REMEDIAL DESIGN/REMEDIAL ACTION

STATEMENT OF WORK

LCP-HOLTRACHEM SUPERFUND SITE

Riegelwood, Columbus County, State of North Carolina

EPA Region 4

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1. INTRODUCTION

1.1 Purpose of the SOW. This Statement of Work (SOW) sets forth the procedures and requirements for implementing the Work by Honeywell, as a Settling Defendant (SD) to the Consent Decree for Remedial Action and Remedial Design (CD or CD for RD/RA).

1.2 Structure of the SOW

- Section 2 (Community Involvement) sets forth EPA's and SD's responsibilities for community involvement.
- Section 3 (Remedial Design) sets forth the process for developing the RD, which includes the submission of specified primary deliverables.
- Section 4 (Remedial Action) sets forth requirements regarding the completion of the RA, including primary deliverables related to completion of the RA.
- Section 5 (Reporting) sets forth SD's reporting obligations.
- Section 6 (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 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 State participation.
- Section 9 (References) provides a list of references, including URLs.
- **1.3** The Scope of the Remedy includes the actions described in Part 2, Section 12 of the ROD. The major components include the following.
 - Treatment of mercury waste and contaminated soil, considered to be principal threat waste (PTW), located beneath the former mercury cell building and former retort pad via In-Situ Stabilization (ISS)
 - Capping of the areas treated by ISS with a cover that meets Resource Conservation and Recovery Act (RCRA) Subtitle C landfill final cover Applicable or Relevant and Appropriate Requirements (ARARs)
 - Excavation of approximately 15,400 cubic yards (yd³) of contaminated soil and sediment
 - Capping approximately 1.7 acres of contaminated soil with a geosynthetic liner and vegetative cover
 - Construction, operation, closure, maintenance and monitoring of an on-site disposal unit that meets Toxic Substances Control Act (TSCA) chemical waste landfill ARARs in Title 40 Code of Federal Regulations (CFR) section 761.75
 - Closure of the underground storm water conveyance system by cleaning and/or sealing off and solidifying the pipes/inlets in place using flowable grout
 - Disposal of stockpiled Wastewater Treatment Solids (WWTS), solids removed from the storm water conveyance system, and excavated contaminated soil and sediment that are not RCRA hazardous wastes in the constructed on-site TSCA disposal unit

- Treatment and/or disposal of RCRA hazardous wastes including soil that is considered RCRA characteristic waste or contains RCRA listed waste, if generated, at an off-site permitted RCRA treatment/disposal facility
- Decommissioning of the storm water treatment system and restoration of the site to natural drainage following completion of remedial action
- Disposal or recycling of demolition debris from the stormwater treatment system and other potentially dismantled structures. Disposition will be determined based on testing of the debris to determine if it is RCRA hazardous waste
- Monitoring and maintenance of the closed RCRA units (former surface impoundments) in accordance with RCRA ARARs for post-closure care of a hazardous waste surface impoundment
- Groundwater monitoring in accordance with ARARs to confirm TSCA disposal unit and closed RCRA units' integrity
- Engineering Controls in the form of fencing, warning signs and erosion control measures to control sedimentation from stormwater runoff
- Institutional Controls (ICs) in the form of a restrictive covenant and/or Notice of Contaminated Site in accordance with North Carolina statute
- Five-Year Reviews (FYRs)
- **1.4** 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 the SOW, and the term "Section" means a section 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 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), and/or any use of the Technical Assistance Services for Communities (TASC) contract.
- (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 a website for 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, as required by EPA. 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. REMEDIAL DESIGN

- **3.1 RD Work Plan**. SD shall submit a Remedial Design (RD) Work Plan (RDWP) for EPA approval. The RDWP must include:
 - (a) Plans for implementing all RD activities identified in this SOW, in the RDWP, or required by EPA to be conducted to develop the RD;
 - (b) A description of the overall management strategy for performing the 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 Remedial Action (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) Description of any proposed treatability study;
 - (h) Descriptions of any applicable permitting requirements and other regulatory requirements;
 - (i) Description of plans for obtaining access in connection with the Work, such as property acquisition, property leases, and/or easements; and

- (j) The following supporting deliverables described in ¶ 6.7 (Supporting Deliverables): Health and Safety Plan; and Emergency Response Plan, Field Sampling Plan and Quality Assurance Project Plan.
- **3.2** SD shall meet regularly with EPA to discuss design issues as necessary, as directed or determined by EPA.
- **3.3 Pre-Design Investigation**. The purpose of the Pre-Design Investigation (PDI) is to address data gaps by conducting additional field investigations.
 - (a) **PDI Work Plan**. If EPA requests, SD 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 quality assurance/quality control (QA/QC) requirements set forth in the Quality Assurance Project Plan (QAPP) as described in ¶ 6.7(d).
 - (b) Following the PDI, SD 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, if applicable;
 - (7) Photographs documenting the work conducted; and
 - (8) Conclusions and recommendations for RD, including design parameters and criteria.
 - (c) EPA may require SD to supplement the PDI Evaluation Report and/or to perform additional pre-design studies.

3.4 Treatability Study

- (a) SD shall perform a Treatability Study (TS) for the purpose of determining the methods, substances and ratios to be used to successfully treat areas scheduled for ISS. The ISS Treatability Study will be performed for material at the Retort Pad area to develop the ISS mix design and ISS Work Plan. If needed, a supplemental study will be performed during RA for material to confirm/adjust the Retort Pad mix design for the Cell Building material after the WWTS stockpile in that area has been relocated to the on-site landfill.
- (b) SD shall submit a TS Work Plan (TSWP) for EPA approval. SD shall prepare the TSWP in accordance with EPA's *Guide for Conducting Treatability Studies under CERCLA, Final* (Oct. 1992), as supplemented for RD by the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995).
- (c) Following completion of the TS, SD shall submit a TS Evaluation Report for EPA comment.
- (d) EPA may require SD to supplement the TS Evaluation Report and/or to perform additional treatability studies based on the results of the treatability studies noted in paragraph 3.4(a).
- **3.5** Initial (50%) RD. SD shall submit an Initial 50% RD for EPA's comment. The 50% 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 \P 7.3 (RA Schedule); and

(h) Updates of all supporting deliverables required to accompany the RDWP and the following additional supporting deliverables described in ¶ 6.7 (Supporting Deliverables): Site Wide 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.

SD shall present and discuss the basis of design and the design plans to EPA prior to submittal.

- **3.6 Pre-Final (95%) RD**. SD shall submit the Pre-final (95%) RD for EPA's final confirmation. The Pre-final RD must be a continuation and expansion of the previous design submittal and must address EPA's comments regarding the Intermediate 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, as appropriate;
 - (b) A survey and engineering drawings showing existing Site 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 Intermediate RD;
 - (d) A specification for photographic documentation of the RA; and
 - (e) Updates of all supporting deliverables required to accompany the Initial (50%) RD.
- **3.7** Final (100%) RD. SD shall submit the Final (100%) RD for EPA approval if comments were not resolved in the 95% submittal. The Final RD must address EPA's comments on the Pre-final RD and must include final versions of all Pre-final RD deliverables.

4. **REMEDIAL ACTION**

- **4.1 RA Work Plan**. SD shall submit a RA Work Plan (RAWP) for EPA approval that includes:
 - (a) A proposed RA Construction Schedule in Gantt chart format, or equivalent;
 - (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.
- **4.2 Independent Quality Assurance Team**. SD shall notify EPA of SD's designated Independent Quality Assurance Team (IQAT). The IQAT will be independent of the Remedial Action Constructor. SD may hire, but need not hire, a third party for this purpose. SD's notice must include the names, titles, contact information, and qualifications of the members of the IQAT. The IQAT will have the responsibility to determine whether Work is of expected quality and conforms to applicable plans and

specifications. The IQAT will have the responsibilities as described in ¶ 2.1.3 of the Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties, EPA/540/G-90/001 (Apr. 1990).

4.3 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 regularly 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 an office desk with chair, a file cabinet, a telephone with a private line, wireless internet access, and sanitation facilities.
- (3) SD shall provide personal protective equipment needed for EPA personnel and any oversight officials to perform their oversight duties.
- (4) 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.

4.4 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, SD 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 \P 4.4(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 SD 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, SD shall immediately notify the authorized EPA officer orally.
- (c) The "authorized EPA officer" for purposes of immediate oral notifications and consultations under ¶ 4.4(a) and ¶ 4.4(b) is the EPA Project Coordinator, the EPA Alternate Project Coordinator (if the EPA Project Coordinator is unavailable), or the EPA Superfund Emergency Response, Removal and Prevention Branch, Region 4 (if neither EPA Project Coordinator is available).
- (d) For any event covered by ¶ 4.4(a) and ¶ 4.4(b), SD 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 \P 4.4 are in addition to the reporting required by CERCLA § 103 or EPCRA § 304.

4.5 Off-Site Shipments

- (a) SD 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. SD will be deemed to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if SD 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) SD 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. SD 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. SD shall provide the notice after the award of the contract for RA construction and before the Waste Material is shipped.

(c) SD 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 Record of Decision. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes and non-RCRA 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.

4.6 **RA Construction Completion**

- (a) For purposes of this ¶ 4.6, "RA Construction" comprises, 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**. SD shall schedule an inspection to review the construction and operation of the system and to review whether the system 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) **Shakedown Period**. There shall be a shakedown period of up to one year for EPA to review whether the remedy is functioning properly and performing as designed. SD shall provide such information as EPA requests for such review.
- (d) RA Report. Following the shakedown period, SD shall submit an "RA Report" 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 ¶ 6.5 (Certification).

- (e) 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.
- (f) If EPA determines, based on the initial or any subsequent RA Report, that RA Construction is complete, EPA shall so notify SD.

4.7 Notice of RA Completion

- (a) **RA Completion Inspection**. The RA is "Complete" for purposes of this ¶ 4.7 when it has been fully performed and the Performance Standards have been achieved. SD shall schedule an inspection for the purpose of obtaining EPA's Notice of RA Completion. The inspection must be attended by SD and EPA and/or their representatives.
- (b) RA Report. Following the inspection, SD shall submit a RA Report to EPA requesting EPA's Notice 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 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.
- (d) If EPA concludes, based on the initial or any subsequent RA Report/Monitoring Report requesting Notice of RA Completion, that the RA is Complete, EPA shall so notify the SD. This notice will constitute the Notice of RA Completion for purposes of the CD. Issuance of the Notice of RA Completion will not affect SD's remaining obligations under the CD.
- **4.8 Periodic Review Support Plan**. SD shall submit the periodic review support plan (PRSP) for EPA approval. The PRSP addresses the studies and investigations that SD 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 guidances.

4.9 Notice of Work Completion

- (a) **Work Completion Inspection**. SD shall schedule an inspection for the purpose of obtaining EPA's Notice of Work Completion. The inspection must be attended by SD and EPA and/or their representatives.
- (b) Work Completion Report. Following the inspection, SD shall submit a report to EPA requesting EPA's Notice of Work Completion. 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 ¶ 6.5 (Certification). If the RA Report/Monitoring Report submitted under ¶ 4.7(b) includes all elements required under this ¶ 4.9(b), then the RA Report/Monitoring Report suffices to satisfy all requirements under this ¶ 4.9(b).
- (c) 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.
- (d) If EPA concludes, based on the initial or any subsequent report requesting Notice of Work Completion, that the Work is complete, EPA shall so notify SD. Issuance of the Notice 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), XIX (Retention of Records), and XVIII (Access to Information) of the CD; (3) Institutional Controls obligations as provided in the ICIAP; and payment of Response Costs under Section X (Payment for Response Costs) of the CD.

5. **REPORTING**

- **5.1 Progress Reports**. Commencing with the month following the Effective Date of the CD and until EPA approves the RA Construction Completion, 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 validated results of sampling, tests, and all other data received or generated by SD;

- (c) A description of all deliverables that SD 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 SD 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, SD shall notify EPA of such change at least 7 days before performance of the activity.

6. **DELIVERABLES**

- 6.1 Applicability. SD 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 is 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**. All deliverables under this SOW must be in writing unless otherwise specified.

6.3 General Requirements for Deliverables

- (a) Except as otherwise provided in this CD, SD shall direct all deliverables required by this CD to the EPA Project Coordinator John Nolen at Superfund Restoration & Site Evaluation Branch, Superfund Division, U.S. EPA Region 4, 61 Forsyth Street, S.W., Atlanta, Georgia 30303, Nolen.John@epa.gov, (404) 562-8750.
- (b) All deliverables provided to the State in accordance with \P 8 (State Participation) shall be directed to NCDEQ.
- All deliverables must be submitted by the deadlines in the RD Schedule or RA
 Schedule, as applicable. SD shall submit all deliverables 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 includes maps, drawings, or other exhibits that are larger than 8.5" by 11", SD shall also provide EPA with paper copies of such exhibits.

6.4 Technical Specifications

- (a) Sampling and monitoring data should be submitted in standard Regional Electronic Data Deliverable (EDD) format and/or other format(s) as agreed to by the EPA Project Coordinator.
- (b) 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 or as directed by the EPA Project Coordinator. 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 http://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.
- **6.5** Certification. All deliverables that require compliance with this ¶ 6.5 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.

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), SD shall, within 45 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 \P 6.6(a) (Initial Submissions) or \P 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) SD shall take any action required by such deliverable, or portion thereof.
- **6.7 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, guidances, and policies (see Section 9 (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. SD 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 site currently has a Post Removal Site Control Plan (PRSCP) that may be used as the Emergency Response Plan. The PRSCP should be reviewed and updated to ensure it includes the components discussed in this paragraph. 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 ¶ 4.4(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 ¶ 4.4 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) 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 its authorized representative have reasonable access to laboratories used by SD in implementing the Work (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 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 upon request;
- (7) For EPA to take any additional samples that it deems necessary;
- (8) For EPA to provide to SD, upon request, split samples and/or duplicate samples in connection with EPA's oversight sampling; and
- (9) For SD to submit to EPA all sampling and tests results and other data in connection with the implementation of the Work.
- (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) **Transportation and Off-Site Disposal Plan**. The Transportation and Off-Site Disposal Plan (TODP) describes plans to ensure compliance with ¶ 4.5 (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 RA. 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 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 which 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.
- (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. 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 the Site. 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.

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. 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 previouslyapproved RD and/or RA Schedules.

7.2 RD Schedule

	Description of Deliverable, Task	¶ Ref.	Deadline
1	Community Involvement Coordinator	2.1(c)	30 days after EPA request
2	Technical Assistance Plan (TAP)	2.2(c)	30 days after EPA request
3	Designate TAP Coordinator	2.2(c)(7)	30 days after EPA request
4	Remedial Design Work Plan	3.1	60 days after EPA's Authorization to Proceed regarding Supervising Contractor under CD ¶ 9.c
5	Pre-Design Investigation Work Plan	3.3(a)	60 days after EPA's Authorization to Proceed regarding Supervising Contractor under CD ¶ 9.c
6	PDI Evaluation Report	3.3(b)	60 days after receipt of validated laboratory data reports
7	Treatability Study Work Plan	3.4(b)	60 days after Approval of Remedial Design Work Plan
8	Treatability Study Evaluation Report	3.4(c)	60 days after receipt of treatability study data results
9*	Initial (50%) RD	3.6	45 days after submission of the PDI Evaluation Report and Treatability Study Evaluation Report, whichever is later
10	Pre-final (95%) RD	3.7	45 days after EPA comments on Initial RD
11	Final (100%) RD	3.8	30 days after EPA comments on Pre-final RD
Notes	•		
	* If the two evaluation reports are submitted on different dates, the latter submittal triggers the 45-		
day clock.			

7.3 RA Schedule

	Description of Deliverable / Task	¶ Ref.	Deadline
1	Award RA contract		60 days after EPA Notice of Authorization to Proceed with RA
2	Remedial Action Work Plan	4.1	45 days after RA contract awarded
3	Designate IQAT	4.2	30 days after EPA Notice of Authorization to Proceed with RA
4	Pre-Construction Conference	4.3(a)	30 days after Approval of RAWP
5	Start of RA Construction		30 days after Approval of RAWP
6	Emergency Response/Release	4.4(b),	Orally immediately; in writing within 30 days
6	Reporting	4.4(d)	after conclusion of response
7	Off-Site Shipment Notification	4.5(b)	After award of the contract for RA construction and before waste is shipped off-site
8	Inspection of Constructed Remedy	4.6(b)	30 days after completion of construction
9	RA Report	4.6(d)	60 days after Inspection of Constructed Remedy
10	Monitoring Report	4.7(a)	30 days after RA completion
11	Periodic Review Support Plan	4.8	Within 1 year of Start of RA Construction
11	Work Completion Inspection	4.9(a)	30 days after completion of all Work (aside from the Work Completion Inspection and the Work Completion Report)
12	Work Completion Report	4.9(b)	30 days after Work Completion Inspection

7.4 Progress Reports

	Description of Deliverable / Task	¶ Ref.	Deadline
1	Monthly Progress Reports	5.1	Monthly, beginning within 30 days following lodging of the CD
2	Construction Progress Reports	5.1	Weekly during active construction, beginning 7 days after start of RA Construction and lasting until Inspection of Constructed Remedy is completed
3	Quarterly TAP progress reports	2.2(c)(9)	Quarterly after TAP assistance is provided to a community group

	Description of Deliverable / Task	¶ Ref.	Deadline
1	Health and Safety Plan	6.7(a)	On the same date as the RD Work Plan
2	Emergency Response Plan	6.7(b)	On the same date as the RD Work Plan
3	Field Sampling Plan	6.7(c)	On the same date as the RD Work Plan
4	Quality Assurance Project Plan	6.7(d)	On the same date as the RD Work Plan
5	Site Wide Monitoring Plan	6.7(e)	On the same date as the RA Work Plan
6	Construction Quality Assurance/Quality Control Plan	6.7(f)	On the same date as the RA Work Plan
7	Transportation and Off-Site Disposal Plan	6.7(g)	On the same date as the RA Work Plan
8	O&M Plan	6.7(h)	On the same date as the RA Work Plan
9	O&M Manual	6.7(i)	14 days prior to Inspection of Constructed Remedy
10	Institutional Controls Implementation and Assurance Plan	6.7(j)	On the same date as the RD Work Plan

7.5 Supporting Deliverables

8. STATE PARTICIPATION

- **8.1 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.
- **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 deliverables that are required to be submitted for EPA approval; and
 - (b) Any approval or disapproval of the Construction Phase under ¶ 4.6 (RA Construction Completion), any disapproval of, or Notice of RA Completion under ¶ 4.7 (Notice of RA Completion), and any disapproval of, or Notice of Work Completion under ¶ 4.9 (Notice of Work Completion).

9. **REFERENCES**

- **9.1** 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 ¶ 9.2:
 - (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).
 - 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).
 - (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) Comprehensive Five-year Review Guidance, OSWER 9355.7-03B-P, 540-R-01-007 (June 2001).
- 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) Quality management systems for environmental information and technology programs -- Requirements with guidance for use, ASQ/ANSI E4:2014 (American Society for Quality, February 2014).
- Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A though 900C (Mar. 2005).
- (s) Superfund Community Involvement Handbook, SEMS 100000070 (January 2016), <u>https://www.epa.gov/superfund/community-involvement-tools-and-resources</u>.
- (t) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).
- (u) EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006).
- (v) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (w) USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, ILM05.4 (Dec. 2006).
- (x) USEPA Contract Laboratory Program Statement of Work for Organic Analysis, SOM01.2 (amended Apr. 2007).
- (y) EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2008), <u>https://www.epa.gov/geospatial/geospatial-policies-and-standards</u> and <u>https://www.epa.gov/geospatial/epa-national-geospatial-data-policy</u>.
- (z) Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, OSWER 9283.1-33 (June 2009).
- (aa) Principles for Greener Cleanups (Aug. 2009), https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups.
- (bb) Providing Communities with Opportunities for Independent Technical Assistance in Superfund Settlements, Interim (Sep. 2009).

- (cc) USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration), ISM01.2 (Jan. 2010).
- (dd) Close Out Procedures for National Priorities List Sites, OSWER 9320.2-22 (May 2011).
- (ee) Groundwater Road Map: Recommended Process for Restoring Contaminated Groundwater at Superfund Sites, OSWER 9283.1-34 (July 2011).
- (ff) Recommended Evaluation of Institutional Controls: Supplement to the "Comprehensive Five-Year Review Guidance," OSWER 9355.7-18 (Sep. 2011).
- (gg) Construction Specifications Institute's MasterFormat 2012, available from the Construction Specifications Institute, http://www.csinet.org/masterformat.
- (hh) Updated Superfund Response and Settlement Approach for Sites Using the Superfund Alternative Approach , OSWER 9200.2-125 (Sep. 2012)
- (ii) 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).
- (jj) 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).
- (kk) EPA's Emergency Responder Health and Safety Manual, OSWER 9285.3-12 (July 2005 and updates), <u>https://www.epaosc.org/_HealthSafetyManual/manual-index.htm.</u>
- (ll) Broader Application of Remedial Design and Remedial Action Pilot Project Lessons Learned, OSWER 9200.2-129 (Feb. 2013).
- (mm) Guidance for Evaluating Completion of Groundwater Restoration Remedial Actions, OSWER 9355.0-129 (Nov. 2013).
- (nn) Groundwater Remedy Completion Strategy: Moving Forward with the End in Mind, OSWER 9200.2-144 (May 2014).
- (oo) Guidance for Management of Superfund Remedies in Post Construction, OLEM 9200.3-105 (Feb. 2017), <u>https://www.epa.gov/superfund/superfund-post-</u> <u>construction-completion</u>.

9.2 A more complete list may be found on the following EPA Web pages:

Laws, Policy, and Guidance: <u>http://www.epa.gov/superfund/superfund-policy-guidance-and-laws</u>

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

9.3 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.