

APPENDIX C

**STATEMENT OF WORK FOR DIAMOND ALKALI OPERABLE UNITS 2 AND 4:
CONSTRUCTION OF UPLAND PROCESSING FACILITY,
CONSTRUCTION OF UPLAND SUPPORT FACILITIES
AND OPERABLE UNIT 2 BASELINE SAMPLING**

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1. INTRODUCTION

- 1.1 Purpose of SOW.** This SOW sets forth the procedures and requirements for implementing the Work.
- 1.2** The Scopes of the Operable Unit 2 (OU2) Remedial Action and OU4 Remedial Action include a number of components identified in Section 12 of the OU2 Record of Decision (ROD) and Section 12 of the OU4 ROD, respectively. Specifically, the OU2 ROD provides that dredged materials will be barged or pumped to an upland processing facility (UPF) in the vicinity of the Lower Passaic River/Newark Bay shoreline for dewatering. The OU4 ROD provides for dredged sediments to be barged to a nearby commercial facility for processing or to the sediment processing facility constructed for the OU2 Remedial Action. Dewatered materials from the OU2 and OU4 Remedial Actions will be transported to permitted treatment facilities and landfills in the United States or Canada for disposal.
- 1.3** The Remedial Design for the OU2 Remedy approved by EPA on May 6, 2024 is described in the Design Criteria Report, Basis of Design Report and all appendices, Community Health and Safety Plan (CHASP), Construction Quality Assurance and Quality Control Plan (Construction QA/QC Plan), Institutional Controls Implementation and Assurance Plan, Operation and Maintenance Plan, Site Wide Monitoring Plan (SWMP) and Transportation and Offsite Disposal Plan (TODP). The Basis of Design Report includes the following components that will be performed under this SOW (Section numbers and appendices in this ¶ 1.3 refer to the Basis of Design Report, except where noted):
- (a) Section 9: Dredged material from OU2 will require dewatering or stabilization before beneficial use or offsite disposal. This will be done at a UPF (Section 9.1), upland support facilities (USFs) (Section 9.2), and commercial dredged material management facilities (Section 9.3). Dewatered and stabilized dredged material will be disposed at licensed landfills, or portions of the dredged material that are of suitable quality may be placed at approved beneficial use sites, as discussed in Section 9.4.
 - (b) Section 5.1: Several upland facilities will be needed to support Remedial Action implementation. Development of upland facilities will be required to start in-river construction, although some sites may be needed for only a portion of the work. Initially, a UPF (Sections 5.1.1 and 5.1.2) and select USFs (Section 5.1.3) will be needed for management of debris and dredged material, including dredged non-aqueous phase liquid (NAPL)-containing sediment, and delivery and management of residuals stabilization layer material, in addition to providing access to the river. Before constructing the engineered cap, existing USFs will be redeveloped and/or additional USFs necessary for the delivery and management of capping materials will be constructed. Development of upland facilities will incorporate air emissions control measures identified in the air emissions evaluations (Appendix U1 [Attachment U1-7] and Appendix U2 [Attachment U2-4]) that are applicable to the operations at each upland facility and required by the Remedial

Design Specifications (Appendix B). Field offices and sites for staging personnel, materials, and equipment will be needed throughout the Remedial Action.

- (c) Sections 5.1 and 5.2.1: In advance of in-river construction, fixed sampling stations (Section 5.1.4) will be installed at several upland sites before initiating the baseline water column chemical sampling that will be conducted as part of the resuspension monitoring program. The resuspension monitoring program that will be implemented during the Remedial Action includes water column chemical sampling from five defined locations and baseline sampling from these same locations that will be performed before initiating dredging activities. Four of these locations are fixed sampling stations within OU2 that will be configured with automated sampling equipment, and the fifth location is a boat-based location in Newark Bay. The baseline sampling will use the same equipment and procedures to be applied during construction, which requires that the sampling systems be installed before the baseline sampling begins. The baseline sampling also includes monitoring of water quality indicators, including turbidity, using moored sensor arrays. These moored sensor arrays will also be installed for a period of time for baseline data collection before dredging begins. The resuspension monitoring program requirements are summarized in Section 6.11 and detailed in Appendix J3. The implementation details for the resuspension monitoring program are included in the Resuspension Monitoring Field Sampling Plan (Appendix E to the Construction QA/QC Plan).
 - (d) Section 10: A component of the CHASP is to evaluate the baseline air quality, odor, and noise conditions through monitoring so that construction-related impacts can be detected in the environmental monitoring program.
 - (e) SWMP Section 4 and Table 2-2: Baseline fish and crab tissue contaminant concentrations will be collected before the start of dredging in order to evaluate the species to be collected during the long-term observational monitoring to be implemented after OU2 remedial construction is completed and to estimate baseline contaminant concentrations in fish and crab tissue before remedial construction.
- 1.4** The terms used in this SOW that are defined in CERCLA, in regulations promulgated under CERCLA, or in the Consent Decree (Decree), have the meanings assigned to them in CERCLA, in such regulations, or in the Decree, 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** As requested by EPA, Settling Defendant shall conduct community involvement activities under EPA’s oversight as provided for in, and in accordance with this Section. Such activities may include designation of a Community Coordinator, upon request by EPA.

2.2 Community Involvement Responsibilities

- (a) EPA has the lead responsibility for developing and implementing community involvement activities at the Site. In 2017 and 2024, during the OU2 and OU4 Remedial Design phases, EPA developed Community Involvement Plans (CIPs) for OU2 and OU4, respectively. In accordance with 40 C.F.R. § 300.435(c), EPA shall review the existing CIPs and determine whether they should be revised to describe further public involvement activities during the Work that are not already addressed or provided for in the existing CIPs.
- (b) **Settling Defendant's Community Coordinator.** As requested by EPA, Settling Defendant shall, within 15 days, designate and notify EPA of Settling Defendant's Community Coordinator. Settling Defendant may hire a contractor for this purpose. Settling Defendant's notice must include the name, title, and qualifications of the Settling Defendant's Community Coordinator. Settling Defendant's Community Coordinator shall coordinate his/her activities with EPA's Community Involvement (CI) Coordinator, provide support regarding EPA's community involvement activities, and as requested by EPA's CI Coordinator, provide draft responses to the public's inquiries including requests for information or data about the Site. The Settling Defendant's Community Coordinator has the responsibility to ensure that when they communicate with the public, the Settling Defendant protects any "Personally Identifiable Information" (PII) (*e.g.* sample results from residential properties) in accordance with "EPA Policy 2151.0: Privacy Policy."
- (c) As requested by EPA, Settling Defendant shall participate in community involvement activities, including participation in: (1) public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site (with interpreters present for community members with limited English proficiency); and (2) Community Advisory Group (CAG) meetings. Settling Defendant'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 (TAG) 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 Settling Defendant's responsibilities for community involvement activities. All community involvement activities conducted by Settling Defendant at EPA's request are subject to EPA's oversight. Upon EPA's request, Settling Defendant shall establish, as early as is feasible, a community information repository at or near the Site, as provided in the CIP, to house one copy of the administrative record.
- (d) **Information for the Community.** As requested by EPA, Settling Defendant shall develop and provide to EPA information about the implementation of the remedy including: (1) once a Supervising Contractor has been selected and after the award of the contract for the Work, an update to the CHASP to incorporate information

provided in the Community Impacts Mitigation Plan¹ to the extent that such information is not already included in the CHASP and annual updates before the start of each construction season, as specified in Section 1 of the CHASP included in the OU2 Remedial Design approved by EPA on May 6, 2024; (2) any validated data from monitoring of impacts to communities as provided in the CHASP; (3) schedules prepared under Section 7; (4) dates that Settling Defendant completed each task listed in the schedules; and (5) digital photographs of the Work being performed, together with descriptions of the Work depicted in each photograph, the purpose of the Work, the equipment being used, and the location of the Work. The EPA Project Coordinator may use this information for communication to the public via EPA's website, social media, or local and mass media. The information provided to EPA should be suitable for sharing with the public and the education levels of the community. Translations should be in the dominant language(s) of community members with limited English proficiency.

3. COORDINATION AND SUPERVISION

3.1 Selection of Project Coordinators and Supervising Contractor

- (a) Settling Defendant's Project Coordinator and Supervising Contractor each:
 - (i) must have sufficient technical expertise to carry out their responsibilities;
 - (ii) may not be attorneys representing any Settling Defendant in this matter;
 - (iii) may not be the same person; and (iv) may not have a conflict of interest regarding the project. The Supervising Contractor must have a quality assurance system that complies with the most recent version of Quality Systems for Environmental Data and Technology Programs -- Requirements with Guidance for Use (American National Standard), ANSI/ASQC E4 (Feb. 2014).

¹ The Community Impacts Mitigation Plan is a document outlined in the EPA/DOJ model RD/RA consent decree SOW, which describes all activities to be performed: (1) to reduce and manage the impacts from remedy implementation (e.g., air emissions, traffic, noise, odor, temporary or permanent relocation) to residential areas, schools, playgrounds, healthcare facilities, or recreational or impacted public areas ("Community Areas") from and during remedy implementation, (2) to conduct monitoring in Community Areas of impacts from remedy implementation, (3) to expeditiously communicate validated remedy implementation monitoring data, (4) to make adjustments during remedy implementation in order to further reduce and manage impacts from remedy implementation to affected Community Areas, (5) to expeditiously restore community resources damaged during remediation such as roads and culverts, and (6) to mitigate the economic effects that the Remedial Action will have on the community by structuring remediation contracts to allow more local business participation. The CIMP should contain information about impacts to Community Areas that is sufficient to assist the Remedial Project Manager in performing the evaluations recommended under the *Superfund Community Involvement Handbook*, OLEM 9230.0-51 (March 2020), pp. 53-56.

- (b) Settling Defendant shall notify EPA, within 10 days after the Effective Date, of the name, title, contact information, and qualifications of their proposed Project Coordinator and Supervising Contractor.
 - (c) EPA shall issue a notice of disapproval and/or authorization to proceed regarding any proposed Project Coordinator and Supervising Contractor, as applicable. Any EPA disapproval must be based on the criteria under ¶ 3.1(a).
 - (d) Settling Defendant shall follow the procedures of ¶¶ 3.1(a) through 3.1(c): (1) to select an alternate Project Coordinator or Supervising Contractor, as applicable, if EPA issues a notice of disapproval; or (2) to change their Project Coordinator or Supervising Contractor.
 - (e) Settling Defendant may assign other representatives, including other contractors, to assist in coordinating the Work.
- 3.2** EPA has designated Alice Yeh as its Remedial Project Manager (RPM) for the Work and Diane Salkie as the alternate RPM for the Work. EPA may designate other representatives including contractors or consultants to oversee the Work.
- 3.3** The State shall designate and notify the Parties of its Project Coordinator. The State may designate other representatives including contractors or consultants to oversee the Work.
- 3.4 Project Coordinator and RPM Responsibilities**
- (a) Settling Defendant's Project Coordinator shall communicate with the RPM at least every other week.
 - (b) The RPM has the authorities described in the NCP, 40 C.F.R. § 300.120.
 - (c) The State's Project Coordinator may participate in any meeting or inspection in which the RPM participates. Settling Defendant shall notify the State reasonably in advance of any such meetings or inspections.

4. REMEDIAL ACTION

4.1 Remedial Action Work Plans (RAWPs).

- (a) Settling Defendant shall submit a RAWP for UPF and USFs for EPA approval that includes:
 - (1) A proposed Remedial Action Construction Schedule
 - (2) Plans for satisfying permitting requirements, if any, including obtaining permits for off-site activity and for satisfying substantive requirements of permits for on-site activity

- (3) A description of how Settling Defendant will coordinate with Passaic Valley Sewerage Commission (PVSC), Public Service Electric & Gas (PSEG), Town of Harrison and any other UPF and USF property owners to implement the Work.
- (4) A description of how the UPF and USFs will be constructed in accordance with the OU2 Remedial Design approved by EPA on May 6, 2024, and how Settling Defendants will demonstrate that the UPF and USFs function as intended.
- (b) Settling Defendant shall submit a RAWP for OU2 Baseline Sampling for EPA approval that includes a description of the activities to be performed for OU2 baseline sampling, including a proposed schedule.

4.2 Meetings and Inspections

- (a) **Preconstruction Conference.** Settling Defendant 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). Settling Defendant shall prepare draft minutes of the conference for EPA review, shall address EPA comments on the draft minutes and shall distribute the final minutes to all Parties.
- (b) **Periodic Communications.** During the Remedial Action, Settling Defendant shall communicate regularly with EPA, and others as directed or determined by EPA, to discuss Remedial Action issues. Upon EPA request, Settling Defendant shall distribute an agenda and list of attendees to all Parties prior to each meeting or telephone call. Upon EPA request, Settling Defendant shall prepare draft minutes of the meetings or calls for EPA review, shall address EPA comments on the draft minutes and shall distribute the final minutes to all Parties.
- (c) **Inspections**
 - (1) EPA and/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) As requested by EPA, Settling Defendant 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, access to reproduction equipment, wireless internet access and sanitation facilities.
 - (3) As requested by EPA, Settling Defendant 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 Remedial Action Construction, Settling Defendant shall take all necessary steps to correct the deficiencies and/or bring the Remedial Action Construction into compliance with the approved Final Remedial Design, any approved design changes, and/or the approved RAWPs. If applicable, Settling Defendant shall comply with any schedule provided by EPA in its notice of deficiency.

4.3 Permits

- (a) As provided in CERCLA Section 121(e), and Section 300.400(e) of the NCP, no permit is required for any portion of the Work conducted entirely on-site (*i.e.*, within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work). Where any portion of the Work that is not on-site requires a federal or state permit or approval, Settling Defendant shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.
- (b) Settling Defendant may seek relief under the provisions of Section XI (Force Majeure) of the Decree for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval referenced in ¶ 4.3(a) and required for the Work, provided that they have submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals.
- (c) Nothing in the Decree or this SOW constitutes a permit issued under any federal or state statute or regulation.

4.4 Emergency Response and Reporting

- (a) **Emergency Action.** 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, Settling Defendant shall: (1) immediately take all appropriate action to prevent, abate, or minimize such release or threat of release; (2) immediately notify the authorized EPA officer (as specified in ¶ 4.4(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 Settling Defendant is required to report under CERCLA § 103 or Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA), Settling Defendant 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 RPM, the Alternate RPM (if the RPM is unavailable), or the National Response Center at (800) 424-8802 (if neither RPM is available).
- (d) For any event covered by ¶ 4.4(a) and ¶ 4.4(b), Settling Defendant shall:
 - (1) within 7 days after the onset of such event, submit a report to EPA describing the actions or events that occurred and the measures taken, and to be taken, in response thereto; and (2) within 30 days after the conclusion of such event, submit a report to EPA describing all actions taken in response to such event.
- (e) The reporting requirements under ¶ 4.4 are in addition to the reporting required by CERCLA § 103 or EPCRA § 304.

4.5 Off-Site Shipments

- (a) Settling Defendant may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if they comply with CERCLA § 121(d)(3), and 40 C.F.R. § 300.440. Settling Defendant will be deemed to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if Settling Defendant obtains 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) Settling Defendant 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 RPM. 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. Settling Defendant also shall notify the state environmental official referenced above and the RPM of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Settling Defendant shall provide the notice before the Waste Material is shipped.
- (c) Settling Defendant may ship Investigation Derived Waste (IDW) from the Site to an off-Site facility only if they comply with CERCLA § 121(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 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 Remedial Action Construction Completion for UPF and USFs:

- (a) For purposes of this ¶ 4.6, “Remedial Action Construction for UPF and USFs” comprises the construction of the UPF and USFs, and the performance of all activities necessary for the UPF and USFs to function properly and as designed.
- (b) **Inspection of Constructed Remedy.** Settling Defendant shall schedule an inspection to review the construction and operation of the UPF and USFs and to review whether the UPF and USFs are functioning properly and as designed. The inspection must be attended by Settling Defendant and EPA and/or their representatives. A reinspection must be conducted if requested by EPA.
- (c) **Remedial Action Report for UPF and USFs.** Settling Defendant, in coordination with PVSC, PSEG, Town of Harrison, and any other UPF and USF property owners if necessary, shall submit a “Remedial Action Report for UPF and USFs” requesting EPA’s determination that Remedial Action Construction for the UPF and USFs has been completed. The Remedial Action Report for UPF and USFs must: (1) include statements by a registered professional engineer and by Settling Defendant’s Project Coordinator that the construction of the UPF and USFs are complete and that they are functioning properly and as designed; (2) include a demonstration and supporting documentation that construction of the UPF and USFs are complete and that they are 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).
- (d) If EPA determines that Remedial Action Construction for the UPF and USFs is not complete, EPA shall so notify Settling Defendant. EPA’s notice must include a description of, and schedule for, the activities that Settling Defendant must perform to complete Remedial Action Construction for the UPF and USFs. EPA’s notice may include a schedule for completion of such activities or may require Settling Defendant to submit a proposed schedule for EPA approval. Settling Defendant 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 Remedial Action Report for the UPF and USFs, that Remedial Action Construction for the UPF and USFs is complete, EPA shall so notify Settling Defendant.

4.7 Remedial Action Construction Completion for OU2 Baseline Sampling:

- (a) For purposes of this ¶ 4.7, “Remedial Action Construction for OU2 Baseline Sampling” comprises the performance of OU2 Baseline Sampling as provided for under ¶ 1.3(c), (d) and (e).

- (b) **Remedial Action Report for OU2 Baseline Sampling.** Settling Defendant shall submit a “Remedial Action Report for OU2 Baseline Sampling” requesting EPA’s determination that Remedial Action Construction for OU2 Baseline Sampling has been completed. The Remedial Action Report for OU2 Baseline Sampling must: (1) include statements by Settling Defendant’s Project Coordinator that the OU2 Baseline Sampling is complete and the baseline sampling data meet the data quality objectives of the Quality Assurance Project Plan (QAPP) described in ¶ 6.7(d); (2) include data deliverables, laboratory records and monitoring reports for the baseline sampling; and (3) be certified in accordance with ¶ 6.5 (Certification).
- (c) If EPA determines that Remedial Action Construction for the OU2 Baseline Sampling is not complete, EPA shall so notify Settling Defendant. EPA’s notice must include a description of, and schedule for, the activities that Settling Defendant must perform to complete Remedial Action Construction for the OU2 Baseline Sampling. EPA’s notice may include a schedule for completion of such activities or may require Settling Defendant to submit a proposed schedule for EPA approval. Settling Defendant shall perform all activities described in the EPA notice in accordance with the schedule.
- (d) If EPA determines, based on the initial or any subsequent Remedial Action Report for the OU2 Baseline Sampling, that Remedial Action Construction for the OU2 Baseline Sampling is complete, EPA shall so notify Settling Defendant.

4.8 Certification of Work Completion

- (a) **Work Completion Inspection.** For the purposes of this ¶ 4.8, “Work Completion” means the transfer of the following to the party or parties performing the OU2 and OU4 Remedial Actions for in-river construction: (1) the UPF and USFs in properly functioning order and (2) OU2 Baseline Sampling data that meet the data quality objectives of the QAPP described in ¶ 6.7(d). Settling Defendant shall schedule an inspection for the purpose of obtaining EPA’s Certification of Work Completion for both components. The inspection must be attended by Settling Defendant and EPA and/or their representatives.
- (b) **Work Completion Report.** Following the inspection, Settling Defendant shall submit a report to EPA requesting EPA’s Certification of Work Completion. The report must: (1) include certifications by a registered professional engineer and by Settling Defendant’s Project Coordinator that the Work, including all O&M activities, is complete; and (2) be certified in accordance with ¶ 6.5 (Certification).
- (c) If EPA concludes that the Work is not complete, EPA shall so notify Settling Defendant. EPA’s notice must include a description of the activities that Settling Defendant must perform to complete the Work. EPA’s notice must include specifications and a schedule for such activities or must require Settling Defendant to submit specifications and a schedule for EPA approval. Settling

Defendant shall perform all activities described in the notice or in the EPA-approved specifications and schedule.

- (d) If EPA concludes, based on the initial or any subsequent report requesting Certification of Work Completion, that the Work is complete, EPA shall so certify in writing to Settling Defendant. Issuance of the Certification of Work Completion does not affect the following continuing obligations: (1) obligations under Sections VII (Property Requirements), and XIX (Records) of the Decree; and (2) reimbursement of EPA's Future Response Costs under Section X (Payments for Response Costs) of the Decree.

5. REPORTING

5.1 Progress Reports. Commencing with the month following lodging of the Decree and until EPA approves the Work Completion Report, Settling Defendant 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 Decree
- (b) A summary of all results of sampling, tests, and all other data received or generated by Settling Defendant
- (c) A description of all deliverables that Settling Defendant submitted to EPA
- (d) A description of all activities relating to Remedial Action Construction for UPF, USFs and OU2 Baseline Sampling that are scheduled for the next six weeks
- (e) An updated Remedial Action 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 Settling Defendant has proposed or that have been approved by EPA; and
- (g) A description of all activities undertaken in support of the CIPs 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, Settling Defendant shall notify EPA of such change at least seven days before performance of the activity.

6. DELIVERABLES

- 6.1 Applicability.** Settling Defendant 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.** As provided in ¶ 100 of the Decree, all deliverables under this SOW must be in writing unless otherwise specified.
- 6.3 General Requirements for Deliverables.** All deliverables must be submitted by the deadlines in Remedial Action Schedule, as applicable. Settling Defendant shall submit all deliverables to EPA in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in ¶ 6.4. All other deliverables shall be submitted to EPA in the electronic form specified by the RPM. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5" by 11", Settling Defendant shall also provide EPA with paper copies of such exhibits, upon request by EPA.
- 6.4 Technical Specifications**
- (a) Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable (EDD) format, which can be found at <https://www.epa.gov/superfund/region-2-superfund-electronic-data-submission>. 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; 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://edg.epa.gov/EME/>.
 - (c) Each file must include an attribute name for each site unit or sub-unit submitted. Consult <https://www.epa.gov/geospatial/geospatial-policies-and-standards> for any further available guidance on attribute identification and naming.

- (d) Spatial data submitted by Settling Defendant does not, and is not intended to, define the boundaries of the Site.

6.5 Certification. All deliverables that require compliance with this paragraph must be signed (or electronically signed) by the Settling Defendant's Project Coordinator, or other responsible official of Settling Defendant, and must contain the following statement:

I certify under penalty of perjury 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 Decree 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 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), Settling Defendant shall, within 15 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 Settling Defendant to correct the deficiencies; or (5) any combination of the foregoing.

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

6.7 Supporting Deliverables. Settling Defendant shall submit each of the following supporting deliverables for EPA approval, except as specifically provided. Settling Defendant shall develop the deliverables in accordance with all applicable regulations, guidances, and policies (see Section 9 (References)). Settling Defendant 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 (HASP).** The 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. Settling Defendant shall develop the HASP in accordance with EPA's *Emergency Responder Health and Safety Manual* and Occupational Safety and Health Administration (OSHA) requirements under 29 C.F.R. §§ 1910 and 1926. The HASP should cover activities during the Work. 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 (ERP).** The 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 CERCLA § 103 or EPCRA § 304; and

- (5) A description of all necessary actions to ensure compliance with ¶ 4.4 of the SOW 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 (FSP).** The 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. Settling Defendant 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 (QAPP).** The QAPP must include a detailed explanation of Settling Defendant's quality assurance, quality control, and chain of custody procedures for all treatability, compliance, and monitoring samples. Settling Defendant shall develop the QAPP in accordance with EPA Directive CIO 2105.1 (Environmental Information Quality Policy, 2021), the most recent version of *Quality Management Systems for Environmental Information and Technology Programs – Requirements with Guidance for Use*, ASQ/ANSI E-4 (Feb. 2014), and *Guidance for Quality Assurance Project Plans*, EPA QA/G-5, EPA Office of Environmental Information (Dec. 2002). Settling Defendant shall collect, produce, and evaluate all environmental information at the Site in accordance with the approved QAPP.
- (e) **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. Settling Defendant shall develop the O&M Manual in accordance with *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017).

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 Remedial Action Schedule set forth below. Settling Defendant may submit proposed revised Remedial Action Schedules for EPA approval. Upon EPA's approval, the revised Remedial Action Schedules supersede the Remedial Action Schedules set forth below, and any previously-approved Remedial Action Schedules.

7.2 Remedial Action Schedule

	Description of Deliverable / Task	¶ Ref.	Deadline
1	Award Remedial Action contract for UPF, USFs and OU2 Baseline Sampling		180 days after Effective Date
2	RAWP for UPF and USFs	4.1(a)	30 days after Award of Remedial Action contract for UPF, USFs and OU2 Baseline Sampling
3	HASP	6.7(a)	30 days after submittal of RAWP for UPF and USFs
4	ERP	6.7(b)	30 days after submittal of RAWP for UPF and USFs
5	FSP and QAPP	6.7(c) and (d)	30 days after submittal of RAWP for UPF and USFs
6	RAWP for OU2 Baseline Sampling	4.1(b)	60 days after submittal of RAWP for UPF and USFs
7	Pre-Construction Conference	4.2(a)	30 days after Approval of RAWP for UPF and USFs
8	Start of Construction for UPF and USFs		45 days after Approval of RAWP for UPF and USFs and upon securing access to Affected Property necessary to complete the Remedial Action Construction, whichever is later
9	Start of Construction for OU2 Baseline Sampling		30 days after Approval of RAWP for OU2 Baseline Sampling
10	Completion of Construction for UPF and USFs	4.6	3 years after Start of Construction for UPF and USFs
11	Completion of Construction for OU2 Baseline Sampling	4.7	At Completion of Construction for UPF and USFs
12	O&M Manual	6.7(e)	30 days after Completion of Construction for UPF and USFs
13	Inspection of Constructed Remedy	4.6(b)	90 days after Completion of Construction of UPF and USFs
14	Remedial Action Report for UPF and USFs	4.6(c)	30 days after Inspection of Constructed Remedy
15	Remedial Action Report for OU2 Baseline Sampling	4.7(b)	60 days after Completion of Construction for OU2 Baseline Sampling
16	Work Completion Inspection	4.8(a)	30 days after Approval of Remedial Action Report for UPF and USFs or 30 days after Award of Remedial Action contract for OU2 and/or OU4 Remedial Action in-river work, whichever comes later

17	Work Completion Report	4.8(b)	30 days after Work Completion Inspection
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8. STATE PARTICIPATION

- 8.1 Copies.** Settling Defendant 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 Settling Defendant, 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 notice to proceed under ¶ 3.1
 - (b) Any EPA approval or disapproval under ¶ 6.6 (Approval of Deliverables) of any deliverables that are required to be submitted for EPA approval; and
 - (c) Any approval or disapproval of the Construction Phase under ¶ 4.6 (Remedial Action Construction Completion for UPF and USFs) and ¶ 4.7 (Remedial Action Construction Completion for OU2 Baseline Sampling), and any disapproval of, or Certification of Work Completion under ¶ 4.8 (Certification 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 three 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).
 - (e) Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties, OSWER 9355.5-01, EPA/540/G90/001 (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) Remedial Design/Remedial Action Handbook, OSWER 9355.0-04B, EPA/540/R-95/059 (June 1995).
- (l) EPA Guidance for Data Quality Assessment, Practical Methods for Data Analysis, QA/G-9, EPA/600/R-96/084 (July 2000).
- (m) Comprehensive Five-year Review Guidance, OSWER 9355.7-03B-P, EPA/540-R-01-007 (June 2001).
- (n) Guidance for Quality Assurance Project Plans, EPA QA/G-5, EPA Office of Environmental Information (Dec. 2002) <https://www.epa.gov/quality/guidance-quality-assurance-project-plans-epa-qag-5>.
- (o) Institutional Controls: Third-Party Beneficiary Rights in Proprietary Controls, OECA (Apr. 2004).
- (p) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).
- (q) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (r) EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2005), <https://www.epa.gov/geospatial/epa-national-geospatial-data-policy>.
- (s) Principles for Greener Cleanups (Aug. 2009), <https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups>.
- (t) Close Out Procedures for National Priorities List Sites, OSWER 9320.2-22 (May 2011).
- (u) Recommended Evaluation of Institutional Controls: Supplement to the “Comprehensive Five-Year Review Guidance,” OSWER 9355.7-18 (Sept. 2011).
- (v) Construction Specifications Institute’s MasterFormat 2020, available from the Construction Specifications Institute, <http://www.csinet.org/masterformat>.

- (w) Updated Superfund Response and Settlement Approach for Sites Using the Superfund Alternative Approach, OSWER 9200.2-125 (Sept. 2012)
- (x) 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), <https://semspub.epa.gov/work/HQ/175446.pdf>.
- (y) 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), <https://semspub.epa.gov/work/HQ/175449.pdf>.
- (z) EPA's Emergency Responder Health and Safety Manual, OSWER 9285.3-12 (July 2005 and updates), https://www.epaosc.org/_HealthSafetyManual/manual-index.htm.
- (aa) Broader Application of Remedial Design and Remedial Action Pilot Project Lessons Learned, OSWER 9200.2-129 (Feb. 2013).
- (bb) Quality Management Systems for Environmental Information and Technology Programs -- Requirements with Guidance for Use, ASQ/ANSI E-4 (February 2014), available at <https://webstore.ansi.org/>.
- (cc) Guidance for Management of Superfund Remedies in Post Construction, OLEM 9200.3-105 (Feb. 2017), <https://www.epa.gov/superfund/superfund-post-construction-completion>.
- (dd) Advanced Monitoring Technologies and Approaches to Support Long-Term Stewardship (July 20, 2018), <https://www.epa.gov/enforcement/use-advanced-monitoring-technologies-and-approaches-support-long-term-stewardship>.
- (ee) Superfund Community Involvement Handbook, OLEM 9230.0-51 (March 2020). More information on Superfund community involvement is available on the Agency's Superfund Community Involvement Tools and Resources web page at <https://www.epa.gov/superfund/superfund-community-involvement-tools-and-resources>.
- (ff) EPA directive CIO 2105.1 (Environmental Information Quality Policy, 2021), https://www.epa.gov/sites/production/files/2021-04/documents/environmental_information_quality_policy.pdf.
- (gg) EPA Privacy Policy, CIO 2151.1 (September 2015)
- (hh) Contaminated Sediment Remediation Guidance for Hazardous Waste Sites, OSWER 9355.0-85 (December 2005)

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

- (a) Laws, Policy, and Guidance at <https://www.epa.gov/superfund/superfund-policy-guidance-and-laws>;
- (b) Search Superfund Documents at <https://www.epa.gov/superfund/search-superfund-documents>; and
- (c) Test Methods Collections at: <https://www.epa.gov/measurements/collection-methods>.

9.3 For any regulation or guidance referenced in the Decree 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 Settling Defendant receives notification from EPA of the modification, amendment, or replacement.