(2) EPA also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

(b) **Resubmissions**. Upon receipt of a notice of disapproval under ¶ 6.6(a) (Initial Submissions), or if required by a notice of approval upon specified conditions under ¶ 6.6(a), SDs shall, within 30 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, EPA may: (1) approve, in whole or in part, the resubmission; (2) approve the resubmission upon specified conditions; (3) modify the resubmission; (4) disapprove, in whole or in part, the resubmission, requiring SDs to correct the deficiencies; or (5) any combination of the foregoing.

(c) **Implementation**. Upon approval, approval upon conditions, or modification by EPA under ¶ 6.6(a) (Initial Submissions) or ¶ 6.6(b) (Resubmissions), of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and enforceable under the CD; and (2) SDs shall take any action required by such deliverable, or portion thereof. The implementation of any non-deficient portion of a deliverable submitted or resubmitted under ¶ 6.6(a) or ¶ 6.6(b) does not relieve SDs of any liability for stipulated penalties under Section XV (Stipulated Penalties) of the CD.

6.7 Supporting Deliverables. SDs shall submit each of the following supporting deliverables for EPA approval, except as specifically provided. The deliverables must be submitted, for the first time, by the deadlines in the RD Schedule or the RA Schedule, or any other EPA-approved schedule, as applicable. SDs shall develop the deliverables in accordance with all applicable regulations, guidance, and policies (*see* Section 9 (References)). SDs shall update each of these supporting deliverables as necessary or appropriate during the course of the Work, and/or as requested by EPA.

(a) **Health and Safety Plan**. The Health and Safety Plan (HASP) describes all activities to be performed to protect on site personnel and area residents from physical, chemical, and all other hazards posed by the Work. SDs shall develop the HASP in accordance with EPA's Emergency Responder Health and Safety and Occupational Safety and Health Administration (OSHA) requirements under 29 C.F.R. §§ 1910 and 1926. The HASP should cover RD activities and should be, as appropriate, updated to cover activities during the RA and updated to cover activities after RA completion. EPA does not approve the HASP, but will review it to ensure that all necessary elements are included and that the plan provides for the protection of human health and the environment.

(b) **Emergency Response Plan**. The Emergency Response Plan (ERP) must describe procedures to be used in the event of an accident or emergency at the Site (for example, power outages, water impoundment failure, treatment plant failure, slope failure, *etc.*). The ERP must include:

(1) Name of the person or entity responsible for responding in the event of an emergency incident;

(2) Plan and date(s) for meeting(s) with the local community, including local, state, and federal agencies involved in the cleanup, as well as local emergency squads and hospitals;

(3) Spill Prevention, Control, and Countermeasures (SPCC) Plan (if applicable), consistent with the regulations under 40 C.F.R. Part 112, describing measures to prevent, and contingency plans for, spills and discharges;

(4) Notification activities in accordance with ¶ 4.3(b) (Release Reporting) in the event of a release of hazardous substances requiring reporting under Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. § 11004; and

(5) A description of all necessary actions to ensure compliance with Paragraph 11 (Emergencies and Releases) of the CD in the event of an occurrence during the performance of the Work that causes or threatens a release of Waste Material from the Site that constitutes an emergency or may present an immediate threat to public health or welfare or the environment.

(c) **Field Sampling Plan**. The Field Sampling Plan (FSP) supplements the QAPP and addresses all sample collection activities. The FSP must be written so that a field sampling team unfamiliar with the project would be able to gather the samples and field information required. SDs shall develop the FSP in accordance with *Guidance for Conducting Remedial Investigations and Feasibility Studies*, EPA/540/G 89/004 (Oct. 1988).

(d) **Quality Assurance Project Plan**. The Quality Assurance Project Plan (QAPP) addresses sample analysis and data handling regarding the Work. The QAPP must include a detailed explanation of SDs' quality assurance, quality control, and chain of custody procedures for all treatability, design, compliance, and monitoring samples. SDs shall develop the QAPP in accordance with *EPA Requirements for Quality Assurance Project Plans*, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006); *Guidance for Quality Assurance Project Plans*, QA/G-5, EPA/240/R 02/009 (Dec. 2002); and *Uniform Federal Policy for Quality Assurance Project Plans*, Parts 1-3, EPA/505/B- 04/900A though 900C (Mar. 2005). The QAPP also must include procedures:

(1) To ensure that EPA and its authorized representatives have reasonable access to laboratories used by SDs in implementing the CD (SDs' Labs);

(2) To ensure that SDs' Labs analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring;

(3) To ensure that SDs' Labs perform all analyses using EPA-accepted methods (*i.e.*, the methods documented in *USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis*, ILM05.4 (Dec. 2006); *USEPA Contract Laboratory Program Statement of Work for Organic Analysis*, SOM01.2 (amended Apr. 2007); and *USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration)*, ISM01.2 (Jan. 2010)), or other methods acceptable to EPA;

(4) To ensure that SDs' Labs participate in an EPA-accepted QA/QC program or other program QA/QC acceptable to EPA;

(5) For SDs to provide EPA with notice at least 28 days prior to any sample collection activity;

(6) For SDs to provide split samples and/or duplicate samples to EPA upon request;

(7) For EPA to take any additional samples that it deems necessary;

(8) For EPA to provide to SDs, upon request, split samples and/or duplicate samples in connection with EPA's oversight sampling; and

(9) For SDs to submit to EPA all sampling and tests results and other data in connection with the implementation of the CD.

(e) **Site Wide Monitoring Plan**. The purpose of the Site Wide Monitoring Plan (SWMP) is to obtain baseline information regarding the extent of contamination in affected media at the Site; to obtain information, through short- and long-term monitoring, about the movement of and changes in contamination throughout the

Site, before and during implementation of the RA; to obtain information regarding contamination levels to determine whether Performance Standards (PS) are achieved; and to obtain information to determine whether to perform additional actions, including further Site monitoring. The SWMP must include:

(1) Description of the environmental media to be monitored;

(2) Description of the data collection parameters, including existing and proposed monitoring devices and locations, schedule and frequency of monitoring, analytical parameters to be monitored, and analytical methods employed;

(3) Description of how performance data will be analyzed, interpreted, and reported, and/or other Site-related requirements;

(4) Description of verification sampling procedures;

(5) Description of deliverables that will be generated in connection with monitoring, including sampling schedules, laboratory records, monitoring reports, and monthly and annual reports to EPA and state agencies; and

(6) Description of proposed additional monitoring and data collection actions (such as increases in frequency of monitoring, and/or installation of additional monitoring devices in the affected areas) in the event that results from monitoring devices indicate changed conditions (such as higher than expected concentrations of the contaminants of concern or groundwater contaminant plume movement).

(f) **Construction Quality Assurance/Quality Control Plan (CQA/QCP)**. The purpose of the Construction Quality Assurance Plan (CQAP) is to describe planned and systemic activities that provide confidence that the RA construction will satisfy all plans, specifications, and related requirements, including quality objectives. The purpose of the Construction Quality Control Plan (CQCP) is to describe the activities to verify that RA construction has satisfied all plans, specifications, and related requirements, including quality objectives. The CQA/QCP must:

(1) Identify, and describe the responsibilities of, the organizations and personnel implementing the CQA/QCP;

(2) Describe the PS required to be met to achieve Completion of the RA;

(3) Describe the activities to be performed: (i) to provide confidence that PS will be met; and (ii) to determine whether PS have been met;

(4) Describe verification activities, such as inspections, sampling, testing, monitoring, and production controls, under the CQA/QCP;

(5) Describe industry standards and technical specifications used in implementing the CQA/QCP;

(6) Describe procedures for tracking construction deficiencies from identification through corrective action;

(7) Describe procedures for documenting all CQA/QCP activities; and

(8) Describe procedures for retention of documents and for final storage of documents.

(g) **O&M Plan**. The O&M Plan describes the requirements for inspecting, operating, and maintaining the RA, both before and after achievement of the PS. SDs shall develop the O&M Plan in accordance with Operation and Maintenance in the *Superfund Program OSWER* 9200 37FS, PEA/540/F-01/004 (May 2001). The O&M Plan must include the following additional requirements:

(1) Description of PS required to be met to implement the ROD;

(2) Description of activities to be performed: (i) to provide confidence that PS will be met; and (ii) to determine whether PS have been met;

(3) **O&M Reporting**. Description of records and reports that will be generated during O&M, such as daily operating logs, laboratory records, records of operating costs, reports regarding emergencies, personnel and maintenance records, monitoring reports, and monthly and annual reports to EPA and state agencies;

(4) Description of corrective action in case of systems failure, including: (i) alternative procedures to prevent the release or threatened release of Waste Material that may endanger public health and the environment or may cause a failure to achieve PS; (ii) analysis of vulnerability and additional resource requirements should a failure occur; (iii) notification and reporting requirements should O&M systems fail or be in danger of imminent failure; and (iv) community notification requirements; and

(5) Description of corrective action to be implemented in the event that PS are not achieved; and a schedule for implementing these corrective actions.

(6) **O&M Manual**. The O&M Manual serves as a guide to the purpose and function of the equipment and systems that make up the remedy. SDs shall develop the O&M Manual in accordance with *Operation and Maintenance in the Superfund Program*, OSWER 9200.1-37FS, EPA/540/F-01/004 (May 2001).

(h) **Institutional Controls Implementation and Assurance Plan**. The Institutional Controls Implementation and Assurance Plan (ICIAP) describes plans to

implement, maintain, and enforce the Institutional Controls (ICs) at the Site. SDs shall develop the ICIAP in accordance with *Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites*, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012), and *Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites*, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012). The ICIAP must include the following additional requirements:

(1) Locations of recorded real property interests (*e.g.,* easements, liens) and resource interests in the property that may affect ICs (*e.g.*, surface, mineral, and water rights), including accurate mapping and geographic information system (GIS) coordinates of such interests; and

(2) Legal descriptions and survey maps that are prepared according to current American Land Title Association (ALTA) Survey guidelines and certified by a licensed surveyor.

(i) **Transportation and Off-Site Disposal Plan.** The Transportation and Off-Site Disposal Plan (TODP) describes plans to ensure compliance with ¶ 4.4 (Off-Site Shipments). The TODP must include:

(1) Proposed routes for off-site shipment of Waste Material;

(2) Identification of communities affected by shipment of Waste Material; and

(3) Description of plans to minimize impacts on affected communities.

(j) **Periodic Review Support Plan**. The Periodic Review Support Plan addresses the studies and investigations that SDs shall conduct to support EPA's reviews of whether the RA is protective of human health and the environment in accordance with Section 121(c) of CERCLA, 42 U.S.C. § 9621(c) (also known as "Five-year Reviews"). SD shall develop the plan in accordance with *Comprehensive Five-year Review Guidance*, OSWER 9355.7-03B-P (June 2001), and any other relevant five-year review guidance.

7. SCHEDULES

7.1 Applicability and Revisions. All deliverables and tasks required under this SOW must be submitted or completed by the deadlines or within the time durations listed in the RD and RA Schedules set forth below. SDs may submit proposed revised RD Schedules or RA Schedules for EPA approval, including proposed revised schedules due to flooding and/or high groundwater in the Soil Cover Borrow Area[3] that prevents fill from being

[3] For purposes of this SOW, "Soil Cover Borrow Area" means the American Milling Company property located along the Mississippi River south of the Area 2 Sites, which is being used as the source of cover material for 35 IAC § 724 compliant soil covers that will be constructed at Sites O, Q, R and S.

accessed for use in Sites O, Q, R, and/or S. Upon EPA's approval, the revised RD and/or RA Schedules supersede the RD and RA Schedules set forth below, and any previously-approved RD and/or RA Schedules.

7.2 RD Schedule

	Description of Deliverable, Task	Included Supporting Deliverable	¶ Ref.	Deadline
1	RDOSP	BSP	3.1	90 days after EPA's Authorization to Proceed
2	SPRDWP	HASP, ERP, FSP, QAPP	3.2	The SPRDWP will be due sequentially for each Specific Project, as set forth in the RDOSP. The SPRDWP will include a PDI WP (where applicable)
3	PDI Evaluation Report (where applicable)		3.2.1	90 days after all PDI analytical data have been validated
4	Pre-Final (80%) RD for each Specific Project	CQA/QCP, O&M Plan, O&M Manual, ICIAP, SWMP	3.3	150 days after EPA approval of Final SPRDWP and the PDI Evaluation Report approval (where applicable)
5	Final (100%) RD	Same as for Pre-final RD	3.4	60 days after EPA approval of Pre-Final RD for Specific Project

7.3 RA Schedule

The RA Schedule below will apply separately to each of the Specific Projects listed below:

	Description of Deliverable / Task for each Specific Project	¶ Ref.	Deadline
1	Award RA contract		90 days after EPA Notice of Authorization to Proceed with RA
2	SPRAWP	4.1	90 days after EPA Notice of Authorization to Proceed with RA
3	Pre-Construction Conference	4.2(a)	30 days after Approval of SPRAWP
4	Start of Construction		90 days after Approval of SPRAWP
5	Completion of Construction		As specified in the SPRAWP
6	Inspection of Construction Remedy	4.5(b)	15 days after completion of construction
7	SPRA Report	4.5(d)	30 days after completion of Pre-final Inspection
8	Final Inspection		15 days after Completion of Work identified in Pre-final Inspection Report

9	SPRA Report	4.5(d)	60 days after Final Inspection
10	RA Report/Monitoring Report	4.8(b)	
11	Work Completion Report	4.7(b)	
12	Periodic Review Support Plan	4.6	Three years after Start of RA Construction

8. STATE PARTICIPATION

8.1 **Copies**. SDs shall, at any time they send a deliverable to EPA, send a copy of such deliverable to the State. EPA shall, at any time it sends a notice, authorization, approval, disapproval, or certification to SDs, send a copy of such document to the State.

8.2 **Review and Comment**. The State will have a reasonable opportunity for review and comment prior to:

(a) Any EPA approval or disapproval under ¶ 6.6 (Approval of Deliverables) of any deliverable that is required to be submitted for EPA approval; and

(b) Any approval or disapproval of the completion of construction under ¶ 4.5 (Certification of RA Construction), any disapproval of, or Certification of Work Completion for each Specific Project under ¶ 4.7 (Certification of Work Completion for Each Specific Project), and any disapproval of, or Certification of RA Completion under ¶ 4.8 (Certification of RA Completion).

9. REFERENCES

8.3 The following regulations and guidance documents, among others, apply to the Work. Any item for which a specific URL is not provided below is available on one of the two EPA webpages listed in ¶ 8.4:

(a) A Compendium of Superfund Field Operations Methods, OSWER 9355.0-14, EPA/540/P-87/001a (Aug. 1987).

(b) CERCLA Compliance with Other Laws Manual, Part I: Interim Final, OSWER 9234.1-01, EPA/540/G-89/006 (Aug. 1988).

(c) Guidance for Conducting Remedial Investigations and Feasibility Studies, OSWER 9355.3-01, EPA/540/G-89/004 (Oct. 1988).

(d) CERCLA Compliance with Other Laws Manual, Part II, OSWER 9234.1-02, EPA/540/G-89/009 (Aug. 1989).

(e) Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties, OSWER 9355.5-01, EPA/540/G-90/001 (Apr.1990).

(f) Guidance on Expediting Remedial Design and Remedial Actions, OSWER 9355.5-02, EPA/540/G-90/006 (Aug. 1990).

(g) Guide to Management of Investigation-Derived Wastes, OSWER 9345.3-03FS (Jan. 1992).

(h) Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, OSWER 9355.7-03 (Feb. 1992).

(i) Guidance for Conducting Treatability Studies under CERCLA, OSWER 9380.3-10, EPA/540/R-92/071A (Nov. 1992).

(j) National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, 40 C.F.R. Part 300 (Oct. 1994).

(k) Guidance for Scoping the Remedial Design, OSWER 9355.0-43, EPA/540/R-95/025 (Mar. 1995).

(l) Remedial Design/Remedial Action Handbook, OSWER 9355.0-04B, EPA/540/R-95/059 (June 1995).

(m) EPA Guidance for Data Quality Assessment, Practical Methods for Data Analysis, QA/G-9, EPA/600/R-96/084 (July 2000).

(n) Comprehensive Five-year Review Guidance, OSWER 9355.7-03B-P, 540-R-01-007 (June 2001).

(o) Guidance for Quality Assurance Project Plans, QA/G-5, EPA/240/R-02/009 (Dec. 2002).

(p) Institutional Controls: Third Party Beneficiary Rights in Proprietary Controls (Apr. 2004).

(q) Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A though 900C (Mar. 2005).

(r) EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2005), https://www.epa.gov/geospatial/epa-national-geospatial-data-policy.

(s) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).

(t) EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006).

(u) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).

(v) Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, OSWER 9283.1-33 (June 2009).

(w) Principles for Greener Cleanups (Aug. 2009), https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups.

(x) Providing Communities with Opportunities for Independent Technical Assistance in Superfund Settlements, Interim (Sep. 2009).

(y) Close Out Procedures for National Priorities List Sites, OSWER 9320.2-22 (May 2011).

(z) Recommended Evaluation of Institutional Controls: Supplement to the "Comprehensive Five-Year Review Guidance," OSWER 9355.7-18 (Sep. 2011).

(aa) Construction Specifications Institute's MasterFormat (2020), available from https://www.csiresources.org/home.

(bb) Updated Superfund Response and Settlement Approach for Sites Using the Superfund Alternative Approach, OSWER 9200.2-125 (Sep. 2012)

(cc) Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012).

(dd) Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012).

(ee) EPA's Emergency Responder Health and Safety Manual, OSWER 9285.3-12 (July 2005 and updates), https://www.epaosc.org/_HealthSafetyManual/manual-index.htm.

(ff) Broader Application of Remedial Design and Remedial Action Pilot Project Lessons Learned, OSWER 9200.2-129 (Feb. 2013).

(gg) Guidance for Evaluating Completion of Groundwater Restoration Remedial Actions, OSWER 9355.0-129 (Nov. 2013).

(hh) Quality management systems for environmental information and technology programs -- Requirements with guidance for use, ASQ/ANSI E4:2014 (American Society for Quality, February 2014).

(ii) Groundwater Remedy Completion Strategy: Moving Forward with the End in Mind, OSWER 9200.2-144 (May 2014).

(jj) Superfund Community Involvement Handbook, OSRTI, SEMS 100000070, (Jan. 2016), https://semspub.epa.gov/work/HQ/100000070.pdf. More information on Superfund community involvement is available on the Agency's Superfund Community Involvement Tools and Resources webpage at https://www.epa.gov/superfund/superfund-community-involvement-tools-and-resources.

(kk) USEPA Contract Laboratory Program Statement of Work for Organic Superfund Methods (Multi-Media, Multi-Concentration), SOM02.4 (Oct. 2016),

https://www.epa.gov/clp/epa-contract-laboratory-program-statement-work-organic-superfund-methods-multi-media-multi-1.

(ll) USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration), ISM02.4 (Oct. 2016), https://www.epa.gov/clp/epa-contract-laboratory-program-statement-work-inorganic-superfund-methods-multi-media-multi-1.

(mm) Guidance for Management of Superfund Remedies in Post Construction, OLEM 9200.3-105 (Feb. 2017), https://www.epa.gov/superfund/superfund-post-construction-completion.

8.4 A more complete list may be found on the following EPA webpages:

Laws, Policy, and Guidance: https://www.epa.gov/superfund/superfund-policy-guidance-and-laws

Test Methods Collections: https://www.epa.gov/measurements/collection-methods

8.5 For any regulation or guidance referenced in the CD or SOW, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after SDs receive notification from EPA of the modification, amendment, or replacement.