IN THE UNITED STATES DISTRICT COURT FOR WESTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

UNITED STATES OF AMERICA and)	
THE STATE OF MICHIGAN)	
)	
Plaintiffs,)	
)	Civil Action No.
V.)	
)	
NCR CORPORATION,)	
)	
Defendant.)	
)	

CONSENT DECREE WITH NCR CORPORATION
Appendix B
(SOW)

STATEMENT OF WORK

ALLIED PAPER/PORTAGE CREEK/KALAMAZOO RIVER SUPERFUND SITE AREAS 2, 3, AND 4 OF OPERABLE UNIT 5, ALLEGAN COUNTY, STATE OF MICHIGAN

EPA REGION 5

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1. INTRODUCTION

1.1 Purpose of the SOW. This SOW sets forth the procedures and requirements for implementing the Work required by the Consent Decree (CD).

1.2 Structure of the SOW

- Section 2 (Community Involvement) sets forth EPA's and Settling Defendant's (SD's) responsibilities for community involvement.
- Section 3 (Area 4 Removal Response Action) sets forth the process for SDs to design and implement a removal response action at Area 4.
- Section 4 (Scope of Remedy) includes the actions described in the applicable RODs for implementation of the respective selected remedies.
- Section 5 (Remedial Design) sets forth the process for developing the RDs
- Section 6 (Remedial Action) sets forth requirements regarding the completion of the Area 2 RA and the Area 3 RA.
- Section 7 (Waste Material) sets forth SD's obligation related to emergency response and reporting and off-site shipment waste material.
- Section 8 (Certification of Work Completion) describes the process for approval and certification of each response action conducted by SD as required by the CD.
- Section 9 (Reporting) sets forth SD's reporting obligations
- Section 10 (Submission of Deliverables) describes the content of the supporting deliverables and the general requirements regarding SD's submission of, and EPA's review of, approval of, comment on, and/or modification of, the deliverables.
- Section 11 (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 Work.
- Section 12 (State Participation) addresses State participation.
- Section 13 (References) provides a list of references, including URLs.
- 1.3 The terms used in this SOW that are defined in CERCLA, in regulations promulgated under CERCLA, or in the 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 this SOW, and the term "Section" means a section of this 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, 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.
- (b) If requested by EPA, SD shall participate in community involvement activities, including participation in (1) the preparation of information regarding the Work for dissemination to the public, with consideration given to including mass media and/or Internet notification, and (2) public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site. SD's support of EPA's community involvement activities may include providing online access to initial submissions and updates of deliverables to (1) any Community Advisory Groups, (2) any 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 SD's responsibilities for community involvement activities. All community involvement activities conducted by SD at EPA's request are subject to EPA's oversight. Upon EPA's request, SD shall establish a community information repository at or near the Site to house one copy of the administrative record.
- (c) **SD's CI Coordinator**. If requested by EPA, SD shall, within 30 days, designate and notify EPA of SD's Community Involvement Coordinator (SD's CI Coordinator). SD may hire a contractor for this purpose. SD's notice must include the name, title, and qualifications of the SD's CI Coordinator. SD's 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.

3. AREA 4 REMOVAL RESPONSE ACTION

- **3.1 Scope of Area 4 Removal Response Action.** The actions to be implemented shall include, but are not limited to, the following:
 - (a) Dredging and/or excavation of PCB-contaminated in-stream sediments and riverbank/floodplain soils with elevated PCB concentrations in the Trowbridge Dam Area, at locations specified in the Action Memorandum;
 - (b) Removal of the Trowbridge Dam including the 150-foot left earthen embankment, 80-foot wide concrete spillway, and a 110-foot right earthen embankment as illustrated in the Action Memorandum, or any water control structure within the Trowbridge Dam Area as needed to reduce the risk of PCB mobilization from floodplains and banks due to failure of the Trowbridge Dam or water control structure;
 - (c) Cut-back and stabilization of riverbanks to mitigate exposures to PCB-contaminated riverbank/floodplain soils and future erosion;
 - (d) Dewatering, as necessary, and disposal off-site of all PCB-contaminated instream sediments and riverbank/floodplain soils removed pursuant to tasks 3.1a, 3.1b, and 3.1c. PCB-contaminated material with PCB concentrations > 50 mg/kg shall be transported

- off-site to a TSCA waste landfill that is in compliance with all state and federal regulatory requirements. PCB-contaminated material with PCB concentrations < 50 mg/kg shall be transported off-site and disposed in an appropriately licensed and permitted commercial landfill in compliance with all state and local laws;
- (e) Ensuring that a stable river channel exists post-removal, including backfilling as appropriate and re-vegetation with native plant species; and
- (f) Conducting appropriate monitoring and maintenance during the removal response action; and
- (g) Post-removal control activities, including restoration. For the avoidance of doubt, SD will not be required to perform restoration work that will be undone by later remedial action in the Area.
- 3.2 Submittal and Approval of Area 4 Removal Work Plan. Within 30 days after EPA issues the Area 4 Action Memorandum and in accordance with Section 10 (Submission of Deliverables) of this SOW, SD shall submit to EPA for approval a draft work plan for performing the Area 4 Removal Response Action (the "Area 4 Removal Work Plan"). The draft Area 4 Removal Work Plan shall provide a description of, and an expeditious schedule (Area 4 Schedule) for, the actions required by the CD related to implementation of the Area 4 Action Memorandum.
 - a. EPA may approve, disapprove, require revisions to, or modify the draft Area 4 Removal Work Plan in whole or in part. If EPA requires revisions, SD shall submit a revised draft Area 4 Removal Work Plan within 45 days after receipt of EPA's notification of the required revisions. SD shall implement the Area 4 Removal Work Plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Area 4 Removal Work Plan, the Area 4 Schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this CD as it relates to implementation of the Area 4 Action Memorandum.
 - b. Upon approval or approval with modifications of the Area 4 Removal Work Plan, SD shall commence implementation of the Work in accordance with the schedule included therein. SD shall not commence or perform any response activities at Area 4 except in conformance with the terms of this CD as it relates to implementation of the Area 4 Action Memorandum.
 - c. Unless otherwise provided in this CD as it relates to implementation of the Area 4 Action Memorandum, any additional deliverables that require EPA approval under the Removal Work Plan shall be reviewed and approved by EPA in accordance with this Paragraph.
- **3.3** Area 4 Health and Safety Plan. Within 60 days after EPA issues the Area 4 Action Memorandum and in accordance with the requirements of ¶10.7(a), SD shall submit for

- EPA review and comment a plan that ensures the protection of public health and safety during performance of the Area 4 Removal Response Action.
- Final Report for Area 4 Removal Response Action. Within 60 days after completion of 3.4 the activities required by the CD as it relates to implementation of the Area 4 Action Memorandum, other than continuing obligations listed in Post-Removal Site Control Plan (¶ 3.5), SD shall request a Work Completion Inspection pursuant to Section 8. Within 45 days after the Work Completion Inspection, SD shall submit for EPA review and approval a final report summarizing the actions taken to comply with this CD as it relates to implementation of the Area 4 Action Memorandum. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports." The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the CD as it relates to implementation of the Area 4 Action Memorandum, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a responsible corporate official of SD or Project Coordinator: "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 on 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 fine and imprisonment for knowing violations."
- 3.5 Post-Removal Site Control. Within 45 days of receipt of EPA's Notice of Completion of Work for the Area 4 Removal Response Action, SD shall submit a proposal for post-removal site control, consistent with Section 300.415(l) of the NCP and OSWER Directive No. 9360.2-02. Upon EPA approval of the proposal, the proposal shall become the Post-Removal Site Control Plan and SD shall implement such controls until the ROD for Area 4 is implemented, and shall provide EPA with documentation of all post-removal site control arrangements that they implement.

4. SCOPE OF REMEDY

- **4.1** The scope of the remedy for Area 2 includes actions described Section 1.4 in the Area 2 ROD, as described below.
 - a. Otsego City Dam removal: Removal of the dam will result in the northeast anabranches not conveying water under normal flow conditions.

- b. Channel realignment: Realigning of the river in Area 2 to create a stable single channel with dam removal will prevent the river from regularly forming unstable anabranches, and will protect the floodplain from future erosion due to channel migration.
- c. Remedial action level (RAL) for bank soil excavation: Excavate bank soil along the realigned channel to a RAL of 5 milligrams per kilogram (mg/kg) total PCBs in a 10-foot swath along the bank. The bank soil excavation will provide a buffer between the newly realigned channel and floodplain soils as a measure of added protection above that provided by the natural channel design to prevent migration of PCBs from floodplain bank soil to the river.
- d. RD sampling as approved by EPA and targeted removal: Sampling will include the identification of the remedial area footprints, as well as targeting areas near the prior sample locations that exceeded 50 mg/kg PCBs to confirm the presence and extent of such hot spots for targeted removal.
- e. Excavation of confirmed PCB hot spots in areas to be capped: The footprints of confirmed hot spots exceeding 50 mg/kg on Knife Blade Island and in proposed cap areas will be excavated and backfilled prior to installing caps.
- f. Excavation of floodplain soil exceeding the 20 mg/kg RAL for PCBs outside the realigned channel footprint: Remedial footprints in the Area 2 floodplain will be identified based on reducing potential exposure to soil for ecological and human receptors.
- g. Capping of the northeast anabranches and Pond G: The northeast anabranches that are cut off from the main channel following Otsego City Dam removal and channel realignment will be capped to prevent ecological exposure. Caps in the floodplain and anabranches will consist of a two-foot-thick soil cap (including topsoil layer) over a geotextile. For Pond G, the subaqueous cap will consist of an 18-inch layer of soil overlain with six inches of sand or gravel.
- h. Excavation of Gun River sediment and bank soil: Gun River will be modified as part of channel realignment. Additional RD sampling will be conducted to determine the extent of sediment and bank soil excavation required.
- i. Targeted excavation of soil/sediment with PCB concentrations exceeding 50 mg/kg at Knife Blade Island: Additional RD sampling will be conducted to determine the hot spot locations and identify any additional hot spot areas to be excavated.
- j. Excavation and backfilling of the floodplain soil exceeding PCB concentrations of 2.5 mg/kg on the two private residential parcels in the northeast

- corner of Area 2. In the event that dioxins are found in floodplain surface soils in current or potential residential use areas located outside the PCB remediation footprint, a FRG of 50 parts per trillion (ppt) will be used to protect residential receptors. If property owners prefer institutional controls may be put in place instead of excavation.
- k. Institutional controls (ICs): ICs include continuation of fish consumption advisories and warning signage until fish tissue goals are met, and land use restrictions to prevent future residential use and limit human exposure at all properties where contamination is left in place at levels unsuitable for unrestricted residential use (i.e., at concentrations greater than 2.5 mg/kg PCBs).
- l. Long-term monitoring, including visual river bank and channel inspections, maintenance activities for caps, bank treatments, and/or vegetation restoration, and monitoring surface water, fish tissue and sediment until fish tissue levels attain final remediation goals.
- 4.2 The scope of the remedy for Area 3 for purposes of this SOW is subject to the "CD and SOW Modification to Incorporate the Area 3 ROD" provisions in the CD. The paragraph shall be updated as part of the SOW Modification.

5. REMEDIAL DESIGN

- **5.1 Remedial Design (RD) Work Plan**. SD shall submit a Remedial Design Work Plan (RDWP) for the Area 2 RD for EPA approval. Subject to the "CD and SOW Modification to Incorporate the Area 3 ROD", SD shall submit a separate RDWP for Area 2 and Area 3. Each RDWP must include:
 - (a) Plans for implementing all RD activities identified in this Scope of Remedy section of this SOW or required by EPA to be conducted to develop the RD for each Area;
 - (b) A description of the overall management strategy for performing the specific RD, 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 related 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 RD;
 - (e) Descriptions of any areas requiring clarification and/or anticipated problems (e.g., data gaps);

- (f) Description of any proposed pre-design investigation;
- (g) Descriptions of any applicable permitting requirements and other regulatory requirements;
- (h) Description of plans for obtaining access in connection with the Work, such as property acquisition, property leases, and/or easements; and
- (i) The following supporting deliverables described in ¶ 10.7 (Supporting Deliverables): Health and Safety Plan; Emergency Response Plan, Field Sampling Plan; Quality Assurance Project Plan; and Long-Term Monitoring Plan. However, SD should reuse any of these plans that were developed and approved during earlier work at the Site.
- 5.2 SD shall meet regularly with EPA to discuss design issues as necessary, as directed or determined by EPA.
- **Pre-Design Investigation**. The purpose of the Pre-Design Investigation (PDI) is to address data gaps identified in a ROD by conducting additional field investigations.
 - (a) **PDI Work Plan**. SD shall submit a PDI Work Plan (PDIWP) for each Area 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 quality assurance/quality control (QA/QC) requirements set forth in the Quality Assurance Project Plan (QAPP) as described in ¶ 10.7(d).
 - (b) **PDI Evaluation Report**. Following the PDI, SD shall submit a PDI evaluation report for Area 2 that shall include, but not be limited to:
 - (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.
- **5.4 Preliminary** (30%) **RD**. SD shall submit a Preliminary (30%) RD for the respective Area of OU5 for EPA's comment. The Preliminary 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 ¶ 11.3 (RA Schedule); and
 - (h) Updates of all supporting deliverables required to accompany the RDWP and the following additional supporting deliverables described in ¶ 10.7 (Supporting Deliverables): Monitoring Plan; Construction Quality Assurance/Quality Control Plan; Transportation and Off-Site Disposal Plan; O&M Plan; O&M Manual; and Institutional Controls Implementation and Assurance Plan.
- **Pre-Final (95%) RD**. SD shall submit the Pre-final (95%) RD for the respective Area of OU5 for EPA's comment. The Pre-final RD must be a continuation and expansion of the previous design submittal and must address EPA's comments regarding the Preliminary RD. The Pre-final RD will serve as the approved Final (100%) RD if EPA approves the Pre-final RD without comments. The Pre-final RD must include:
 - (a) A complete set of construction drawings and specifications that are: (1) certified by a registered professional engineer; (2) suitable for procurement; and (3) follow the Construction Specifications Institute's MasterFormat 2012;

- (b) A survey and engineering drawings showing existing features, such as elements, property borders, easements, and Site conditions;
- (c) Pre-Final versions of the same elements and deliverables as are required for the Preliminary RD;
- (d) A specification for photographic documentation of the RA; and
- (e) Updates of all supporting deliverables required to accompany the Preliminary (30%) RD.
- **5.6 Final (100%) RD**. SD shall submit the Final (100%) RD for Area 2 for EPA approval. The Final RD must address EPA's comments on the Pre-final RD and must include final versions of all Pre-final RD deliverables.

6. REMEDIAL ACTION

- **RA Work Plan**. SD shall submit for EPA approval a Remedial Action Work Plan (RAWP) for performance of each RA required under the CD that includes:
 - (a) A proposed RA Construction Schedule in both critical path method and Gantt format;
 - (b) An updated health and safety plan that covers activities during the RA; and
 - (c) Plans for satisfying permitting requirements, including obtaining permits for offsite activity and for satisfying substantive requirements of permits for on-site activity.

6.2 Meetings and Inspections

- (a) **Preconstruction Conference**. SD shall hold a preconstruction conference with EPA and others as directed or approved by EPA and as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995). SD 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), SD shall meet biweekly with EPA, and others as directed or determined by EPA, to discuss construction issues. SD shall distribute an agenda and list of attendees to all Parties prior to each meeting. SD 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 or have an on-site presence during the Work. At EPA's request, the Supervising

- Contractor or other designee shall accompany EPA or its representative during inspections.
- (2) SD shall provide on-site office space for EPA personnel to perform their oversight duties. The minimum office requirements are a private office with at least 150 square feet of floor space, an office desk with chair, a four-drawer file cabinet, and a telephone with a private line, access to facsimile, reproduction, and personal computer equipment, wireless internet access, and sanitation facilities.
- (3) Upon notification by EPA of any deficiencies in the RA Construction, SD 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, SD shall comply with any schedule provided by EPA in its notice of deficiency.

6.3 RA Construction Completion

- (a) For purposes of this ¶ 6.3, "RA Construction" comprises the excavation and construction activities described in ¶ 6 of this SOW.
- (b) **Inspection of Constructed Remedy**. Following the construction of each remedy performed pursuant to this CD and SOW, SD shall schedule inspections to review whether the remedy is functioning properly and as designed. The inspection must be attended by SD and EPA and/or their representatives. A re-inspection must be conducted if requested by EPA.
- (c) RA Report. Following the inspection of the constructed remedy, SD shall submit an "RA Report" for each RA constructed pursuant to this CD and SOW requesting EPA's determination that RA Construction has been completed. The RA Report must: (1) include statements by a registered professional engineer and by SD's 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 ¶ 10.5 (Certification).
- (d) If EPA determines that RA Construction is not complete, EPA shall so notify SD. EPA's notice must include a description of, and schedule for, the activities that SD must perform to complete RA Construction. EPA's notice may include a

- schedule for completion of such activities or may require SD to submit a proposed schedule for EPA approval. SD shall perform all activities described in the EPA notice in accordance with the schedule.
- (e) If EPA determines, based on the initial or any subsequent RA Report, that RA Construction is complete, EPA shall so notify SD.

6.4 Certification of RA Completion

- (a) Monitoring Report. SD shall submit a Monitoring Report to EPA requesting EPA's Certification of RA Completion for each Area. The report must:

 (1) include certifications by a registered professional engineer and by SD's Project Coordinator that that Area's RA is complete; (2) 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); [(3) contain monitoring data to demonstrate that Performance Standards have been achieved;] and (4) be certified in accordance with ¶ 10.5 (Certification).
- (b) If EPA concludes that an RA is not Complete, EPA shall so notify SD. EPA's notice must include a description of any deficiencies. EPA's notice may include a schedule for addressing such deficiencies or may require SD to submit a schedule for EPA approval. SD shall perform all activities described in the notice in accordance with the schedule.
- (c) If EPA concludes, based on the initial or any subsequent Monitoring Report requesting Certification of RA Completion, that an RA is Complete, EPA shall so certify to SD. Certification of RA Completion will not affect SD's remaining obligations under the CD.
- (d) Certification of RA Completion described in this section does not constitute the Final Certification of Remedial Action Completion for purposes Section XV (Covenants by Plaintiff) of the CD unless the corresponding completed remedial action is last in time for the Site.
- 6.5 Periodic Review Support Plan (PRSP). SD shall submit the PRSP for EPA approval. The PRSP addresses the studies and investigations that SD shall conduct to support EPA's reviews of whether the RAs in Area 2 and 3 of OU5 implemented by SD are 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 documents. The SD shall update the PRSP upon completion of each RA.

7. WASTE MATERIAL

7.1 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 ¶ 7.1(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 ¶ 7.1(a) and ¶ 7.1(b) is the EPA Project Coordinator, the EPA Alternate Project Coordinator (if the EPA Project Coordinator is unavailable), or the EPA Emergency Response Unit, Region 5 (if neither EPA Project Coordinator is available).
- (d) For any event covered by ¶ 7.1(a) and ¶ 7.1(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 ¶ 7.1 are in addition to the reporting required by CERCLA § 103 or EPCRA § 304.

7.2 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) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the 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 CFR § 261.4(e) shipped off-site for treatability studies, are not subject to 40 C.F.R. § 300.440.

8. CERTIFICATION OF WORK COMPLETION

- **8.1 Work Completion Inspection**. SD shall schedule inspections for the purpose of obtaining EPA's Certification of Work Completion for each of the response actions implemented by SD. Each of the inspections must be attended by SD and EPA and/or their representatives.
- **8.2 Work Completion Report**. Following the inspection for Area 2, 3, or 4, SD shall submit a report to EPA requesting EPA's Certification of Work Completion for that Area. The report must: (1) include certifications by a registered professional engineer and by SD's Project Coordinator that the Work, including all O&M activities, is complete; and (2) be certified in accordance with ¶ 10.5 (Certification). If the Monitoring Report submitted under ¶ 6.4(a) includes all elements required under this ¶ 8.2, then the Monitoring Report suffices to satisfy all requirements under this ¶ 8.2.
 - (a) If EPA concludes that the Work is not complete, EPA shall so notify SD. EPA's notice must include a description of the activities that SD must perform to complete the Work. EPA's notice must include specifications and a schedule for such activities or must require SD to submit specifications and a schedule for EPA approval. SD shall perform all activities described in the notice or in the EPA-approved specifications and schedule.

(b) If EPA concludes, based on the initial or any subsequent report requesting Certification of Work Completion, that the Work is complete, EPA shall so certify in writing to SD. Issuance of the Certification of Work Completion does not affect the following continuing obligations: (1) activities under the PRSP; (2) obligations under Sections **X** (Property Requirements), **XXI** (Retention of Records), and **XX** (Access to Information) of the CD; (3) Institutional Controls obligations as provided in the ICIAP; (4) Long-Term Monitoring Plan; and (5) reimbursement of EPA's Future Response Costs under Section **XII** (Payments for Response Costs) of the CD.

9. **REPORTING**

- **Progress Reports**. Commencing with the month following lodging of the CD and until EPA issues a notice of Completion of Work for the last RA completed by SD, SD 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 SD (a central database accessible by the EPA may be used in lieu of providing monthly updates);
 - (c) A description of all deliverables that SD submitted to EPA;
 - (d) A description of all activities that are scheduled for the next month;
 - (e) An updated 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 SD has proposed or that have been approved by EPA; and
 - (g) A description of all activities undertaken in support of the CIP during the reporting period and those to be undertaken in the next month.
- **9.2 Notice of Progress Report Schedule Changes**. If the schedule for any activity described in the Progress Reports, including activities required to be described under ¶ 9.1(d), changes, SD shall notify EPA of such change at least seven days before performance of the activity.

10. SUBMISSION OF DELIVERABLES

- **10.1 Applicability**. SD shall submit deliverables for EPA approval or for EPA comment as specified in this SOW. If neither is specified, the deliverable does not require EPA's approval or comment. Paragraphs 10.2 (In Writing) through 10.4 (Technical Specifications) apply to all deliverables. Paragraph 10.5 (Certification) applies to any deliverable that is required to be certified. Paragraph 10.6 (Approval of Deliverables) applies to any deliverable that is required to be submitted for EPA approval.
- **10.2 In Writing**. As provided in ¶ 107 of the CD, all deliverables under this SOW must be in writing unless otherwise specified.
- 10.3 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 ¶ 10.4 All other deliverables shall be submitted to EPA in the electronic form and paper form as specified by the EPA RPM or OSC. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5" by 11", SDs shall also provide EPA with paper copies of such exhibits.
 - (a) Area 4 Removal Response Action: SD shall submit all deliverables required by this CD related to the Area 4 Removal Response Action or the approved Area 4 Removal Work Plan to EPA in accordance with the CD or the schedule set forth in the Area 4 Removal Work Plan. Unless otherwise instructed by EPA, SD shall direct all submissions required by the Area 4 Removal Work Plan to the OSC listed below.

Paul Ruesch
On-Scene Coordinator
United States Environmental Protection Agency Region 5
77 W. Jackson Blvd., Mail Code SE-5J
Chicago, IL 60604
ruesch.paul@epa.gov
312-886-7898

(b) **RD/RA:** All RD/RA deliverables must be submitted by the deadlines in the RD Schedule or RA Schedule, as applicable, to the RPM listed below.

James Saric Remedial Project Manager United States Environmental Protection Agency Region 5 77 W. Jackson Blvd., Mail Code SE-5J Chicago, IL 60604 saric.james@epa.gov 312-886-0992

10.4 Technical Specifications

- (a) Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable (EDD) format. Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.
- (b) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (1) in the ESRI File Geodatabase format or the Region 5 EDD 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 optionally be included 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://www.epa.gov/geospatial/epa-metadata-editor.
- (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 any further available guidance on attribute identification and naming.
- (d) Spatial data submitted by SD does not, and is not intended to, define the boundaries of the Site.
- **10.5 Certification**. All deliverables that require compliance with this ¶ 10 must be signed by the SD's Project Coordinator, or other responsible official of SD, 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 on 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 fine and imprisonment for knowing violations.

10.6 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 this 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 ¶ 10.6(a) (Initial Submissions), or if required by a notice of approval upon specified conditions under ¶ 10.6(a), SD 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 SD to correct the deficiencies; or (5) any combination of the foregoing.
- (c) **Implementation**. Upon approval, approval upon conditions, or modification by EPA under ¶ 10.6(a) (Initial Submissions) or ¶ 10.6(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) SD 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 ¶ 10.6(a) or ¶ 10.6(b) does not relieve SD of any liability for stipulated penalties under Section **XVI** (Stipulated Penalties) of the CD.
- **10.7 Supporting Deliverables**. SD shall submit each of the following supporting deliverables for EPA approval, except as specifically provided. SD shall develop the deliverables in accordance with all applicable regulations, guidance, and policies (see Section 13 (References)). SD 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. This plan shall be prepared in accordance with "OSWER Integrated Health and Safety Program

Operating Practices for OSWER Field Activities," Pub. 9285.0-OIC (Nov. 2002), available on the NSCEP database at http://www.epa.gov/nscep/index.html, and "EPA's Emergency Responder Health and Safety Manual," OSWER Directive 9285.3-12 (July 2005 and updates), available at http://www.epaosc.org/ HealthSafetyManual/manual-index.htm. In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 C.F.R. Part 1910 and 1926.

SD may develop one HASP that covers the Area 4 removal response action and Area 2 and 3 RD/RA activities and should be, as appropriate, updated to cover the various stages of Work described in the CD and this SOW. 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 Area 2, Area 3 or Area 4 (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 ¶ 7.1(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 10 (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 Areas 2, 3, and 4 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) 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. SD 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) augments the FSP and addresses sample analysis and data handling regarding the Work. The QAPP must include a detailed explanation of SD's quality assurance, quality control, and chain of custody procedures for all treatability, design, compliance, and monitoring samples. SD 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 the State and their authorized representative have reasonable access to laboratories used by SD in implementing the CD (SD's Labs);
 - (2) To ensure that SD's Labs analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring;
 - (3) To ensure that SD's 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 SD's Labs participate in an EPA-accepted QA/QC program or other program QA/QC acceptable to EPA;
 - (5) For SD to provide EPA and the State with notice at least 28 days prior to any sample collection activity;
 - (6) For SD to provide split samples and/or duplicate samples to EPA and the State upon request;
 - (7) For EPA and the State to take any additional samples that they deem necessary;

- (8) For EPA and the State to provide to SD, upon request, split samples and/or duplicate samples in connection with EPA's and the State's oversight sampling; and
- (9) For SD to submit to EPA and the State all sampling and tests results and other data in connection with the implementation of the CD.
- (e) **Long-Term Monitoring Plan**. The long-term monitoring program (LTM) will obtain baseline information, confirm the ongoing effects of natural processes and will document the continued decline in PCB concentrations in various media, resulting in reductions in risk and ecological exposures. The LTM program will be implemented until FRGs are achieved. The LTM may be used to obtain information to determine whether to perform additional actions. The LTM plan will include at a minimum:
 - (1) 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;
 - (2) Description of how performance data will be analyzed, interpreted, and reported, and/or other Area-related requirements;
 - (3) Description of verification sampling procedures;
 - (4) 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;
 - (5) 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).
 - (6) Fish monitoring annually for the first five years, then once every five years for the remainder of the LTM period. Fish samples should be collected within locations spanning Area 2 and as applicable Area 3 and the reference/background areas. Smallmouth bass and carp should be collected at each sampling location. Adult carp and both adult (fillet) and young-of-year (whole body) smallmouth bass should be collected and analyzed for total PCBs and lipid content;
 - (7) Surface water quality monitoring should occur annually for the first five years then once every five years for the remainder of the LTM period to support EPA's five-year reviews. Water samples should be analyzed for

total PCBs;

- (8) Sediment samples will be collected to support EPA's five-year reviews by monitoring ongoing recovery conditions and natural attenuation in selected portions of Area 2 and as applicable Area 3;
- (9) Visual inspections of riverbank erosion should occur annually for the first five years then once every five years for the remainder of the LTM period. Additional inspections should be conducted after major storm/flooding events, as necessary;
- (10) Biological samples may be collected from terrestrial areas to evaluate the effectiveness of floodplain remedies;
- (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 construction of the Area 2 RA, Area 3 RA, Area 4 TCRA and any and all other response activities undertaken by SD pursuant to this CD and SOW will satisfy 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 each response action to be implemented by SD;
 - (3) Describe the activities to be performed: (i) to provide confidence that the Area 2 PS will be met as well as the Area 3 PS and Area 4 PS as applicable; and (ii) to determine whether each applicable PS has 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) **Transportation and Off-Site Disposal Plan**. The Transportation and Off-Site Disposal Plan (TODP) describes plans to ensure compliance with ¶ 7.2 (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.
- (h) **O&M Plan**. The O&M Plan describes the requirements for inspecting, operating, and maintaining the RAs. SD shall develop the O&M Plan in accordance with *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017). The O&M Plan must include the following additional requirements:
 - (1) Description of the Areas 2 PS and, as applicable, the Area 3 PS, as well as the Cleanup Standards of the Action Memorandum required to be met to implement the Area 2 ROD, the Area 3 ROD, as applicable, and the Area 4 TCRA;
 - (2) Description of activities to be performed: (i) to provide confidence that the Area 2 PS and the Area 3 PS, as applicable, as well as the Cleanup Standards of the Action Memorandum or will be met; and (ii) to determine whether the Areas 2 and 3 PS, as well as the Cleanup Standards of the Action Memorandum, 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 which may endanger public health and the environment or
 may cause a failure to achieve the requisite performance standard;
 (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 performance standards are not achieved; and a schedule for implementing these corrective actions.

- (i) **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 for Area 2. SD shall develop the O&M Manual in accordance with *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017).
- (j) 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 Area 2 and, as applicable, Area 3. SD 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.
 - Owner's Affected Property, use best efforts to secure Non-Respondent Owner's cooperation in executing and recording, in accordance with the procedures of this ¶ 10.7(j), proprietary controls that: (i) grant a right of access to conduct any activity regarding the CD, including those activities listed in ¶ 31.a (Access Requirements); and (ii) grant the right to enforce the land, water, or other resource use restrictions set forth in ¶ 31.a(11) related to land, water, or other resource use restrictions).
 - (i) **Grantees**. The Proprietary Controls must be granted to one or more of the following persons and their representatives, as determined by EPA: the United States, the State, SD, and other appropriate grantees.
 - (4) **Initial Title Evidence**. SD shall, within the schedule set forth in the ICIAP:
 - (i) **Record Title Evidence**. Submit to EPA a title insurance commitment or other title evidence acceptable to EPA that: (i) names the proposed insured or the party in whose favor the title evidence runs, or the party who will hold the real estate interest, or

if that party is uncertain, names EPA, the State, the SD, or "To Be Determined;" (ii) covers the Affected Property that is to be encumbered; (iii) demonstrates that the person or entity that will execute and record the Proprietary Controls is the owner of such Affected Property; (iv) identifies all record matters that affect title to the Affected Property, including all prior liens, claims, rights (such as easements), mortgages, and other encumbrances (collectively, "Prior Encumbrances"); and (v) includes complete, legible copies of such Prior Encumbrances; and

(ii) **Non-Record Title Evidence**. Submit to EPA a report of the results of an investigation, including a physical inspection of the Affected Property, which identifies non-record matters that could affect the title, such as unrecorded leases or encroachments.

(5) Release or Subordination of Prior Liens, Claims, and Encumbrances.

- (i) SD shall secure the release, subordination, modification, or relocation of all Prior Encumbrances on the title to the Affected Property revealed by the title evidence or otherwise known to any Respondent, unless EPA waives this requirement as provided under ¶ 10.7(j)(5) (i)-(iv).
- (ii) SD may, by the deadline under ¶ 10.7(j)(4) (Initial Title Evidence), submit an initial request for waiver of the requirements of ¶ 10.7(j)(5)(i) regarding one or more Prior Encumbrances, on the grounds that such Prior Encumbrances cannot defeat or adversely affect the rights to be granted by the Proprietary Controls and cannot interfere with the remedy or result in unacceptable exposure to Waste Material.
- (iii) SD may, within 90 days after the Effective Date, or if an initial waiver request has been filed, within 45 days after EPA's determination on the initial waiver request, submit a final request for a waiver of the requirements of ¶ 10.7(J)(5)(i) regarding any particular Prior Encumbrance on the grounds that SD could not obtain the release, subordination, modification, or relocation of such Prior Encumbrance despite best efforts.
- (iv) The initial and final waiver requests must include supporting evidence including descriptions of and copies of the Prior Encumbrances and maps showing areas affected by the Prior Encumbrances. The final waiver request also must include evidence of efforts made to secure release, subordination, modification, or relocation of the Prior Encumbrances.

(v) SD shall complete their obligations under ¶ 10.7(j)(5)(i) regarding all Prior Encumbrances: within 180 days after the Effective Date; or if an initial waiver request has been filed, within 135 days after EPA's determination on the initial waiver request; or if a final waiver request has been filed, within 90 days after EPA's determination on the final waiver request.

(6) Update to Title Evidence and Recording of Proprietary Controls.

- (i) SD shall submit to EPA for review and approval, by the deadline specified in \P 10.7(j)(5)(v), all draft Proprietary Controls and draft instruments addressing Prior Encumbrances.
- (ii) Upon EPA's approval of the proposed Proprietary Controls and instruments addressing Prior Encumbrances, SD shall, within 15 days, update the original title insurance commitment (or other evidence of title acceptable to EPA) under ¶ 10.7(j)(4) (Initial Title Evidence). If the updated title examination indicates that no liens, claims, rights, or encumbrances have been recorded since the effective date of the original commitment (or other title evidence), SD shall secure the immediate recordation of the Proprietary Controls and instruments addressing Prior Encumbrances in the appropriate land records. Otherwise, SD shall secure the release, subordination, modification, or relocation under $\P 10.7(i)(5)(i)$, or the waiver under $\P10.7(j)(5)(ii)$ -(iv), regarding any newlydiscovered liens, claims, rights, and encumbrances, prior to recording the Proprietary Controls and instruments addressing Prior Encumbrances.
- (iii) If SD submitted a title insurance commitment under ¶ 10.7(j)(4)(i) (Record Title Evidence), then upon the recording of the Proprietary Controls and instruments addressing Prior Encumbrances, SD shall obtain a title insurance policy that: (i) is consistent with the original title insurance commitment; (ii) is for \$100,000 or other amount approved by EPA; (iii) is issued to EPA, SD, or other person approved by EPA; and (iv) is issued on a current American Land Title Association (ALTA) form or other form approved by EPA.
- (iv) SD shall, within 30 days after recording the Proprietary Controls and instruments addressing Prior Encumbrances, or such other deadline approved by EPA, provide EPA and to all grantees of the Proprietary Controls: (i) certified copies of the recorded Proprietary Controls and instruments addressing Prior Encumbrances showing the clerk's recording stamps; and (ii) the title insurance policy(ies) or other approved form of updated title

- evidence dated as of the date of recording of the Proprietary Controls and instruments.
- (7) SD shall monitor, maintain, enforce, and annually report on all Proprietary Controls required under this CD.
- (8) **Best Efforts**. As used in this Section, "best efforts" means the efforts that a reasonable person in the position of SD would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access and/or use restriction agreements. If, within 60 days after the Effective Date, SD are unable to accomplish what is required through "best efforts," they shall notify EPA, and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist SD, or take independent action, in obtaining such access and/or use restrictions. EPA reserves the right to pursue cost recovery regarding all costs incurred by the United States in providing such assistance or taking such action, including the cost of attorney time and the amount of monetary consideration or just compensation paid.

11. RD/RA SCHEDULES

11.1 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. SD may submit proposed revised RD Schedules or RA Schedules for EPA approval. 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.

11.2 Area 2 RD Schedule

	Description of		
	Deliverable, Task	¶ Ref.	Deadline
1	RDWP	5.1	60 days after EPA's Authorization to Proceed regarding Supervising Contractor under CD ¶ 9.c
2	PDIWP	5.3(a)	90 days after EPA's Authorization to Proceed regarding Supervising Contractor under CD ¶ 9.c
3	Preliminary (30%) RD	5.4, 5.3(a)	As scheduled in the Approved RDWP
4	Pre-final (95%) RD	5.5	60 days after EPA comments on Preliminary RD
5	Final (100%) RD	5.6	30 days after EPA comments on Pre-final RD

11.3 Area 2 RA Schedule

	Description of		
	Deliverable / Task	¶ Ref.	Deadline
			60 days after EPA Notice of
			Authorization to Proceed with RA or
			approval of Final (100%) RD, whichever
1	Award RA contract		is later
			120 days after EPA Notice of
			Authorization to Proceed with RA or
			approval of Final (100%) RD, whichever
2	RAWP	6.1	is later
3	Pre-Construction Conference	6.2(a)	15 days after Approval of RAWP
4	Start of Construction		60 days after Approval of RAWP
5	Completion of Construction		
6	Pre-final Inspection	6.3(b)	30 days after completion of construction
			30 days after completion of Pre-final
7	Pre-final Inspection Report	6.3(c)	Inspection
			30 days after Completion of Work
8	Final Inspection		identified in Pre-final Inspection Report
9	RA Report	6.3(c)	60 days after Final Inspection
10	Monitoring Report	6.4(a)	
11	Work Completion Report	8.2	
12	Periodic Review Support Plan	6.4(d)	Four years after Start of RA Construction

11.4 Area 3 RD Schedule. To be determined pursuant the "CD and SOW Modification to Incorporate the Area 3 ROD" provisions in the CD.

11.5 Area 3 RA Schedule. To be determined pursuant "CD and SOW Modification to Incorporate the Area 3 ROD" provisions in the CD.

12. STATE PARTICIPATION

- **12.1 Copies.** SD 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 SD, send a copy of such document to the State.
- **12.2 Review and Comment.** The State will have a reasonable opportunity for review and comment prior to:
 - (a) Any EPA approval or disapproval under ¶ 10.6 (Approval of Deliverables) of any deliverables related to RD/RA that are required to be submitted for EPA approval; and
 - (b) Any approval or disapproval of the Construction Phase under ¶ 6.3 (RA Construction Completion), any disapproval of, or Certification of RA Completion under ¶ 6.4 (Certification of RA Completion), and any disapproval of, or Certification of Work Completion under ¶ 8 (Certification of Work Completion).

13. REFERENCES

- 13.1 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 Web pages listed in ¶ 13.212.2:
 - (a) A Compendium of Superfund Field Operations Methods, OSWER 9355.0-14, EPA/540/P-87/001a (Aug. 1987).
 - (b) Contaminated Sediment Remediation Guidance for Hazardous Waste Sites, OSWER 93355.0-85, EPA/540/R-05/012 (Dec. 2005).
 - (c) CERCLA Compliance with Other Laws Manual, Part I: Interim Final, OSWER 9234.1-01, EPA/540/G-89/006 (Aug. 1988).
 - (d) Guidance for Conducting Remedial Investigations and Feasibility Studies, OSWER 9355.3-01, EPA/540/G-89/004 (Oct. 1988).
 - (e) CERCLA Compliance with Other Laws Manual, Part II, OSWER 9234.1-02, EPA/540/G-89/009 (Aug. 1989).
 - (f) 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).

- (g) Guidance on Expediting Remedial Design and Remedial Actions, OSWER 9355.5-02, EPA/540/G-90/006 (Aug. 1990).
- (h) Guide to Management of Investigation-Derived Wastes, OSWER 9345.3-03FS (Jan. 1992).
- (i) Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, OSWER 9355.7-03 (Feb. 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).
- (1) 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) Operation and Maintenance in the Superfund Program, OSWER 9200.1-37FS, EPA/540/F-01/004 (May 2001).
- (o) Comprehensive Five-year Review Guidance, OSWER 9355.7-03B-P, 540-R-01-007 (June 2001).
- (p) Guidance for Quality Assurance Project Plans, QA/G-5, EPA/240/R-02/009 (Dec. 2002).
- (q) Institutional Controls: Third Party Beneficiary Rights in Proprietary Controls (Apr. 2004).
- (r) Quality management systems for environmental information and technology programs -- Requirements with guidance for use, ASQ/ANSI E4:2014 (American Society for Quality, February 2014).
- (s) Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A though 900C (Mar. 2005).
- (t) Superfund Community Involvement Handbook, SEMS 100000070 (January 2016), https://www.epa.gov/superfund/community-involvement-tools-and-resources.
- (u) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).

- (v) EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006).
- (w) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (x) USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, ILM05.4 (Dec. 2006).
- (y) USEPA Contract Laboratory Program Statement of Work for Organic Analysis, SOM01.2 (amended Apr. 2007).
- (z) EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2008), https://www.epa.gov/geospatial/geospatial-policies-and-standards and https://www.epa.gov/geospatial/epa-national-geospatial-data-policy.
- (aa) Principles for Greener Cleanups (Aug. 2009), https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups.
- (bb) USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration), ISM01.2 (Jan. 2010).
- (cc) Close Out Procedures for National Priorities List Sites, OSWER 9320.2-22 (May 2011).
- (dd) Recommended Evaluation of Institutional Controls: Supplement to the "Comprehensive Five-Year Review Guidance," OSWER 9355.7-18 (Sep. 2011).
- (ee) Construction Specifications Institute's MasterFormat 2012, available from the Construction Specifications Institute, http://www.csinet.org/masterformat.
- (ff) 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).
- (gg) 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).
- (hh) EPA's Emergency Responder Health and Safety Manual, OSWER 9285.3-12 (July 2005 and updates), https://www.epaosc.org/ HealthSafetyManual/manual-index.htm.
- (ii) Broader Application of Remedial Design and Remedial Action Pilot Project Lessons Learned, OSWER 9200.2-129 (Feb. 2013).

- (jj) Guidance for Management of Superfund Remedies in Post Construction, OLEM 9200.3-105 (Feb. 2017), https://www.epa.gov/superfund/superfund-post-construction-completion.
- **13.2** A more complete list may be found on the following EPA Web pages:

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

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

13.3 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 SD receive notification from EPA of the modification, amendment, or replacement.