

APPENDIX B

Statement of Work

REMEDIAL DESIGN/REMEDIAL ACTION

STATEMENT OF WORK

OPERABLE UNIT 4

DEPUE/NEW JERSEY ZINC/MOBILCHEMICAL SUPERFUND SITE

DePue, Bureau County, Illinois

EPA Region 5

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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.

(a) Background.

- (1) This Statement of Work (“SOW”) forms a part of the Consent Decree (“CD”) for the implementation of remedial designs (“RD”) and remedial actions (“RA”) in Operable Unit 4 (“OU4”) of the DePue/New Jersey Zinc/Mobil Chemical Superfund Site (“Site”) in DePue, Illinois, consistent with the remedy selected in the Record of Decision (“ROD”). The ROD was signed by Illinois Environmental Protection Agency (“Illinois EPA”) on May 17, 2017, and U.S. Environmental Protection Agency (“EPA”) on June 23, 2017. The Settling Defendant (“SD”) responsible for the implementation of this SOW is TCI Pacific Communications, LLC (“TCI”).
- (2) The Site is a former primary and secondary zinc smelter. At various times, it also produced sulfuric acid, lithopone, and diammonium phosphate fertilizer. The Site includes the smelter and fertilizer plant area and bluff, a phosphogypsum stack and associated features, bottomland areas including a drainage ditch and outfall area, Lake DePue, portions of the floodplain associated with Lake DePue and soils within the Village of DePue. The Site has been divided into six operable units. The operable units and the current status are described in the following sections.
 - (i) Operable Unit 1. OU1 consists of the South Ditch that received historic groundwater and surface water discharges from the plant area and conveyed this water to Lake DePue. The potentially responsible parties (“PRPs”) performed an interim remedial action in the South Ditch in 2005 including dredging of contaminated sediment, stabilizing the sediment, and disposing the stabilized sediment on the plant site in a corrective action management unit (“CAMU”). A final remedial action for OU1 is anticipated to be included as part of the remedial action for OU5.
 - (ii) Operable Unit 2. OU2 consists of the phosphogypsum stack and includes phosphogypsum from the fertilizer production operation and several water-management features. The phosphogypsum stack serves as a permanent disposal area for phosphogypsum and is being closed consistent with the requirements of the State of Illinois landfill regulations, 35 Illinois Administrative Code (“IAC”) Part 807. The Closure Plan for OU2 was approved by Illinois EPA in February 2017. Construction on the cap has been completed and a final construction completion report was

submitted to the Illinois EPA on February 26, 2020, and has been approved by Illinois EPA.

- (iii) Operable Unit 3. OU3 is the former plant site area (“FPSA”). The FPSA includes a 136-acre area enclosed by a fence where the former smelting plant and other production operations were conducted. OU3 also includes a 75-acre Bluff Area north of the plant, and a 25-acre area that includes a former solid waste dump beyond the plant’s fence line, south of the main thoroughfare of the Village of DePue. The Remedial Investigation of OU3 is currently ongoing.
 - (iv) Operable Unit 4. OU4 consists of soils impacted from Site operations beyond the FPSA’s boundaries. The residential areas, public property, parks, alleys, the school, and miscellaneous properties (as defined in the approved Remedial Design) within the Village of DePue are the focus of this SOW.
 - (v) Operable Unit 5. OU5 consists of Lake DePue and its associated floodplain. The South Ditch and another site-related outfall conveyed wastewater from the Site to Lake DePue, resulting in, among other things, the deposition of metals-contaminated soils and sediments and other fertilizer production related constituents in the floodplain in certain areas of the lake. The Remedial Investigation of OU5 is currently ongoing.
 - (vi) Operable Unit 6. OU6 is the “other areas of OU4 that include primarily ecological areas and agricultural areas” that are not subject to the ROD and will be evaluated and addressed at a later time.
- (b) Constituents of Concern. Soils in yards throughout OU4 contain lead, arsenic, cadmium, and manganese at concentrations above background levels and the Remedial Goals or “RGs.” The RGs for OU4 were determined in the ROD. The RGs are summarized in the table below.

Table 1. Remedial Goals for OU4 Soils

COC	Remedial Goals		
	Residential (mg/kg)	Garden (mg/kg)	Construction Worker (mg/kg)
Arsenic	21	21	140
Cadmium	70	24	280
Lead	400	400	940
Manganese	1,800	1,800	6,200

*Lead RG is considered “interim RG” per the ROD.

- (c) Record of Decision. The ROD requires excavation of soil in yards that contain arsenic, cadmium, lead, and/or manganese above the RGs down to a maximum depth of eighteen inches below ground surface (“bgs”) in yards and/or twenty-four inches bgs in garden areas. The ROD specified that the RGs controlling the need for excavation are based on the residential receptors for yards, parks, alleys, the school, and miscellaneous properties. The garden RGs control the need for and extent of remedial actions in gardens. The construction worker RGs will determine the acceptable management of excavated soil. The ROD does not require the excavation of soils in yards that contain arsenic, cadmium, lead, and/or manganese in concentrations that exceed the RGs located more than eighteen inches bgs in yards or twenty-four inches bgs in gardens. However, if soils in yards and/or gardens that contain arsenic, cadmium, lead, and/or manganese in concentrations that exceed the RGs are located more than eighteen inches bgs or twenty-four inches bgs in gardens, a visual barrier must be installed after any contaminated soils in the first eighteen inches bgs or twenty-four inches bgs in gardens are excavated, and other Institutional Controls must be implemented unless impacted soils above RGs are removed to the full extent. Excavated soils and Site-Related Material (“SRM”), as defined in the CD, removed from properties will be transported to the FPSA for stockpiling and management. SRM and soils with concentrations above construction worker RGs and residential RGs will be stockpiled separately at the FPSA in OU3. Best management practices will be established for the stockpiles to prevent leaching, run-on, run-off, wind dispersion, and direct contact of placed soils.
- (d) The ROD addresses only the residential areas, public property, parks, alleys, the school, and miscellaneous properties within the Village of DePue. The ROD does not include OU6 areas, which are the nearby primarily ecological areas and agricultural areas, as those areas will be addressed at a later time.
- (e) SD will implement its activities consistent with: (1) the ROD; (2) the RD Work Plan, and the UAO; (3) all plans approved by EPA pursuant to the UAO and this SOW including approved modifications; (4) any additional written direction provided by EPA; (5) the National Contingency Plan; (6) the *Superfund Lead Contaminated Residential Sites Handbook*, August 2003 (“*Lead Handbook*”); and (7) where not in conflict with the documents and authorities referenced in Subparagraphs (1) through (6) of this Paragraph, documents and guidances including, but not limited to, those identified in Section 11 (References) of this SOW.

1.2 Structure of the SOW

- Section 2 (Community Involvement) sets forth EPA’s and SD’s responsibilities for community involvement.

- Section 3 (Coordination and Supervision) contains the provisions for selecting the Supervising Contractor and Project Coordinators regarding the Work.
 - Section 4 (Remedial Design) sets forth the process for developing the RD, which includes the submission of specified primary deliverables.
 - Section 5 (Remedial Action) sets forth requirements regarding the completion of the RA, including primary deliverables related to completion of the RA.
 - Section 6 (Data Management) sets forth SD's responsibilities and requirements related to the Data Management for data collected as part of the RD/RA.
 - Section 7 (Reporting) sets forth SD's reporting obligations.
 - Section 8 (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 9 (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 10 (State Participation) addresses State participation.
 - Section 11 (References) provides a list of references, including URLs.
- 1.3** The Scope of the Remedy includes the actions described in the ROD at Section 1.4, Section 2.4, Section 2.8, Section 2.9.2, Alternative 2 of Section 2.9.3, and Section 2.12.
- 1.4** The terms used in this SOW that are defined in CERCLA, in regulations promulgated under CERCLA, or in the Consent Decree ("CD"), have the meanings assigned to them in CERCLA, in such regulations, or in the CD, except that the term "Paragraph" or "¶" means a paragraph of the SOW, and the term "Section" means a section of the SOW, unless otherwise stated.

2. COMMUNITY INVOLVEMENT

- 2.1** As requested by EPA, Settling Defendants shall conduct community involvement activities under EPA's oversight as provided for in, and in accordance with this Section. Such activities must include designation of a Community Involvement Coordinator ("CI Coordinator").
- 2.2 Community Involvement Responsibilities**
- (a) EPA has the lead responsibility for developing and implementing community involvement activities at the Site. Previously, Illinois EPA developed a Community Involvement Plan ("CIP") for the Site. Pursuant to 40 C.F.R. § 300.435(c), EPA shall develop and implement a CIP to describe public involvement activities during the Work, that are not already addressed or provided for in the existing CIP, including, if applicable, any Technical Assistance Grant ("TAG"), any use of the Technical Assistance Services for

Communities (“TASC”) contract, and/or any Technical Assistance Plan (“TAP”).

- (b) **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 SD’s CI Coordinator. SD’s CI Coordinator shall coordinate his/her activities with EPA’s 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 SD’s CI Coordinator has the responsibility to ensure that when they communicate with the public, the SD protects any “Personally Identifiable Information” (“PII”) (e.g. sample results from residential properties) in accordance with “EPA Policy 2151.0: Privacy Policy.”
- (c) If requested by EPA, SD shall participate in community involvement activities, including participation in (1) the preparation of information regarding the Work for dissemination to the public, with consideration given to including mass media and/or Internet notification, and (2) public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site. SD’s support of EPA’s community involvement activities may include providing online access to initial submissions and updates of deliverables to (1) any Community Advisory Groups, (2) any TAG recipients and their advisors, and (3) other entities to provide them with a reasonable opportunity for review and comment. EPA may describe the SD’s responsibilities for community involvement activities in its CIP. 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.
- (d) **Information for the Community.** If requested by EPA, SD shall develop and provide to EPA information about the design and implementation of the remedy including: (1) any validated data from monitoring of impacts to communities as provided in the Community Impact Mitigation Plan under ¶ 8.8(m); (2) a copy of the Community Impacts Mitigation Plan required under ¶ 8.8(m); (3) schedules prepared under Section 9; (4) dates that Settling Defendants 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 as indicated in EJ Screen. Translations should be in the dominant language(s) of community members with limited English proficiency.

3. COORDINATION AND SUPERVISION

3.1 Project Coordinators

- (a) SD's Project Coordinator may not be an attorney representing any SD in this matter and may not act as the Supervising Contractor. SD's Project Coordinator may assign other representatives, including other contractors, to assist in coordinating the Work.
- (b) EPA shall designate and notify the SD of EPA's Project Coordinator and Alternate Project Coordinator. EPA may designate other representatives, which may include its employees, contractors and/or consultants, to oversee the Work. EPA's Project Coordinator/Alternate Project Coordinator will have the same authority as a remedial project manager and/or an on-scene coordinator, as described in the NCP. This includes the authority to halt the Work and/or to conduct or direct any necessary response action when he or she determines that conditions at OU4 of the Site constitute an emergency or may present an immediate threat to public health or welfare or the environment due to a release or threatened release of Waste Material.
- (c) The State shall designate and notify EPA and the SD of its Project Coordinator and Alternate Project Coordinator. The State may designate other representatives, including its employees, contractors, and/or consultants to oversee the Work. For any meetings and inspections in which EPA's Project Coordinator participates, the State's Project Coordinator also may participate. Settling Defendants shall notify the State reasonably in advance of any such meetings or inspections.
- (d) SD's Project Coordinator shall meet with EPA's and/or the State's Project Coordinator at least monthly.

3.2 **Supervising Contractor.** Settling Defendants' proposed Supervising Contractor must have sufficient technical expertise to supervise the Work and 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).

3.3 **Procedures for Disapproval/Notice of Authorization to Proceed**

- (a) SD shall designate, and notify EPA, within 10 days after the Effective Date, of the name, title, contact information, and qualifications of the SD's proposed Project Coordinator and Supervising Contractor, whose qualifications shall be subject to EPA's review for verification based on objective assessment criteria (e.g., experience, capacity, technical expertise) and who do not have a conflict of interest with respect to the project.
- (b) EPA, after a reasonable opportunity for review and comment by the State, shall issue notices of disapproval and/or authorizations to proceed regarding the

proposed Project Coordinator and Supervising Contractor, as applicable. If EPA issues a notice of disapproval, SD shall, within 30 days, submit to EPA a list of supplemental proposed Project Coordinators and/or Supervising Contractors, as applicable, including a description of the qualifications of each. SD may select any coordinator/contractor covered by an authorization to proceed and shall, within 21 days, notify EPA of SD's selection.

- (c) EPA may disapprove the proposed Project Coordinator, the Supervising Contractor, or both, based on objective assessment criteria (e.g., experience, capacity, technical expertise), if they have a conflict of interest regarding the project, or any combination of these factors.
- (d) Settling Defendants may change their Project Coordinator and/or Supervising Contractor, or both, by following the procedures of ¶¶ 3.3(a) and 3.3(b).
- (e) Notwithstanding the procedures of ¶¶ 3.3(a) through 3.3(d), SD has proposed, and EPA has authorized SD to proceed regarding: Wilmer Reyes, Senior Environmental Engineer, Paramount, as Project Coordinator; and TetraTech Inc as Supervising Contractor.

4. REMEDIAL DESIGN

- 4.1 **RD Work Plan.** SD has submitted a Remedial Design ("RD") Work Plan ("RDWP") which was approved by Illinois EPA in August 2018. The RDWP established the performance criteria for proposed clean-up activities at residential and residential-like properties, including schools, parks, and alleys within OU4. SD submitted the RDWP to EPA under the 2020 UAO and the RDWP was revised and subsequently approved by EPA in August 2020.
- 4.2 SD shall meet regularly with EPA to discuss RD issues as necessary, as directed or determined by EPA.
- 4.3 **Pre-Remedial Activities.** SD will continue to implement pre-remedial activities at all residential and residential-like properties, in accordance with the Final RD. These activities include, but are not limited to, the following:
 - (a) Access Agreements. SD shall obtain or, with EPA's approval, utilize existing access agreements with current property owners to allow for sampling and clean-up work. Any access agreements effective after the Effective Date of the CD shall include officers, employees, contractors, and authorized representatives of EPA and Illinois EPA. SD shall use best efforts to secure access to the properties within OU4, including, but not limited to, a minimum of door-to-door events, phone calls, and mailings. SD may request EPA assistance in obtaining access agreements. EPA will assist SD by conducting door-to-door outreach activities, phone calls, and mailings to residents, hosting public meetings and open house sessions for the community, and attending

meetings at resident's properties to discuss activities. SD shall submit to EPA all copies of access agreements obtained or denied.

- (b) Sensitive Population Reconnaissance. SD shall gather information related to sensitive populations before or during sampling events. This information shall be defined to include the presence of pregnant women, children aged 6 or under who spend a significant amount of time at the residence or residential-like property, and/or children with blood lead levels at or above 10 µg/dL. This information should be included in the property inspection checklist and will be utilized to assign priority for clean-up actions.
- (c) Soil Sampling and Analysis. SD shall conduct soil sampling in general accordance with the *Superfund Lead Contaminated Residential Sites Handbook*, August 2003, and the EPA-approved Remedial Design. Composite samples will be collected in six-inch increments as follows:
 - (1) Residential yards - samples will be collected at depths of 0-6 inches, 6-12 inches, 12-18 inches and 18-24 inches bgs, though the 18-24-inch sample may not be analyzed, depending on the results of the 12-18-inch sample;
 - (2) Parks and alleys - samples will be collected at depths of 0-6 inches, 6-12 inches, and 12-18 inches, though the 12-18-inch sample may not be analyzed, depending on the results of the 6-12-inch sample;
 - (3) Gardens - discrete samples will be collected and analyzed in six-inch increments to 30 inches bgs, although the decision to analyze the 24-30-inch sample may depend on the results of the 18-24-inch sample;
 - (4) SD shall collect composite samples from the front yard, back yard, and side yard (if applicable) from each property in OU4. SD shall collect drip zone samples, downspout samples, play areas, gardens, and permeable driveways, as appropriate, in accordance with the RDWP and any relevant modifications to this plan.
 - (5) Additional sample requirements related to the presence of SRM are detailed in the approved RD. In addition, further sampling requirements related to Lead Based Paint Surveys are set forth in the RDWP.
- (d) Soil Sampling Results. EPA intends to notify residents of soil sample results in a timely manner. Specifically, EPA intends to notify residents that have results above RGs within 24-48 hours of receiving preliminary, non-validated data. SD shall notify EPA of all preliminary results, so notifications can be made to the property owners. Upon receipt of final validated data, SD shall prepare and submit to EPA the soil sampling results for each property in a timely manner, to be discussed and determined prior to each field season. EPA will distribute results letters to the property owners for all soil sampling conducted. SD shall prepare property reports for each property, further discussed in ¶ 4.4.

4.4 Operable Unit 4 Property Reports. SD will continue to prepare OU4 Property Reports.

- (a) For each property in OU4 that has not yet been remediated and that requires clean-up, SD will develop a drawing for the property which will consist of a diagram for that individual property detailing areas requiring clean-up.
 - (1) The individual property diagram will identify the areas of excavation and the depth of the excavation areas. Areas on the diagram that are not identified for excavation (such as sidewalks, impermeable driveways, and buildings) are not required to be excavated.
 - (2) The diagram will identify whether the waste material to be excavated is non-hazardous or contains Site-Related Material (“SRM”).
 - (3) The diagram will identify whether waste material to be excavated is located at depths below 18 inches bgs in the yard and 24 inches bgs in the garden. At its election, SD may either: (i) install a visible barrier immediately over contamination remaining below 24-inch bgs; or (ii) excavate all Waste Materials that are contaminated with arsenic, cadmium, lead, and/or manganese above the RGs. Notwithstanding the following and as set forth in Section 3.4(b), if Waste Materials that are contaminated with arsenic, cadmium, lead, and/or manganese above the RGs are not present in the first 18 inches bgs in the yard and 24 inches bgs in the garden, but only exist below those depths, a visible barrier will not be required.
- (b) For the yards of each property in OU4 that do not contain arsenic, cadmium, lead and/or manganese in concentrations above the RGs at locations from the surface to eighteen inches bgs in the yard and twenty-four inches bgs in the garden, SD will create a map showing sample locations; however, SD shall not be required to excavate or remove Waste Material from such property.
- (c) To the extent of SD’s knowledge, each property diagram will identify features that may inhibit excavation such as underground lighting systems, invisible fences, or watering systems.
- (d) Diagrams for each property that requires remediation shall be submitted to EPA, along with items detailed in the EPA-approved Remedial Design, for review and approval. Diagrams should identify the yards for each property, the areas and depth requiring remediation for each quadrant/area, areas requiring placement of visual barrier, the soil sampling results, and date of sample collection.
- (e) SD shall prepare property reports for each property that shall be submitted to EPA for review and approval. Property reports will be distributed to property owners at pre-construction meetings or with the soil sampling results letters (if no action is required at a specific property).

4.5 Pre-Final (95%) RD. If requested and to the extent not already finalized under the UAO, SD shall submit the Pre-final (95%) RD for EPA's comment. The Pre-final RD must be a continuation and expansion of the previous RD submittal and must address EPA's comments regarding any previous RD submittals. 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 2018;
- (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 RD;
- (d) A specification for photographic documentation of the RA; and
- (e) Updates of all supporting deliverables required to accompany the Preliminary (30%) RD.

4.6 Final (100%) RD. If requested and to the extent not already finalized under the UAO, SD shall submit the Final (100%) RD for EPA approval. The Final RD must address EPA's comments on the Pre-final RD and must include final versions of all Pre-final RD deliverables.

5. REMEDIAL ACTION

5.1 Operable Unit 4 RA Work Plan. SD submitted a Remedial Action Work Plan ("RAWP") under the 2020 UAO that was approved by EPA in August 2020. SD shall review and update the RAWP (the "Annual RAWP Update"), or notify EPA that SD thinks no changes to the RAWP are necessary, at the start of each construction season. The updated RAWP or notice to EPA that no changes to the RAWP are necessary should be submitted to EPA no later than 30 days prior to the mobilization for each construction season.

5.2 Operable Unit 4 Remedial Action. SD shall conduct the OU4 RA in accordance with the RAWP and the ROD. When conducting the OU4 RA, SD shall, at a minimum:

- (a) Prioritize properties that have both of the following: soil in yards that contain arsenic, cadmium, lead, and/or manganese above the RGs in the top 6-inches of soil; and a member of a sensitive population (defined in ¶ 4.3(b) of this OU4 SOW) that resides or spends a significant amount of time at the property.
- (b) Excavate soils consistent with the individual property diagrams prepared and approved by EPA pursuant to ¶ 4.4 of this SOW.

- (c) Consistent with each individual property diagram, install a visible barrier such as landscape fabric or orange construction fencing over soil containing lead, cadmium, manganese, and/or arsenic in concentrations above the RGs or SRM at depths greater than 18 inches bgs (24 inches bgs in the garden). SD is required to install a visible barrier only if soils above 18 inches bgs (24 inches bgs in the garden) are excavated and soil contamination above RGs or SRM remains below that depth. Alternatively, at its option, SD may elect to excavate soil deeper than 18 inches bgs (24 inches bgs in the garden) to avoid the need for a visible barrier and other Institutional Controls at the property. If SD elects to excavate additional soils, SD shall revise any individual property diagram from which they deviate to show the actual excavation that was undertaken.
- (d) Deviate from the individual property diagrams that EPA approves, as necessary.
 - (1) Deviations Requiring EPA Approval.
 - (i) Based on property conditions (e.g., underground utilities or features, the addition of a porch or garage), SD may need to deviate from an individual property diagram (e.g., by using offsets). If SD determines that it is necessary to deviate from an individual property diagram based on property conditions, SD shall confer with EPA and obtain EPA's approval. Based upon the extent of the deviation from the individual property diagram, EPA may require SD to: (i) submit sufficient information to document the need for the deviation; (ii) revise, prior to excavation, the individual property diagram to reflect the newly proposed excavation design; and/or (iii) undertake additional soil sampling. If EPA determines that additional soil sampling is necessary, SD's sampling must be consistent with sampling methods and analysis described in the RDWP.
 - (2) Deviations Not Requiring EPA Approval. If an individual property diagram approved by EPA does not include complete sampling data to a depth of eighteen inches or twenty-four inches (in gardens) bgs either because of refusal during pre-remedial sampling or because a previously existing impermeable barrier has been removed, SD shall undertake additional soil sampling to determine whether any unsampled soils in the yard, down to a depth of at least eighteen inches bgs (twenty-four inches bgs in the garden), contain arsenic, cadmium, lead, and/or manganese above the RGs. SD's sampling must be consistent with sampling methods and analysis described in the *Remedial Investigation Report, Final*, June 2012, at Section 3.0 and the *Superfund Lead-Contaminated Residential Sites Handbook*, OSWER 9285.7-50 (Aug. 2003) at Section 4.3.
 - (i) Contaminated Soils 0–18 Inches (24 Inches in the Garden) Below Ground Surface. If SD finds additional soils containing arsenic, cadmium, lead, and/or manganese above the RGs or contain SRM

within eighteen inches bgs (twenty-four inches bgs in the garden) that were not identified in the individual property design, SD shall excavate those soils.

- (ii) Unknown Contaminated Soils Below 18 Inches (24 Inches in the Garden) Below Ground Surface. If SD excavates additional soils down to eighteen inches (twenty-four inches in the garden) bgs that were not identified in the individual property design approved by EPA, SD shall also sample the next six inches of soil below eighteen inches (twenty four inches in the garden) bgs to determine if they contain arsenic, cadmium, lead, and/or manganese above the RGs and/or SRM. If they do, SD shall either:
 - (A) Install a visible barrier (e.g., landscape fabric, orange construction fencing) over the contaminated soil at eighteen inches (twenty-four inches in the garden) bgs and implement other Institutional Controls to prevent exposure to soil below eighteen inches bgs in the yard and/or twenty-four inches bgs contaminated with arsenic, cadmium, lead and/or manganese above the RGs; or
 - (B) Excavate all soils that are contaminated with arsenic, cadmium, lead, and/or manganese above the RGs and/or SRM. Institutional controls are not needed with this option.
- (iii) Known Contaminated Soils Below 18 Inches (24 Inches in the Garden) Below Ground Surface. If an individual property diagram approved by EPA shows soil containing arsenic, cadmium, lead, and/or manganese above the RGs and/or SRM below eighteen inches bgs in the yard or twenty-four inches bgs in the garden, SD shall either:
 - (A) Install a visible barrier (e.g., landscape fabric, orange construction fencing) over the contaminated soil at eighteen inches bgs in the yard and/or twenty-four inches bgs in the garden and implement other Institutional Controls to prevent exposure to soil below eighteen inches bgs in the yard and/or twenty-four inches bgs contaminated with arsenic, cadmium, lead and/or manganese above the RGs; or
 - (B) Excavate all soils that are contaminated with arsenic, cadmium, lead, and/or manganese above the RGs and/or SRM. Institutional controls are not needed with this option.
- (3) SD shall revise any individual property diagram from which it deviates to show the actual excavation that was undertaken.

- (e) Backfill and restore each property in a manner consistent with the ROD and the *Superfund Lead-Contaminated Residential Sites Handbook*, OSWER 9285.7-50 (Aug. 2003).
- (f) Transport and manage removed waste material consistent with the OU4 RA Waste Material Transportation and Temporary Storage Plan (“OU4 RA TTSP Plan”) and ¶ 5.7. Excavated soils and SRM removed from properties will be transported to the FPSA on OU3 for stockpiling and management. SRM and soils with concentrations above construction worker RGs and residential RGs will be stockpiled separately at OU3. Best management practices will be established for the stockpiles to prevent leaching, run-on, run-off, wind dispersion, and direct contact of placed soils.
- (g) Implement Institutional Controls to preserve the protectiveness of the OU4 RA and prevent exposure to soil below eighteen inches bgs (twenty-four inches bgs in the garden) containing arsenic, cadmium, lead, and/or manganese above the RGs or containing SRM, at properties with soils below eighteen inches bgs (twenty-four inches bgs in gardens) which contain arsenic, cadmium, lead, and/or manganese above the RGs or contain SRM after implementation of the OU4 RA Construction.

5.3 Independent Quality Assurance Team. SD shall notify EPA of SD’s designated Independent Quality Assurance Team (“IQAT”). The IQAT will be independent of the Supervising Contractor. SD may 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).

5.4 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 the State of Illinois (“State”), 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 and the State 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 State of Illinois and any designated EPA contractors will also be allowed access to this space. The minimum office requirements are an office desk with chair and sanitation facilities.
- (3) Upon notification by EPA of any deficiencies in the RA Construction, SD shall take all necessary steps to correct the deficiencies and/or bring the RA Construction into compliance with the approved Final RD, any approved design changes, and/or the approved RAWP. If applicable, SD shall comply with any schedule provided by EPA in its notice of deficiency.

5.5 Permits

- (a) As provided in CERCLA § 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 Defendants shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.
- (b) Settling Defendants may seek relief under the provisions of Section [XI] (Force Majeure) of the Consent 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 ¶ 5.5(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 Consent Decree or this SOW constitutes a permit issued under any federal or state statute or regulation.

5.6 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 FPSA at OU3 or OU4 of 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 ¶ 5.6(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 is 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 ¶ 5.6(a) and ¶ 5.6(b) is the EPA Project Coordinator, the EPA Alternate Project Coordinator (if the EPA Project Coordinator is unavailable), or the EPA Emergency Response Unit, Region 5 (if neither EPA Project Coordinator is available).
- (d) For any event covered by ¶ 5.6(a) and ¶ 5.6(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 ¶ 5.6 are in addition to the reporting required by CERCLA § 103 or EPCRA § 304.

5.7 Off-Site Shipments

- (a) SD may ship hazardous substances, pollutants, and contaminants from OU4 of 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 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) SD may ship Waste Material from OU4 of the Site to an out-of-state waste management facility only if, prior to any shipment, it provides 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 OU4 of the Site to an off-Site facility only if it complies with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, *EPA's Guide to Management of Investigation Derived Waste*, OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the ROD. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 CFR § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.

5.8 Proprietary Controls. Upon request by EPA, SD shall, with respect to any property owned by the City of DePue ("City") or CBS/Wilmerding of PA, Inc. ("CBS/Wilmerding"), use best efforts to secure the City's cooperation in executing and recording; and SD shall, with respect to CBS/Wilmerding's Affected Property, execute and record, in accordance with the procedures of this ¶ 5.8, Proprietary Controls that: (i) grant a right of access to conduct any activity regarding the CD, including those activities listed in ¶ 12.c (Access Requirements) of the CD; and (ii) grant the right to enforce the land, water, or other resource use restrictions set forth in ¶ 12.d (Restrictions) of the CD.

- (a) **Grantees.** The Proprietary Controls must be granted to one or more of the following persons and their representatives, as determined by EPA: the United States, the State, SD, and other appropriate grantees. Proprietary Controls in the nature of a Uniform Environmental Covenants Act document granted to persons other than the United States must include a designation that EPA (and/or the State as appropriate) is either an "agency" or a party expressly granted the right of access and the right to enforce the covenants allowing EPA and/or the State to maintain the right to enforce the Proprietary Controls without acquiring an interest in real property.
- (b) **Initial Title Evidence.** SD shall, within 45 days after the Effective Date:

- (1) **Record Title Evidence.** Submit to EPA a title insurance commitment or other title evidence acceptable to EPA that: (i) names the proposed insured or the party in whose favor the title evidence runs, or the party who will hold the real estate interest, or if that party is uncertain, names the United States, the State, the SD, or "To Be Determined;" (ii) covers the Affected Property that is to be encumbered; (iii) demonstrates that the person or entity that will execute and record the Proprietary Controls is the owner of such Affected Property; (iv) identifies all record matters that affect title to the Affected Property, including all prior liens, claims, rights (such as easements), mortgages, and other encumbrances (collectively, "Prior Encumbrances"); and (v) includes complete, legible copies of such Prior Encumbrances; and

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

(c) **Release or Subordination of Prior Liens, Claims, and Encumbrances**

(3) If any Prior Encumbrance may defeat or adversely affect the rights to be granted by the Proprietary Controls in a manner that could interfere with the remedy or result in unacceptable exposure to Waste Material, Settling Defendants shall consult with EPA regarding the release, subordination, modification, or relocation of such Prior Encumbrance.

(d) **Update to Title Evidence and Recording of Proprietary Controls**

(1) SD shall submit all draft Proprietary Controls and draft instruments addressing Prior Encumbrances to EPA for review and approval within 180 days after the Effective Date; or if an initial waiver request has been filed, within 135 days after EPA's determination on the initial waiver request, or if a final waiver request has been filed, within 90 days after EPA's determination on the final waiver request.

(2) Upon EPA's approval of the proposed Proprietary Controls and instruments addressing Prior Encumbrances, SD shall, within 15 days, update the original title insurance commitment (or other evidence of title acceptable to EPA) under ¶ 5.8(b) (Initial Title Evidence). If the updated title examination indicates that no liens, claims, rights, or encumbrances have been recorded since the effective date of the original commitment (or other title evidence), SD shall secure the immediate recordation of the Proprietary Controls and instruments addressing Prior Encumbrances in the appropriate land records. Otherwise, SD shall secure the release, subordination, modification, or relocation under ¶ 5.8(c)(1) regarding any newly-discovered liens, claims, rights, and encumbrances, prior to recording the Proprietary Controls and instruments addressing Prior Encumbrances.

(3) If SD submitted a title insurance commitment under ¶ 5.8(b)(1) (Record Title Evidence), then upon the recording of the Proprietary Controls and instruments addressing Prior Encumbrances, SD shall obtain a title insurance policy that: (i) is consistent with the original title insurance commitment; (ii) is for \$100,000 or other amount approved by EPA; (iii) is issued to the United States, SD, or other person approved by EPA; and (iv) is issued on a current American Land Title Association ("ALTA") form, or other form approved by EPA.

(4) SD shall, within 30 days after recording the Proprietary Controls and instruments addressing Prior Encumbrances, or such other deadline approved by EPA, provide to the United States and to all grantees of the

Proprietary Controls: (i) certified copies of the recorded Proprietary Controls and instruments addressing Prior Encumbrances showing the clerk's recording stamps; and (ii) the title insurance policy(ies) or other approved form of updated title evidence dated as of the date of recording of the Proprietary Controls and instruments.

- (e) SD shall monitor, maintain, enforce, and annually report to EPA on all Proprietary Controls required under this CD.
- (f) Owner SD shall not transfer its Affected Property unless it has executed and recorded all Proprietary Controls and instruments addressing Prior Encumbrances regarding such Affected Property in accordance with this Paragraph.

5.9 Certification of RA Completion

- (a) **RA Completion Inspection.** The RA is "Complete" for purposes of this ¶ 5.9 when it has been fully performed and the Performance Standards have been achieved. For properties that have not already been certified as "Complete" by EPA under the UAO, SD shall schedule an inspection for the purpose of obtaining EPA's Certification of RA Completion. The inspection must be attended by SD, and EPA and/or their representatives, with an invitation to the State.
- (b) **RA Report.** Following the inspection, SD shall submit a RA Report to EPA requesting EPA's Certification of RA Completion. The report must: (1) include certifications by a registered professional engineer and by SD's Project Coordinator that the RA is complete; (2) include as-built drawings signed and stamped by a registered professional engineer; (3) be prepared in accordance with Chapter 2 (Remedial Action Completion) of EPA's *Close Out Procedures for NPL Sites* guidance (May 2011), as supplemented by *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017); and (4) be certified in accordance with ¶ 8.5 (Certification).
- (c) If EPA, in consultation with the State, 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, in consultation with the State and based on the initial or any subsequent RA Report requesting Certification of RA Completion, that the RA is Complete, EPA shall so certify to SD. This certification will constitute the Certification of RA Completion for purposes of the CD, including Section XVI of the CD (Covenants by Plaintiffs). Certification of RA Completion will not affect SD's remaining obligations under the CD.

5.10 Periodic Review Support Plan (PRSP). SD shall submit the PRSP for EPA approval. The PRSP addresses the studies and investigations that SD shall conduct to support EPA's reviews of whether the 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.

5.11 Certification of Work Completion

- (a) **Work Completion Inspection.** For properties that have not already been issued a Certification of Work Completion under the UAO, SD shall schedule an inspection for the purpose of obtaining EPA's Certification of Work Completion. The inspection must be attended by SD and EPA and/or their representatives, with an invitation to the State.
- (b) **Work Completion Report.** Following the inspection, SD 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 SD's Project Coordinator that the Work, including all O&M activities, is complete; and
 - (2) be certified in accordance with ¶ 8.5 (Certification). If the RA Report submitted under ¶ 5.9(b) includes all elements required under this ¶ 5.11(b), then the RA Report suffices to satisfy all requirements under this ¶ 5.11(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, in consultation with the State and based on the initial or any subsequent report requesting Certification of Work Completion, that the Work is complete, EPA shall so certify in writing to SD. Issuance of the Certification of Work Completion does not affect the following continuing obligations: (1) activities under the Periodic Review Support Plan; (2) obligations under Sections VII (Property Requirements) and XVII (Records) of the CD; (3) Institutional Controls obligations as provided in the ICIAP; and (4) reimbursement of EPA's Future Response Costs under Section IX (Payments for Response Costs) of the CD.

6. DATA MANAGEMENT

- 6.1 Data Management.** SD is responsible for the management of all project information generated by the SD including but not limited to: all field and laboratory data, information related to sample collection, documentation (e.g. chain of custody (“COC”) forms, sample labels, and bottle tags), and submission of relevant reports for all field sample collection activities. SD submitted a Site-specific Data Management Plan (“DMP”) as part of the RAWP, which was approved by EPA in August 2020. The SD shall continue to manage data in accordance with the approved DMP. The SD shall review and update the DMP prior to the start of each construction, in conjunction with the annual RAWP review and approval. The DMP shall document the SD’s data management processes for the project. SD shall incorporate the standards listed below into the project-specific DMP.
- 6.2 Locational Data.** SD shall provide locational data for all field and laboratory data. The locational data shall comply with all mandatory latitude/longitude (lat/long) data standards in the EPA’s Latitude/Longitude Data Standard (January 6, 2006) with a goal of Tier 1 accuracy and precision (Tiers are defined in EPA’s National Geospatial Data Policy, latest review date August 2008).
- 6.3 Data Management Software.** SD shall use Scribe for the management of: planning for the collection of environmental samples; screening levels for comparisons of environmental sample results; storage and management of preliminary analytical results; and storage and management of final and validated analytical results. SD may use an equivalent software that is capable of publishing to [Scribe.NET](#) in a Scribe database. All Scribe data should be published to [Scribe.NET](#) at a minimum of once per week while RD data is being collected. The standard deadline for publishing to [Scribe.NET](#) is Monday at 8AM, Central Time Zone. Current versions of Scribe software can be found at: https://response.epa.gov/site/site_profile.aspx?site_id=ScribeGIS.
- 6.4 Geospatial Technical Specifications.**
- (a) SD shall submit spatial data, including spatially-referenced data and geospatial data: (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/>.

- (b) 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.
- (c) Spatial data submitted by SD does not, and is not intended to, define the boundaries of the Site.

6.5 Field Data. SD shall manage discrete field measurements with Scribe or an equivalent software in instances where equipment is set up to log data, such as results from x-ray fluorescence analyzers or air monitoring equipment. In instances where data is collected continuously and data telemetry is available, SD shall manage the data using EPA's VIPER system, or equivalent. All field data collected should be included in the Scribe database, or equivalent software per section 3.3 of this SOW. More information on VIPER may be found here: <https://response.epa.gov/viper>.

6.6 Analytical Data. SD shall report data from labs via electronic data deliverables ("EDDs").

- (a) EDDs shall meet the universal Superfund Contract Laboratory Program ("CLP") EDD format requirements that are Scribe-ready. *See* https://response.epa.gov/site/doc_list.aspx?site_id=ScribeGIS. The EDD shall also meet the Region 5 Superfund Electronic Data Submission Requirements listed at <https://www.epa.gov/superfund/region-5-superfund-electronic-data-submission>. Information on ERLN EDD/SEDD can be obtained at: <https://www.epa.gov/clp/staged-electronic-data-deliverable-sedd> and <https://www.epa.gov/emergency-response/environmental-response-laboratory-network-erln-data-submission-requirements>.
- (b) EPA intends to notify residents that have RD sampling results above RGs within 24-48 hours of receiving preliminary data. Preliminary data received by the SD should be sent to EPA within 24 hours of receipt. The preliminary data shall be followed by data delivered in the EDD format from the laboratory, for SD's review, using manual processes or preferably automated processes, such as the Web-based Electronic Data Review tool or Electronic Data Exchange and Evaluation Systems.
- (c) SD shall assign and associate all analytical data generated or managed by SD with a label indicating the level of validation. The OSWER Directive No. 9200.1-85 regarding this requirement, and the associated guidance document EPA 540-R-08005 may be obtained at <https://www.epa.gov/clp/superfund-clp-analytical-services-guidance-documents>.

6.7 Interactive Data Viewers.

- (a) SD will continue to maintain an interactive data viewer for the Site to display information relating to the status of OU4. The Webviewer should provide information relating to access agreement status, soil sampling status, soil

sampling results, and remediation status (excavated, backfilled, restored, property sign-off). EPA and their designated representatives and partner oversight agencies shall be granted access to the interactive data viewer.

- (b) SD shall provide necessary support including database management to support EPA's interactive data viewer production for the public-facing interactive data viewer. SD shall respond to requests for database modifications or additions within three business days.

6.8 Data Management Plan. The SD submitted a DMP under the 2020 UAO that was approved by EPA in August 2020. The SD shall review and update the DMP in conjunction with the RAWP prior to the start of each construction season if there have been changes implemented in the field that are not reflected in the existing DMP or changes proposed to the existing DMP. The DMP shall address the strategy for fulfilling the data management requirements under the CD. The purpose of the DMP is to document standard practices and ensure data confidence. The DMP shall include the QA/QC strategy, and data input, collection, and nomenclature standards. SD shall identify a Data Manager who will be responsible for the implementation and any updates to the DMP. The contents of the DMP shall include at a minimum:

- (a) **Roles and Responsibilities:** SD shall designate a Data Manager who is responsible for implementation of the DMP. SD will identify the individual and supporting qualifications of the individual to EPA for approval. Anytime SD re-designates the Data Manager, the name and qualifications will be submitted to EPA for approval ten days prior to date when designation would be transferred by SD.
- (b) **Data Types:** The DMP shall describe the types of data, both chemical (i.e. real-time air monitoring and sample analytical data and associated information) and non-chemical (i.e. photographic and video information, reports, site files, maps, equipment tracking, etc.), that will be managed under the CD. The DMP shall detail the source of the collected data.
- (c) **Data Management Flow:** The DMP shall detail the flow of data from collection through electronic delivery to Scribe.NET and any additional cloud or other data systems and applications the SD will use under the CD.
- (d) **Data Management Resources:** The DMP shall detail the system, formats and media for storage, maintenance, and back up of data. The DMP shall describe the use of existing software, including Scribe, ArcGIS Online, GIS, CADD, spreadsheet and other applications or systems. The DMP shall detail the hardware resources (such as iPads, GPS hardware, etc.) that will be used under the CD.
- (e) **Data Acquisition or Collection:** The DMP shall detail the process for acquiring or collecting data (i.e. forms, equipment, instrumentation, and/or software used to acquire the data).

- (f) **Data Analysis, Summary, and Reporting:** The DMP shall describe the procedure for processing data from collected formats (SEDD, electronic checklists, paper checklists, or forms, etc.) into useable deliverables. The DMP shall describe in the plan how collected data will be placed in a format that can be searched, sorted, queried, and transferred into other programs with minimal effort. The DMP shall include the use of the data to graph, map, or model both chemical parameters (e.g. data plotting and kriging/contour mapping of sample concentrations) and non-chemical parameters.
- (g) **Data Quality:** SD shall provide information on how field and analytical data will be evaluated for accuracy prior to posting to the final Scribe database. Detailed information shall be provided in accordance with Scribe auditor rules.
- (h) **Data Dissemination:** The DMP shall detail the process for sharing data with EPA. The DMP shall detail the process for allowing the EPA immediate access to data for review, and the process for revision of errant data found by EPA.

6.9 Data Sharing Agreements/Data Privacy

- (a) SD shall ensure any information that contains PII or records that would be exempted from disclosures pursuant to the Freedom of Information Act shall not be provided to any other entity that is not a signatory of the Information Sharing and Restrictions on Information Memorandum of Understanding in accordance with the executed Information Sharing and Restrictions on Information Handling MOA.

7. REPORTING

7.1 Progress Reports. Commencing with the month following lodging of the CD and until EPA approves the RA 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 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 has 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.

7.2 Notice of Progress Report Schedule Changes. If the schedule for any activity described in the progress reports changes, SD shall notify EPA of such change at least seven days before performance of the activity.

7.3 Status Updates. Beginning the week after the Effective Date of the CD, SD shall submit a weekly status update email to EPA. The email must generally include summary of all the number of access agreements obtained, the number of properties where samples have been collected, the presence of sensitive populations identified at residences, how many properties require remediation (the number of priority properties should be further identified), and the status of all properties scheduled for RA during the construction season (number of properties identified for cleanup, how many excavated, backfilled, restored, sign-off status).

8. DELIVERABLES

8.1 Applicability. As applicable to the extent not already submitted pursuant to the UAO, 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. ¶¶ 8.2 (In Writing) through 8.4 (Technical Specifications) apply to all deliverables. ¶ 8.5 (Certification) applies to any deliverable that is required to be certified. ¶ 8.6 (Approval of Deliverables) applies to any deliverable that is required to be submitted for EPA approval.

8.2 In Writing. As provided in ¶ 72 of the CD, all deliverables under this SOW must be in writing unless otherwise specified.

8.3 General Requirements for Deliverables. All deliverables must be submitted by the deadlines in the RD Schedule or RA Schedule, as applicable. SD shall submit all deliverables to EPA in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in ¶ 8.4. 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.

8.4 Technical Specifications

- (a) Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable ("EDD") format. SD shall consult with the EPA Remedial Project Manager prior to transmitting sampling and monitoring data in order to be advised of the EDD format that the data should be transmitted in.

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 NAD83 or 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 shall be accompanied by metadata, and such metadata should be compliant with the 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 SD does not, and is not intended to, define the boundaries of the Site.

8.5 Certification. All deliverables that require compliance with this ¶ 8.5 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.

8.6 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 and consultation with the State, 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 ¶ 8.6(a) (Initial Submissions), or if required by a notice of approval upon specified conditions under ¶ 8.6(a), SD shall, within 30 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, EPA may: (1) approve, in whole or in part, the resubmission; (2) approve the resubmission upon specified conditions; (3) modify the resubmission; (4) disapprove, in whole or in part, the resubmission, requiring SD to correct the deficiencies; or (5) any combination of the foregoing.
- (c) **Implementation.** Upon approval, approval upon conditions, or modification by EPA under ¶ 8.6(a) (Initial Submissions) or ¶ 8.6(b) (Resubmissions), of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and enforceable under the CD; and (2) SD shall take any action required by such deliverable, or portion thereof. The implementation of any non-deficient portion of a deliverable submitted or resubmitted under ¶ 8.6(a) or ¶ 8.6(b) does not relieve SD of any liability for stipulated penalties under Section XIII (Stipulated Penalties) of the CD.

8.7 Pre-Remedial Activities Deliverables. As applicable to the extent not already submitted pursuant to the UAO, SD shall submit each of the following supporting deliverables for EPA approval after consultation with the State as part of the Pre-Remedial Activities, detailed below, as they are completed.

- (a) Access Agreements. SD shall provide a copy of all access agreements to EPA in a timely manner. Access agreements can be provided in batches (size of batches to be discussed and agreed upon) to EPA electronically.
- (b) Soil Sampling Results. SD shall notify EPA electronically of all preliminary results, so notifications can be made to the property owners. Upon receipt of final validated data, SD shall prepare and submit to EPA the soil sampling results for each property in a timely manner, to be discussed and determined prior to each field season.
- (c) Pre-Remedial Property Packets. SD shall prepare packets, in accordance with the RD, for each property that shall be submitted to EPA for review and approval. Property reports can be submitted in batches (size of batches and schedule to be discussed and agreed upon). The property packets will be distributed to property owners at pre-construction meetings or with the soil sampling results letters (if no action is required at a specific property).

8.8 Supporting Deliverables. The deliverables in subsections 8.8(a) through 8.8(i) of this Paragraph have been previously submitted and, if necessary, approved by EPA under the UAO. SD shall submit the O&M Plan under subsection (j), the O&M Manual under subsection (k), the Institutional Controls Implementation and Assurance Plan under subsection (l), and the Community Impacts Mitigation Plan under subsection (m) of this Paragraph to EPA for approval after consultation with the State. SD shall review and update each of these supporting deliverables prior to the start of each construction season during the course of the Work, and/or as requested by EPA. SD shall develop and/or update all deliverables under this Paragraph in accordance with all applicable regulations, guidances, and policies (*see* Section 11 (References)).

- (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 Emergency Response Plan (“ERP”) must describe procedures to be used in the event of an accident or emergency at the FPSA on OU3 or OU4 of 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 clean-up, as well as local emergency squads and hospitals;
 - (3) Spill Prevention, Control, and Countermeasures 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 ¶ 5.6(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 EPCRA, 42 U.S.C. § 11004; and
 - (5) A description of all necessary actions to ensure compliance with ¶ 5.6 (Emergency Response and Reporting) 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 through 900C (Mar. 2005). The QAPP also must include procedures:
 - (1) To ensure that EPA and the State and their authorized representative have reasonable access to laboratories used by SD in implementing the CD (“SD’s Labs”);
 - (2) To ensure that SD’s Labs analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring;
 - (3) To ensure that SD’s Labs perform all analyses using EPA-accepted methods (i.e., the methods documented in *USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis*, ILM05.4 (Dec. 2006); *USEPA Contract Laboratory Program Statement of Work for Organic Analysis*, SOM01.2 (amended Apr. 2007); and *USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration)*, ISM01.2 (Jan. 2010)) or other methods acceptable to EPA;
 - (4) To ensure that SD’s Labs participate in an EPA-accepted QA/QC program or other program QA/QC acceptable to EPA;
 - (5) For SD to provide EPA and the State with notice at least 14 days prior to any sample collection activity;
 - (6) For SD to provide split samples and/or duplicate samples to EPA and the State upon request;

- (7) For EPA and the State to take any additional samples that they deem necessary;
 - (8) For EPA and the State to provide to SD, upon request, split samples and/or duplicate samples in connection with EPA's and the State's oversight sampling; and
 - (9) For SD to submit to EPA and the State all sampling and tests results and other data in connection with the implementation of the CD.
- (e) **Construction Quality Assurance/Quality Control Plan ("CQA/QCP").** The purpose of the Construction Quality Assurance Plan ("CQA") 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 ("QCP") 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.
- (f) **Construction Stormwater Pollution Prevention Plan.** SD shall prepare a Construction Stormwater Pollution Prevention Plan for the Work. A Stormwater Pollution Prevention Plan shall also be prepared to manage the Waste Material on OU3.
- (g) **Traffic Management Plan.** SD shall prepare a Traffic Management Plan for the Work.

- (h) **OU4 Remedial Action Material Transportation and Temporary Storage Plan.** The OU4 RA Material Transportation and Temporary Storage Plan (“OU4 RA TTSP Plan”) must include at a minimum:
- (1) Proposed routes for any off-Site shipments of excavated material;
 - (2) Proposed routes for consolidation of Material at the FPSA;
 - (3) Description of the site setup at the FPSA, including the locations of the waste staging areas, segregation measures (including waste characterization sampling) and laydown yard;
 - (4) SRM and soils with concentrations above construction work RGs and residential RGs will be stockpiled separately at OU3.
 - (5) Best management practices (and corrective measures) for the management of the stockpiles to prevent leaching, run-on, run-off, wind dispersion, and direct contact of placed soil.
 - (6) Waste management control measures necessary for safety and protection of human health and the environment including but not limited to erosion control, stormwater pollution prevention, dust suppression (both on the roads used by the truck traffic and near the excavated Materials), and air monitoring;
 - (7) Description of maintenance to be performed on the roads used by trucks hauling Waste Materials
 - (8) Health and safety requirements;
 - (9) Documentation requirements;
 - (10) Identification of communities affected by shipment of excavated Material; and
 - (11) Description of plans to minimize impacts on affected communities.
- (i) **Data Management Plan.** SD shall prepare a Site-specific DMP in accordance with Section 6 that shall describe the information that SD shall collect during the OU4 Remedial Action Construction (including pre-remedial activities) and how SD manages that information so that it is compatible with EPA’s data management practices. The DMP should at a minimum discuss the different data streams, types of data collected, the management of the data, and how EPA will receive the data.
- (j) **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.
- (k) **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).
- (l) **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 OU4 of 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 any 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) Any legal descriptions and survey maps that are prepared according to current ALTA Survey guidelines and certified by a licensed surveyor

- (m) **Community Impacts Mitigation Plan (“CIMP”).** The CIMP describes all activities, including any to address concerns of EJ and disadvantaged communities, 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 EPA’s Project Coordinator in performing the evaluations recommended under the *Superfund Community Involvement Handbook*, OLEM 9230.0-51 (March 2020), pp. 53-56.

9. SCHEDULES

9.1 Applicability and Revisions. All deliverables and tasks required under this SOW must be submitted or completed by the deadlines or within the time durations listed in the RD and RA Schedules set forth below. SD may submit proposed revised RD Schedules or RA Schedules for EPA approval. Upon EPA’s approval, the revised RD and/or RA Schedules supersede the RD and RA Schedules set forth below, and any previously-approved RD and/or RA Schedules.

9.2 RA Schedule

	Description of Deliverable / Task	¶ Ref.	Deadline
1	Award RA contract		60 days after EPA Notice of Authorization to Proceed
2	Annual RAWP Update	5.1	No later than 30 days prior to the start of each construction season, beginning with that year’s construction season, as defined by agreement of the Parties.
3	Designate IQAT	5.3	30 days after EPA Notice of Authorization to Proceed
4	Preconstruction Conference	5.4(a)	30 days prior to the start of each construction season, as defined by agreement of the Parties.
5	Start of Construction		The later of: (i) 30 days after Approval of Annual RAWP Update; or (ii) such other

			time as EPA may require (provided that EPA has approved the RAWP)
6	OU4 O&M Plan, if properties remain that are other than Unrestricted Use/Unrestricted Access	8.8(j)	60 days before Completion of the construction of the RA (“Remedial Action Construction”)
7	ICIAP, if Institutional Controls are necessary	8.8(k)	60 days before Completion of Remedial Action Construction
8	Completion of Construction		Per approved OU4 Remedial Action Construction Schedule in RAWP.
9	RA Completion Inspection	5.9(a)	Prior to obtaining EPA’s Certification of RA Completion for properties that have not already been certified as “Complete” by EPA under the UAO
10	RA Report	5.9(b)	60 days after RA Completion Inspection
11	Work Completion Report	5.11(b)	30 days after Work Completion Inspection
12	Periodic Review Support Plan	5.10	Five years after Start of RA Construction

10. STATE PARTICIPATION

10.1 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 in care of:

Charlene Falco
Project Manager, Federal Programs
Illinois Environmental Protection Agency
Mail Code #24
PO Box 19276
Springfield, IL 62794

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

- (a) Any EPA approval or disapproval under ¶ 8.6 (Approval of Deliverables) of any deliverables that are required to be submitted for EPA approval; and
- (b) After the Effective Date of the CD, any approval or disapproval of Certification of RA Completion under ¶ 5.9 (Certification of RA Completion), and any

approval or disapproval of, or Certification of Work Completion under ¶ 5.11 (Certification of Work Completion).

11. REFERENCES

11.1 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 ¶ 11.2:

- (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/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 9380.310, EPA/540/R-92/071A (Nov. 1992).
- (j) National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, 40 C.F.R. Part 300 (Oct. 1994).
- (k) Guidance for Scoping the Remedial Design, OSWER 9355.0-43, EPA/540/R-95/025 (Mar. 1995).
- (l) Remedial Design/Remedial Action Handbook, OSWER 9355.0-04B, EPA/540/R-95/059 (June 1995).
- (m) EPA Guidance for Data Quality Assessment, Practical Methods for Data Analysis, QA/G-9, EPA/600/R-96/084 (July 2000).
- (n) Operation and Maintenance in the Superfund Program, OSWER 9200.1-37FS, EPA/540/F-01/004 (May 2001).

- (o) Comprehensive Five-year Review Guidance, OSWER 9355.7-03B-P, 540-R-01007 (June 2001).
- (p) Guidance for Quality Assurance Project Plans, QA/G-5, EPA/240/R-02/009 (Dec. 2002).
- (q) Superfund Lead-Contaminated Residential Sites Handbook, OSWER 9285.7-50 (Aug. 2003).
- (r) Institutional Controls: Third Party Beneficiary Rights in Proprietary Controls (Apr. 2004).
- (s) Quality management systems for environmental information and technology programs -- Requirements with guidance for use, ASQ/ANSI E4:2014 (American Society for Quality, February 2014).
- (t) Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A through 900C (Mar. 2005).
- (u) Superfund Community Involvement Handbook, SEMS 100000070 (January 2016), <https://www.epa.gov/superfund/community-involvement-tools-and-resources>.
- (v) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).
- (w) EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006).
- (x) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (y) USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, ILM05.4 (Dec. 2006).
- (z) USEPA Contract Laboratory Program Statement of Work for Organic Analysis, SOM01.2 (amended Apr. 2007).
- (aa) EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2008), <https://www.epa.gov/geospatial/geospatial-policies-and-standards> and <https://www.epa.gov/geospatial/epa-national-geospatial-data-policy>.
- (bb) Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, OSWER 9283.1-33 (June 2009).
- (cc) Principles for Greener Cleanups (Aug. 2009), <https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups>.

- (dd) Providing Communities with Opportunities for Independent Technical Assistance in Superfund Settlements, Interim (Sep. 2009).]
- (ee) USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration), ISM01.2 (Jan. 2010).
- (ff) Close Out Procedures for National Priorities List Sites, OSWER 9320.2-22 (May 2011).
- (gg) Groundwater Road Map: Recommended Process for Restoring Contaminated Groundwater at Superfund Sites, OSWER 9283.1-34 (July 2011).
- (hh) Recommended Evaluation of Institutional Controls: Supplement to the “Comprehensive Five-Year Review Guidance,” OSWER 9355.7-18 (Sep. 2011).
- (ii) Construction Specifications Institute’s MasterFormat 2018, available from <https://www.csiresources.org/home>.
- (jj) Updated Superfund Response and Settlement Approach for Sites Using the Superfund Alternative Approach, OSWER 9200.2-125 (Sep. 2012)
- (kk) 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).
- (ll) 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).
- (mm) [EPA’s Emergency Responder Health and Safety Manual, OSWER 9285.3-12](#) (July 2005 and updates), https://www.epaossc.org/_HealthSafetyManual/manual-index.htm.
- (nn) Broader Application of Remedial Design and Remedial Action Pilot Project Lessons Learned, OSWER 9200.2-129 (Feb. 2013).
- (oo) Guidance for Evaluating Completion of Groundwater Restoration Remedial Actions, OSWER 9355.0-129 (Nov. 2013).
- (pp) Groundwater Remedy Completion Strategy: Moving Forward with the End in Mind, OSWER 9200.2-144 (May 2014).
- (qq) Guidance for Management of Superfund Remedies in Post Construction, OLEM 9200.3-105 (Feb. 2017), <https://www.epa.gov/superfund/superfund-post-construction-completion>.

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

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

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

- 11.3** 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 receives notification from EPA of the modification, amendment, or replacement.

APPENDIX C

Site Map

APPENDIX C

Map of DePue /New Jersey Zinc/Mobil Chemical Corp. Superfund Site

Source: OU4 RD/RA Workplan, with noted revisions

