

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VII
11201 Renner Boulevard
LENEXA, KANSAS 66219

IN THE MATTER OF:

Cotter Corporation (N.S.L.),
Bridgeton Landfill, LLC,

Respondents

and

U.S. Department of Energy,

Settling Federal Agency

Docket No: VII-93-F-0005

Proceeding Under Section 104,
122(a), and 122(d)(3) of the
Comprehensive Environmental
Response, Compensation and
Liability Act, as amended, 42 U.S.C.
§§ 9604, 9622(a) and 9622(d)(3)

THIRD AMENDMENT TO ADMINISTRATIVE SETTLEMENT AGREEMENT
AND ORDER ON CONSENT

WHEREAS, the United States Environmental Protection Agency, Region VII
("EPA"), Cotter Corporation (N.S.L.) ("Cotter"), Laidlaw Waste Systems (Bridgeton),
Inc. ("Laidlaw"), Rock Road Industries, Inc. ("Rock Road") (Cotter, Laidlaw, Rock Road
are collectively referred to herein as "Respondents") and the U.S. Department of Energy
("DOE," referred to herein as "Settling Federal Agency") (EPA, Respondents and the
Settling Federal Agency are collectively the "Parties") entered into an Administrative
Order on Consent ("AOC") docket no. VII-93-F-0005;

WHEREAS, Section XXVII, paragraph 106 of that AOC provides for amendments to the
AOC by the mutual agreement of the Parties;

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Superfund

WHEREAS, the Parties amended the AOC on July 17, 1997 (“First Amendment”);

WHEREAS, the Parties amended the AOC on October 1, 2008 (“Second Amendment”); and

WHEREAS, the Parties hereby now wish again to amend the AOC.

NOW, THEREFORE, the Parties amend the AOC as follows:

1. Bridgeton Landfill, LLC is the successor in interest to Rock Road Industries, Inc. and Laidlaw Waste Systems (Bridgeton), Inc.
2. For purposes of this Third Amendment to the Settlement Agreement, “Work” shall mean all activities Respondents, including Settling Federal Agency, are required to perform pursuant to the Settlement Agreement, and “RD Work” shall mean all activities Respondents, including Settling Federal Agency, are required to perform pursuant to this Third Amendment. For avoidance of confusion, “Work” includes RD Work as well as other work conducted pursuant to the Settlement Agreement. “Third Amendment” shall mean this amendment. “Response Costs” shall mean all costs incurred or paid by the Respondents to EPA to perform, monitor, oversee, supervise or enforce the Work or the Settlement Agreement, and “RD Response Costs” shall mean all costs incurred or paid by the Respondents or the United States subsequent to September 27, 2018 in connection with the Remedial Design for OU1 to perform, monitor, oversee, supervise or enforce the RD Work or this Third Amendment. For avoidance of confusion, “Response Costs” includes RD Response Costs as well as other response costs incurred pursuant to the Settlement Agreement. Response Costs shall include, but not be limited to, all costs that

the United States pays to Respondents on behalf of the Settling Federal Agency, as well as all costs that the EPA incurs in determining whether Respondents' performance of the Work is consistent with the requirements of the Settlement Agreement, as amended, in reviewing or developing plans, reports and other items pursuant to the Settlement Agreement, as amended, or otherwise implementing, overseeing, or enforcing the Settlement Agreement, as amended, and for direct and indirect costs, payroll costs, contractor costs, travel costs, laboratory costs and/or costs incurred by the EPA to secure access, plus interest. "United States" shall mean the United States of America, including all of its departments, agencies, and instrumentalities of the United States, including EPA and Settling Federal Agency.

3. Section I (Introduction), paragraph 1 of the AOC, shall be amended as follows:

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement" or "ASAOC") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Cotter Corporation (N.S.L.) ("Respondent Cotter"), and Bridgeton Landfill, LLC ("Respondent Bridgeton"), (collectively, "Respondents") and the U.S. Department of Energy ("DOE") ("Settling Federal Agency"). This Settlement Agreement concerns the preparation of, performance of, and reimbursement of, all costs incurred by EPA in connection with a remedial investigation and feasibility study ("RI/FS") and the design of the Remedial Action as described in the Record of Decision Amendment ("ROD Amendment") dated September 27, 2018, at the West Lake Landfill Site, OU1 located at Bridgeton, Missouri (hereinafter referred to as "West Lake" or "Site").

4. All references in the original document and first and second amendments thereto to DOE as a “Respondent” or “Federal Respondent” shall be understood to be synonymous with “Settling Federal Agency” as used in this Third Amendment.

5. Section IV (Statement of Purpose), paragraph 6(d) shall be amended as follows: (d) to perform a design for the Remedial Action as described in the ROD Amendment for the Site.

6. Subsection 39(h)(1) in Section VIII (Work to Be Performed) shall be amended as follows, and Subsections 39(h)(2) through 39(h)(6) and 39(h)(8) are deleted:

39. h. Remedial Design Work Plan and Implementation.

1. Respondents shall develop the Remedial Design in accordance with the SOW and all EPA-approved, conditionally-approved, or modified deliverables as required by the SOW. All deliverables required to be submitted for approval under the Settlement Agreement or SOW shall be subject to EPA approval in accordance with Paragraph 5.6 (Approval of Deliverables) of the SOW. Upon its approval by EPA, the RD Work Plan shall be incorporated into and become enforceable under this Third Amendment to the Settlement Agreement.

7. Section XI (Quality Assurance) shall be deleted.

8. Paragraph 70.1 in Section XVI (Project Coordinators) shall be deleted.

9. Section XX (Delay in Performance/Stipulated Penalties) shall be amended as follows:

a. Paragraph 77 by adding the following deliverable items: RD Work Plan, Supporting Deliverables identified in Section 5.7 of the SOW, Design Criteria Report, Design Investigation Work Plan, Design Investigation Evaluation Report, preliminary remedial design submittal, intermediate remedial design submittal, and pre-final/final remedial design submittal.

b. Paragraph 81 by deleting the last sentence and adding the following:

All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be made in accordance with ¶ 91.

10. Section XXII (Reimbursement of Response and Oversight Costs), paragraph 91, shall be substituted as follows:

Respondents shall make payment to EPA by Fedwire Electronic Funds Transfer (EFT) to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York, NY 10045
Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

and shall reference Site/Spill ID Number 0714 and the EPA docket number for this action. At the time of payment, Respondents shall send notice that payment has been made to EPA's RPM at:

Chris Jump
Remedial Project Manager
U.S. Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219

and to the EPA Cincinnati Finance Office by email at cinwd_acctsreceivable@epa.gov,
or by mail to:

EPA Cincinnati Finance Office
26 W. Martin Luther King Drive
Cincinnati, Ohio 45268

Such notice shall reference Site/Spill ID Number 0714 and the EPA docket number for this action.

The total amount to be paid by Respondents pursuant to this paragraph shall be deposited by EPA in the West Lake Landfill Superfund Site Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund, provided, however, that EPA may only deposit a Response Costs payment and/or RD Response Costs payments directly into the EPA Hazardous Substance Superfund if, at the time the payment is received, EPA estimates that the West Lake Landfill Superfund Site Special Account balance is sufficient to address currently anticipated future response actions to be conducted or financed by EPA at or in connection with the Site. Any decision by EPA to deposit a Response Costs payment and/or RD Response Costs payment directly into the EPA Hazardous Substance Superfund for this reason shall not be subject to challenge by Respondents pursuant to the dispute resolution provisions of this Settlement or in any other forum.

11. The following shall be inserted as paragraph 92.a. within Section XXII (Reimbursement of Response and Oversight Costs):
- 92.a. Payments by Settling Federal Agency
1. The Parties have agreed for purposes of their entry into this Settlement Agreement that each shall be responsible for payment of one-third (1/3) of the RD Response Costs for the Site, and that the Settling Federal Agency shall pay the Respondents its one-third (1/3) share of such costs while the Respondents perform the RD Work required by this Third Amendment. The Respondents and Settling Federal Agency reserve all rights to argue all equitable factors, including payment of RD Response Costs, in connection with the Consent Decree negotiations and allocation of remedial action costs.
- a. The United States, on behalf of Settling Federal Agency, shall reimburse Respondents for one-third (1/3) of Respondents' future RD Response Costs and for one-third (1/3) of future Response Costs (including oversight costs) that Respondents have paid to EPA in accordance with Section XXII. Such payments shall be made in accordance with the provisions of this Paragraph.
- b. The United States, on behalf of Settling Federal Agency, shall make an initial payment to Respondents of \$1,700,000.00 as soon as reasonably practical after this agreement becomes effective. This amount represents Settling Federal Agency's minimum estimate of its 1/3 share of Respondents' future RD Response Costs and its 1/3 share of future Response Costs (including oversight costs) that Respondents will pay to EPA in accordance with Section XXII. For any payment under this subsection made more than 120 days after the Effective Date of this Third Amendment, the United States on

behalf of the Settling Federal Agency shall pay interest at the rate established pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), which interest shall begin to accrue on the 121st day after the Effective Date and shall continue to accrue until the date of payment. In the event that Settling Federal Agency's initial payment of \$1,700,000.00 represents more than its one-third (1/3) share of Respondents' future RD Response Costs and its one-third (1/3) share of future Response Costs (including oversight costs) that Respondents have paid to EPA, Respondents shall credit Settling Federal Agency the difference between \$1,700,000.00 and its share in a future settlement between the Parties regarding the Site.

c. Respondents shall make an Initial Payment Demand to Settling Federal Agency within 120 days after the end of the Calendar Year in which Respondents expended a total of \$5,100,000.00 for Respondents' RD Response Costs and Response Costs (including oversight costs). Such payment demand shall cover all reimbursable costs incurred by Respondents up through the end of that Calendar Year. Respondents' failure to include costs in the Initial Payment Demand costs that had been incurred prior to the end of the preceding Calendar Year shall result in a waiver of Respondents' right to demand payment for those costs from Settling Federal Agency.

d. After making the Initial Payment Demand, Respondents shall make Annual Payment Demands to Settling Federal Agency within 120 days after the end of each Calendar Year. Respondents' failure to include costs in the Payment Demand for the calendar year in which the cost was incurred shall result in a waiver of Respondents' right to demand payment for those costs from Settling Federal Agency.

e. Every Payment Demand, including the Initial Payment Demand, shall include the following:

- (1) Reference to the order, letters, or other communication issued by EPA, during the time period in which the costs were incurred, pursuant to which Respondents have incurred costs performing the Work;
- (2) For Payment Demands for Settling Federal Agencies' 1/3 share of future RD Response Costs and future Response Costs (including oversight costs) pursuant to Section XXII, a copy of EPA's bill(s) to Respondents for its RD Response Costs and Response Costs (including oversight costs);
- (3) An invoice showing the amount of payment requested fully divided into its detailed component cost items and related back to the relevant cost authorizing document(s);
- (4) Supporting documentation or information, such as copies of invoices, descriptions of the work underlying the invoices. Such supporting documentation or information shall identify each contractor, vendor, or other person to whom money for which Respondents seeks reimbursement was paid, and show, for each such contractor, vendor, or other person, the amount of money they were paid and the services or goods they provided;
- (5) Evidence that Respondents have actually incurred and paid each claimed cost;
- (6) Certification by the Project Coordinator or a member of his firm that the information provided in or with the Payment Demand is true and accurate to the best of Respondents' knowledge and that Respondents believe in good faith that they are entitled to recover the amount requested. The certification should be included in each Payment Demand and state the following: "To the best of my knowledge, after thorough

investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I further certify that in my professional judgment the actual costs summarized in this submission were incurred and paid for necessary Work in compliance with the requirements of the ASAOC, the SOW, and EPA-approved deliverables. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”;

(7) A statement that, effective upon the receipt of the United States’ payment of such costs on behalf of Settling Federal Agency, the Respondents covenant not to sue the United States for the response costs identified in the payment demand.

f. A Payment Demand that does not comply with the requirements of this Paragraph may be rejected by Settling Federal Agency and returned to Respondents for proper completion, clarification, or documentation. No time limits or other consequences associated with payment for and calculation of interest on the Payment Demand will begin to run until a complete and documented Payment Demand is submitted in conformance with Paragraph 92.e.

g. Respondents’ Payment Demands shall reference In re Westlake Landfill Superfund Site, DJ No. 90-11-6-130, and shall be sent by overnight delivery to the address specified below, or such other address or by such other means as an authorized representative of Settling Federal Agency specifies in writing:

Chief, Environmental Defense Section
Environment & Natural Resources Division
601 D Street, N.W.
Suite 8000
Washington, D.C. 20004
(202) 514-2701

h. The United States on behalf of the Settling Federal Agency shall pay its 1/3 share of the Respondents' future RD Response Costs and 1/3 share of future Response Costs (including oversight costs) paid by Respondents that are identified in each Payment Demand, less any amount that Settling Federal Agency disputes pursuant to Paragraph 92.i. as soon as reasonably practicable after receipt of a complete payment demand. For any payment made more than 120 days after Settling Federal Agency's receipt of a complete Payment Demand in conformance with the requirements of Paragraph 92.e., except a payment made after the resolution of a dispute under Paragraph 92.i., Settling Federal Agency shall pay interest at the rate established pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), which interest shall begin to accrue on the 121st day after Settling Federal Agency's receipt of the Payment Demand and shall continue to accrue until the date of payment. Payments shall be made by Electronic Funds Transfer in accordance with instructions provided by Respondents.

i. Objections to Payment of Response Costs by the United States.

(1) If Settling Federal Agency in good faith questions or contests any cost for which payment is requested, in whole or in part, it shall have the right to withhold payment of the amount of the disputed cost; provided, however, that Settling Federal Agency shall notify Respondents in writing of any such disputed amount within 60 days after Settling Federal Agency receives Respondents' complete Payment Demand or any supplement thereto. Such notice shall contain a listing of the specific costs questioned by Settling Federal Agency and a detailed statement describing the basis for Settling Federal Agency's position. Respondents and Settling Federal Agency shall promptly make a good faith effort to resolve such a dispute. In the event that Settling Federal Agency and

Respondents cannot informally resolve the dispute, either party may seek formal dispute resolution in accordance with 5 U.S.C. § 571 et seq. The invocation of dispute resolution procedures under this Paragraph shall not extend, postpone or affect in any way any obligation of Respondents to perform the Work or pay future Response Costs, including oversight costs, under this agreement.

(2) If Settling Federal Agency questions any costs included in a Payment Demand because the information provided by Respondents with regard to those costs is incomplete or not clear, Respondents may supplement their payment request by submitting additional information concerning those costs within 60 days after Respondents receive notice, pursuant to this subparagraph, that Settling Federal Agency has disputed such costs. An error or omission in the original submission, if corrected within 60 days after Respondents receive notice, shall not be the basis for Settling Federal Agency denying payment of an otherwise sufficiently documented cost. If Respondents supplement their original submission pursuant to this subparagraph, Settling Federal Agency shall be deemed to have received the Payment Demand on the Day that it receives the supplement.

j. The Parties to this Settlement recognize and acknowledge that the payment obligations of Settling Federal Agency under this Settlement can only be paid from appropriated funds legally available for such purpose. Nothing in this Settlement shall be interpreted or construed as a commitment or requirement that Settling Federal Agency obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. § 1341, or any other applicable provision of law.

12. Paragraph 103 is hereby deleted and replaced with the following:

103. In order to ensure completion of the Work, Respondents shall secure financial assurance, initially in the amount of \$5,418,000.00 (“Estimated Cost of the Work”), for the benefit of EPA. The financial assurance must be one or more of the mechanisms listed below, in a form substantially identical to the relevant sample documents available from EPA or under the “Financial Assurance - Settlements” category on the Cleanup Enforcement Model Language and Sample Documents Database at <https://cfpub.epa.gov/compliance/models/>, and satisfactory to EPA. Respondents may use multiple mechanisms if they are limited to surety bonds guaranteeing payment, letters of credit, trust funds, and/or insurance policies.

- a. A surety bond guaranteeing payment and/or performance of the Work that is issued by a surety company among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury;
- b. An irrevocable letter of credit, payable to or at the direction of EPA, that is issued by an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency;
- c. A trust fund established for the benefit of EPA that is administered by a trustee that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency;
- d. A policy of insurance that provides EPA with acceptable rights as a beneficiary thereof and that is issued by an insurance carrier that has the authority to issue insurance policies in the applicable jurisdiction(s) and whose insurance operations are regulated and examined by a federal or state agency;

e. A demonstration by a Respondent that it meets the financial test criteria of Paragraph 103.2, accompanied by a standby funding commitment, which obligates the affected Respondent to pay funds to or at the direction of EPA, up to the amount financially assured through the use of this demonstration in the event of a Work Takeover; or

f. A guarantee to fund or perform the Work executed in favor of EPA by a company: (1) that is a direct or indirect parent company of a Respondent or has a “substantial business relationship” (as defined in 40 C.F.R. § 264.141(h)) with a Respondent; and (2) can demonstrate to EPA’s satisfaction that it meets the financial test criteria of Paragraph 103.2.

103.1. Respondents shall, within 30 days after the Effective Date, obtain EPA’s approval of the form of Respondents’ financial assurance. Within 30 days of such approval, Respondents shall secure all executed and/or otherwise finalized mechanisms or other documents consistent with the EPA-approved form of financial assurance and shall submit such mechanisms and documents to the Regional Financial Management Officer at:

Alan Cooke
Office of Policy and Management
U.S. Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219

103.2. Respondents seeking to provide financial assurance by means of a demonstration or guarantee under Paragraph 103.e or 103.f, must, within 30 days of the Effective Date:

a. Demonstrate that:

(1) the affected Respondent or guarantor has:

- i. Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and
- ii. Net working capital and tangible net worth each at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and
- iii. Tangible net worth of at least \$10 million; and
- iv. Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; or

(2) The affected Respondent or guarantor has:

- i. A current rating for its senior unsecured debt of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; and
- ii. Tangible net worth at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other

federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

iii. Tangible net worth of at least \$10 million; and

iv. Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

b. Submit to EPA for the affected Respondent or guarantor: (1) a copy of an independent certified public accountant's report of the entity's financial statements for the latest completed fiscal year, which must not express an adverse opinion or disclaimer of opinion; and (2) a letter from its chief financial officer and a report from an independent certified public accountant substantially identical to the sample letter and reports available from EPA or under the "Financial Assurance-Settlements" subject list category on the Cleanup Enforcement Model Language and Sample Documents Database at <https://cfpub.epa.gov/compliance/models/>.

103.3. Respondents providing financial assurance by means of a demonstration or guarantee under Paragraph 103.e or 103.f must also:

a. Annually resubmit the documents described in Paragraph 103.2.b within 90 days after the close of the affected Respondent's or guarantor's fiscal year;

b. Notify EPA within 30 days after the affected Respondent or guarantor determines that it no longer satisfies the relevant financial test criteria and requirements set forth in this Section; and

c. Provide to EPA, within 30 days after EPA's request, reports of the financial condition of the affected Respondent or guarantor in addition to those specified in Paragraph 103.2.b; EPA may make such a request at any time based on a belief that the affected Respondent or guarantor may no longer meet the financial test requirements of this Section.

103.4. Respondents shall diligently monitor the adequacy of the financial assurance. If any Respondent becomes aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, such Respondent shall notify EPA of such information within 7 days. If EPA determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, EPA will notify the affected Respondent of such determination. Respondents shall, within 30 days after notifying EPA or receiving notice from EPA under this Paragraph, secure and submit to EPA for approval a proposal for a revised or alternative financial assurance mechanism that satisfies the requirements of this Section. EPA may extend this deadline for such time as is reasonably necessary for the affected Respondent, in the exercise of due diligence, to secure and submit to EPA a proposal for a revised or alternative financial assurance mechanism, not to exceed 60 days. Respondents shall follow the procedures of Paragraph 103.6 (Modification of Amount, Form, or Terms of Financial Assurance) in seeking approval of, and submitting documentation for, the revised or alternative financial assurance mechanism. Respondents' inability to secure financial assurance in accordance with this Section does not excuse performance of any other obligation under this Third Amendment.

103.5. Access to Financial Assurance

- a. If EPA issues a notice of implementation of a Work Takeover then, in accordance with any applicable financial assurance mechanism, and/or related standby funding commitment, EPA is entitled to: (1) the performance of the Work; and/or (2) require that any funds guaranteed be paid in accordance with Paragraph 103.5.d.
- b. If EPA is notified by the issuer of a financial assurance mechanism that it intends to cancel the mechanism, and the affected Respondent fails to provide an alternative financial assurance mechanism in accordance with this Section at least 30 days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation in accordance with Paragraph 103.5.d.
- c. If, upon issuance of a notice of implementation of a Work Takeover either: (1) EPA is unable for any reason to promptly secure the resources guaranteed under any applicable financial assurance mechanism and/or related standby funding commitment, whether in cash or in kind, to continue and complete the Work; or (2) the financial assurance is a demonstration or guarantee under Paragraphs 103.e or 103.f, then EPA is entitled to demand an amount, as determined by EPA, sufficient to cover the cost of the remaining Work to be performed. Respondents shall, within 10 days of such demand, pay the amount demanded as directed by EPA.
- d. Any amounts required to be paid under this Paragraph shall be, as directed by EPA: (i) paid to EPA in order to facilitate the completion of the Work by EPA

or by another person; or (ii) deposited into an interest-bearing account, established at a duly chartered bank or trust company that is insured by the FDIC, in order to facilitate the completion of the Work by another person. If payment is made to EPA, EPA shall deposit the payment into the EPA Hazardous Substance Superfund or into the West Lake Landfill Superfund Site Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

e. All EPA Work Takeover costs not paid under this Paragraph must be reimbursed as Response Costs under Section XXII (Reimbursement of Response and Oversight Costs).

103.6. Modification of Amount, Form, or Terms of Financial Assurance. Respondents may submit, on any anniversary of the Effective Date or at any other time agreed to by the Parties, a request to reduce the amount, or change the form or terms, of the financial assurance mechanism. Any such request must be submitted to EPA in accordance with Paragraph 103.1, and must include an estimate of the cost of the remaining Work, an explanation of the bases for the cost calculation, and a description of the proposed changes, if any, to the form or terms of the financial assurance. EPA will notify Respondents of its decision to approve or disapprove a requested reduction or change pursuant to this Paragraph. Respondents may reduce the amount of the financial assurance mechanism only in accordance with: (a) EPA's approval; or (b) if there is a dispute, the agreement or written decision resolving such dispute under Section XIX (Dispute Resolution). Respondents may change the form or terms of the financial

assurance mechanism only in accordance with EPA's approval. Any decision made by EPA on a request submitted under this Paragraph to change the form or terms of a financial assurance mechanism shall not be subject to challenge by Respondents pursuant to the dispute resolution provisions of the Settlement Agreement or in any other forum. Within 30 days after receipt of EPA's approval of, or the agreement or decision resolving a dispute relating to, the requested modifications pursuant to this Paragraph, Respondents shall submit to EPA documentation of the reduced, revised, or alternative financial assurance mechanism in accordance with Paragraph 103.1.

103.7. Release, Cancellation, or Discontinuation of Financial Assurance. Respondents may release, cancel, or discontinue any financial assurance provided under this Section only: (a) if EPA issues a notification of approval of Respondents certification Section XXVIII (Termination and Satisfaction); (b) in accordance with EPA's approval of such release, cancellation, or discontinuation; or (c) if there is a dispute regarding the release, cancellation or discontinuance of any financial assurance, in accordance with the agreement or final decision resolving such dispute under Section XIX (Dispute Resolution).

Paragraph 104 is deleted and replaced with the following:

Paragraph 104

104.a The United States does not assume any liability by entering into this Third Amendment or by virtue of any designation of Respondents as EPA's authorized representatives under Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), and 40 C.F.R. 300.400(d)(3). Respondents shall indemnify, save, and hold harmless the United States,

its officials, agents, employees, contractors, subcontractors, employees, and representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, and any persons acting on Respondents' behalf or under their control, in carrying out activities pursuant to this Third Amendment. Further, Respondents agree to pay the United States all costs it incurs, including, but not limited to attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Third Amendment. The United States shall not be held out as a party to any contract entered into, by, or on behalf of Respondents in carrying out activities pursuant to this Third Amendment. Neither Respondents nor any such contractor shall be considered an agent of the United States.

104.b The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

104.c Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States for damages or reimbursement or for set-off of any payments made, or to be made, to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondents shall indemnify and

hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of, any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

13. Section XXIX is deleted and replaced with the following:

COVENANTS BY EPA

110.a Covenants for Respondents. Except as provided in Section XXIII (Reservations of Rights by EPA), EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Response Costs. These covenants shall take effect upon the Effective Date. These covenants are conditioned upon the complete and satisfactory performance by Respondents of their obligations under the Settlement Agreement. These covenants extend only to Respondents and do not extend to any other person.

b. Covenants for Settling Federal Agency. In consideration of the payments that will be made by the United States on behalf of Settling Federal Agency under the Settlement Agreement, and except as specifically provided in Section XXIII (Reservation of Rights by EPA), EPA covenants not to take administrative action against Settling Federal Agency pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Response Costs. This covenant shall take effect upon receipt of the payment(s) due under Paragraphs 92.a. and any Interest due thereon under Paragraph 92.a and is conditioned upon the complete and satisfactory

performance by Settling Federal Agency of all of the Settling Federal Agency's obligations under the Settlement Agreement. This covenant extends only to Settling Federal Agency and does not extend to any other person.

14. Section XXX is deleted and replaced with the following:

XXX. CONTRIBUTION.

111. a. Nothing in the Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to the Settlement Agreement. Except as provided in Section XXXI (Covenant Not To Sue By Respondents and Settling Federal Agency), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action that each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in the Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

b. The Parties agree that the Settlement Agreement constitutes an administrative settlement pursuant to which each Respondent and the Settling Federal Agency has, as of the Effective Date, resolved liability to the United States within the meaning of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise

provided by law, for the “matters addressed” in the Settlement Agreement. The “matters addressed” in the Settlement Agreement are the Work and Response Costs.

c. The Parties further agree that this Settlement Agreement constitutes an administrative settlement pursuant to which each Respondent and the Settling Federal Agency has, as of the Effective Date, resolved liability to the United States within the meaning of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).

d. Each Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement, notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Each Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement Agreement, notify EPA in writing within 10 days after service of the complaint or claim upon it. In addition, each Respondent shall notify EPA within 10 days after service or receipt of any Motion for Summary Judgment and within 10 days after receipt of any order from a court setting a case for trial, for matters related to this Settlement Agreement.

e. In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of EPA, for injunctive relief, recovery of response costs, or other relief relating to the Site, Respondents shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenant by EPA set forth in Section XXIX (Covenant by EPA).

15. The specific provisions of Section XXXI are amended as follows. For purposes of clarity, this Third Amendment does not modify the language in Paragraphs 112(a) and 112(b) in the Second Amendment:

XXXI. COVENANT NOT TO SUE BY RESPONDENTS AND SETTLING FEDERAL AGENCY.

112. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to activities and costs under this ASAOC including the Work, payment of Response Costs (including oversight costs), or the Settlement Agreement, including, but not limited to:

- a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established through 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
- b. any claim arising out of response actions at, or in connection with, the Site, including any claim under the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or
- c. any claim pursuant to Section 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law relating to the Work or payment of Response Costs, including oversight costs.

113. Covenant Not to Sue by Settling Federal Agency:

- a. Settling Federal Agency hereby agrees not to assert any direct or indirect claim for reimbursement from the Hazardous Substances Superfund established by 26 U.S.C. § 9507, based on Section 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law relating to the

Work or payment of Response Costs, including oversight costs, and the Settlement Agreement. This covenant does not preclude a demand for reimbursement from the Superfund of costs incurred by the Settling Federal Agency in the performance of its duties (other than pursuant to this Settlement Agreement) as lead or support agency under the National Contingency Plan (40 C.F.R. Part 300).

b. Settling Federal Agency covenants not to sue and agrees not to assert any claims or causes of action against the Respondents with respect to the Work, Response Costs, and the Settlement Agreement.

114. These covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to any of the reservations set forth in Section XXIII (Reservations of Rights), other than liability for failure to meet a requirement of the Settlement Agreement, criminal liability, or violations of federal/state law during or after implementation of the Work, but only to the extent that Respondents' and Settling Federal Agency's claims arise from the same response action, Response Costs, or damages that the United States is seeking pursuant to the applicable reservation.

115. Nothing in this Settlement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

16. EFFECTIVE DATE: This Third Amendment shall become effective upon EPA's last signature. EPA will advise Respondents and Settling Federal Agency when EPA has signed.

Signature Page for Third Amendment to Administrative Settlement Agreement and Order
on Consent Docket No: VII-93-F-0005

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 7

5/6/2019
Date

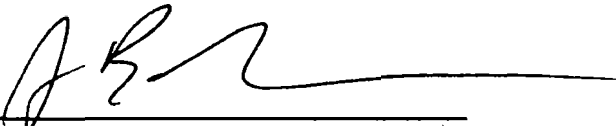
Mary P. Peterson
Mary Peterson, Director
Superfund Division, Region 7

4/22/19
Date

Alyse Stoy
Alyse Stoy
Associate Deputy Regional Counsel

Signature Page for Third Amendment to Administrative Settlement Agreement and Order
on Consent Docket No: VII-93-F-0005

FOR BRIDGETON LANDFILL, LLC:

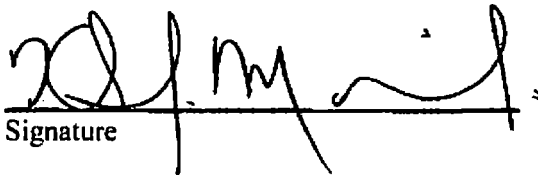
4/12/2019 
Date Signature


Vice President
Title

Signature Page for Third Amendment to Administrative Settlement Agreement and Order
on Consent Docket No: VII-93-F-0005

FOR COTTER CORPORATION (N.S.L.):

4/15/19 _____
Date

 _____
Signature


PRESIDENT

Title

Signature Page for Third Amendment to Administrative Settlement Agreement and Order
on Consent Docket No: VII-93-F-0005

FOR U.S. DEPARTMENT OF ENERGY:

8-2-19 Kevin R. Miller
Date Signature

Dpty. A.G.C. for Environment
Title

REMEDIAL DESIGN
STATEMENT OF WORK
OPERABLE UNIT 1
WEST LAKE LANDFILL SUPERFUND SITE
City of Bridgeton, St. Louis County, State of Missouri
EPA Region 7

April 2019

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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 Remedial Design (RD) work necessary to implement the remedy set forth in the Record of Decision Amendment, West Lake Landfill Site, Bridgeton, Missouri Operable Unit 1 or RODA, dated September 27, 2018.

1.2 Structure of the SOW

- Section 1 (Introduction)
- Section 2 (Community Involvement) sets forth EPA's and Respondents' responsibilities for community involvement.
- Section 3 (Remedial Design) sets forth the process for developing the RD, which includes the submission of specified primary deliverables.
- Section 4 (Reporting) sets forth Respondents' reporting obligations.
- Section 5 (Deliverables) describes the content of the supporting deliverables and the general requirements regarding Respondents' submission of, and EPA's review of, approval of, comment on, and/or modification of, the deliverables.
- Section 6 (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 Remedial Design, or RD.
- Section 7 (State Participation) addresses State participation.
- Section 8 (References) provides a list of references, including URLs.

1.3 The Scope of the Remedy for OU-1 is presented in the RODA and includes activities below.

- (a) Excavation and stockpiling of overburden in OU-1 Radiological Areas 1 and 2 to access the RIM;
- (b) Excavation of RIM from the Areas 1 and 2 of OU-1 that contains combined radium or combined thorium activities greater than 52.9 pCi/g that is located generally within 12 feet of the 2005 topographic surface. Optimization of RIM removal above and below the 12-foot target depth (excavation as deep as 20 feet or as shallow as 8 feet) will be performed during the remedial design (RD) based on criteria set forth in Section 12.0 of the ROD and summarized below:
 - (1) If RIM greater than 52.9 pCi/g occurs between 12 and 20 feet below the surface, then evaluate and excavate where necessary to achieve long-term effectiveness and permanence objective;
 - (2) The EPA places a priority on focusing the excavation on the higher activity occurrences of RIM. Therefore, the EPA expects the areas

between 12 and 16 feet will be excavated if they are greater than 1,000 pCi/g;

- (3) The EPA also expects to focus the excavation in the areas between 16 to 20 feet on the higher activity occurrences of RIM (greater than 1,000 pCi/g) if it doesn't add significant excavation of non-RIM waste;
 - (4) Data show that isolated pockets of RIM between 8 and 12 feet only occur in a limited number of areas; and
 - (5) Not excavating isolated pockets of RIM between 8 and 12 feet will minimize the short-term impacts by reducing the volume of overburden and setback.
- (c) Excavation of radiologically impacted soil from the Buffer Zone and/or Lot 2A2 sufficient to reduce concentrations of radionuclides to background in order to allow for unlimited use and unrestricted exposure (UU/UE);
 - (d) Loading and transport of the RIM and radiologically impacted soil for disposal at an off-site permitted disposal facility;
 - (e) Regrading of the remaining solid waste materials within Areas 1 and 2 to meet the minimum (5%) and maximum (25%) slope criteria;
 - (f) Installation of a landfill cover over Areas 1 and 2 designed to meet the Resource Conservation and Recovery Act (RCRA) hazardous waste design criteria, municipal waste landfill regulations, and Uranium Mill Tailings Radiation Control Act (UMTRCA) performance and longevity standards;
 - (g) Design, installation, and maintenance of surface water runoff controls;
 - (h) Groundwater monitoring;
 - (i) Landfill gas and radon monitoring and control, in accordance with applicable or relevant and appropriate requirements (ARARs);
 - (j) Institutional controls (ICs) to prevent land uses that are inconsistent with a closed landfill containing radiological materials; and
 - (k) Long-term surveillance and maintenance of the landfill cover in Areas 1 and 2 and other remedial components.

- 1.4** The terms used in this SOW that are defined in the Comprehensive Environmental Response, Compensation, and Liability Act, or CERCLA, in regulations promulgated under CERCLA, or in the Administrative Settlement Agreement and Order on Consent and any amendments (ASAOC), have the meanings assigned to them in CERCLA, in such regulations, or in the ASAOC, except that the term "Paragraph" or "¶" means a paragraph of the SOW, and the term "Section" means a section of the SOW, unless otherwise stated.

2. COMMUNITY INVOLVEMENT

2.1 Community Involvement Responsibilities

- (a) EPA has the lead responsibility for developing and implementing community involvement activities at the Site. Previously, EPA developed a Community Involvement Plan (CIP) for the Site. Pursuant to 40 C.F.R. § 300.435(c), EPA shall review the existing CIP and determine whether it should be revised to describe further public involvement activities during the Work that are not already addressed or provided for in the existing CIP, including, if applicable, any Technical Assistance Grant (TAG), any use of the Technical Assistance Services for Communities (TASC) contract, and/or any Technical Assistance Plans (TAP).
- (b) If requested by EPA, Respondents 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. Respondents' support of EPA's community involvement activities may include providing online access to deliverables to (1) any Community Advisory Groups, (2) any Technical Assistance Grant recipients and their advisors, and (3) other entities to provide them with a reasonable opportunity for review and comment. EPA may describe in its CIP Respondents' responsibilities for community involvement activities. All community involvement activities conducted by Respondents at EPA's request are subject to EPA's oversight. Upon EPA's request, Respondents shall establish a community information repository.
- (c) **Respondents' CI Coordinator.** If requested by EPA, Respondents shall, within 30 days, designate and notify EPA of Respondents' Community Involvement Coordinator (Respondents' CI Coordinator). Respondents may hire a contractor for this purpose. Respondents' notice must include the name, title, and qualifications of the Respondents' CI Coordinator. Respondents' CI Coordinator is responsible for providing support regarding EPA's community involvement activities, including coordinating with EPA's CI Coordinator regarding responses to the public's inquiries about the Site.

3. REMEDIAL DESIGN

3.1 RD Work Plan. Respondents shall submit a Remedial Design Work Plan (RDWP) for EPA approval. The RDWP must include:

- (a) Identification and description of all plans necessary for implementing all RD activities identified in this SOW, in the RDWP, or required by EPA to be conducted to develop the RD;
- (b) A description of the overall management strategy for performing the RD, including a proposal for phasing of design and outline considerations for phasing of construction, if applicable;

- (c) A description of the potential considerations for guiding the general approach(es) to contracting, construction, operation, maintenance, and monitoring of the Remedial Action (RA) as necessary to implement the Work;
- (d) Preliminary RD Schedule;
- (e) A description of the qualifications, responsibility and authority of all organizations and key personnel involved with the development of the RD;
- (f) Descriptions of any areas of the remedy requiring clarification and/or anticipated problems (e.g., areas where additional information is necessary);
- (g) Preliminary description of additional data needed to complete the RD, any evaluation of alternative models for estimating the extent of RIM, any proposed design investigation and recommended timing for the performance of the investigation activities;
- (h) Descriptions of any applicable permitting requirements and other regulatory requirements;
- (i) Description of plans for obtaining access in connection with the Work, such as property acquisition, property leases, and/or easements; and
- (j) List of all supporting deliverables, and a schedule for submittal of each draft deliverable. The list should include any plans necessary for planning, designing, implementing, and monitoring the remedy in the RODA, including those described in ¶ 5.7.

3.2 Design Criteria Report. Respondents shall submit a Design Criteria Report (DCR) for EPA approval that defines in detail the technical parameters upon which the design will be based, as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995). The DCR will be submitted with the RDWP in accordance with the schedule in ¶ 6.2

3.3 Respondents shall meet with EPA to discuss design issues as directed or determined by EPA.

3.4 Preliminary Excavation Plan. Respondents shall submit a Preliminary Excavation Plan and drawings based on the December 21, 2017, 3D Extent of RIM Report, or alternative model as approved by EPA, for EPA comment and approval in accordance with the schedule in ¶ 6.2. The Preliminary Excavation Plan must also include the information below:

- (a) An evaluation of location of RIM >52.9 pCi/g originally derived from the data and geostatistical model in the December 21, 2017, 3D Extent of RIM Report, or an alternative model as approved by EPA, for the purpose of selecting additional boring locations for the investigation;

- (b) Identification of and evaluation of the optimized excavation locations including;
 - (1) Isolated pockets between 8 and 12 feet that, if excavated, would require excavation of large volumes of non-RIM waste as overburden and setback;
 - (2) Higher concentrations of RIM >12 feet and <20 feet to be excavated in order to remove the activity represented by RIM greater than 52.9 pCi/g between the surface and 16 feet;
- (c) Preliminary estimates of the radioactivity and volume of RIM to be excavated;
- (d) A preliminary estimate of the volume of all other waste that must be excavated to access the RIM;

3.5 Preliminary (30%) RD. Respondents shall submit a Preliminary (30%) RD for EPA's comment in accordance with the schedule in ¶ 6.2. The Preliminary (30%) RD must include:

- (a) The approved Design Criteria Report as described in Section 3.2 above and submitted in accordance with the schedule in ¶ 6.2;
- (b) A Basis of Design Report, as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995), including evaluation of field screening procedures;
- (c) The Preliminary Excavation Plan as described in Section 3.4 above and approved by EPA;
- (d) Preliminary drawings and specifications;
- (e) Identification and descriptions of applicable permits and requirements;
- (f) Descriptions of how the design will meet applicable or relevant and appropriate requirements (ARARs) identified in the RODA
- (g) A description of how the RA will be implemented in a manner that minimizes environmental impacts in accordance with EPA's *Principles for Greener Cleanups* (Aug. 2009);
- (h) A description of monitoring and control measures to be used to protect human health and the environment, such as storm water management, air monitoring and dust suppression, during the RA;
- (i) Preliminary construction schedule; and
- (j) Updates of the supporting deliverables submitted prior to the preliminary (30%) design along with the Loading, Transportation and Off-Site Disposal Plan as described in ¶ 5.7 to be submitted in accordance with the schedule in ¶ 6.2.

3.6 Design Investigation. The purpose of the Design Investigation (DI) is to collect additional information necessary to design and implement the RODA remedy by conducting additional field investigations.

- (a) **DI Work Plan.** Respondents shall submit a DI Work Plan (DIWP) for EPA approval after receipt of EPA approval of the Preliminary Excavation Plan described in ¶ 3.4 above and in accordance with the schedule in ¶ 6.2. The DIWP must include:
- (1) An evaluation and summary of existing data and description of additional data needs including:
 - (i) Extent of RIM on the Buffer Zone and Lot 2A2 of the Crossroads Industrial Park;
 - (ii) Additional background characterization to determine statistically valid background concentrations for the Buffer Zone and Lot 2A2;
 - (iii) Boundary confirmation OU-1/OU-2;
 - (iv) The extent of historical impacts, if any, in drainage areas and northwest, or NW, surface water body; and
 - (v) Additional characterization to support the proposed preliminary excavation, including the proposed optimized excavation locations, presented in the preliminary excavation plan described in ¶ 3.4 above.
 - (2) A field sampling plan as described in ¶ 5.7(e), and submitted in accordance with the schedule in ¶ 6.2, including media to be sampled, contaminants or parameters for which sampling will be conducted, sample locations (including boring locations and sample depths), and number of samples;
 - (3) Cross references to quality assurance/quality control (QA/QC) requirements set forth in the Quality Assurance Project Plan (QAPP) as described in ¶ 5.7(e) and submitted in accordance with the schedule in ¶ 6.2;
 - (4) A Data Management Plan as described in ¶ 5.7(e) and in accordance with the schedule in ¶ 6.2; and
 - (5) A Health and Safety Plan as described in ¶ 5.7(e) and in accordance with the schedule in ¶ 6.2
- (b) Meeting or meetings with EPA and the state during the Field Investigation work to determine whether the preliminary data or field screening indicate additional sample collection is warranted.

- (c) **DI Evaluation Report.** Following the DI, Respondents shall submit a DI Evaluation Report for EPA comment and approval in accordance with the schedule in ¶ 6.2. This report must include:
- (1) Summary of the investigations performed;
 - (2) Summary of investigation results;
 - (3) Summary of validated data (i.e., tables and graphics);
 - (4) Data validation reports and laboratory data reports;
 - (5) Narrative interpretation of data and results;
 - (6) Results of statistical analyses and comparison with the geostatistical modeling;
 - (7) Photographs documenting the work conducted; and
 - (8) Conclusions and recommendations for the RD, including the excavation plan and cover design.
- (d) EPA may require Respondents to supplement the DI Evaluation Report and/or to perform additional design studies.

3.7 Revised Excavation Plan. Respondents will submit a revised excavation plan and drawings based on the investigation presented in the DI Evaluation Report, including:

- (a) Further evaluation of the location of RIM >52.9 pCi/g based upon further geostatistical evaluation and optimization;
- (b) Final design-level delineation and supporting evaluation of the optimized excavation locations considering such factors as:
 - (1) Isolated pockets between 8 and 12 feet that, if excavated, would require excavation of large volumes of non-RIM waste as overburden and setback;
 - (2) Higher concentrations of RIM >12 feet and <20 feet to be excavated in order to remove the activity represented by RIM greater than 52.9 pCi/g between the surface and 16 feet;
- (c) Final calculations of the radioactivity and volume of RIM to be excavated;
- (d) Final estimated volume of all other waste to be excavated as part of the RIM removal;

3.8 Pre-Final (90%) RD. Respondents shall submit the Pre-Final (90%) RD for EPA's comment in accordance with the schedule in ¶ 6.25.7 The Pre-Final (90%) RD must be a

continuation and expansion of the Preliminary (30%) RD and address EPA's comments regarding the Preliminary (30%) RD. The Pre-Final (90%) RD must include:

- (a) An approved excavation plan based on the design investigation as discussed in ¶ 3.7 above;
- (b) Pre-final, updated versions of the same elements required for the Preliminary (30%) RD, updated versions of all supplemental documents previously submitted and the supplemental documents listed below as described in ¶ 5.7 that address all EPA comments, including:
 - (1) Construction Quality Assurance/Quality Control Plan (CQAP/CQCP) as discussed in ¶ 5.7(h) and submitted in accordance with the schedule in ¶ 6.2
 - (2) ICIAP as discussed in ¶ 5.7(m) and submitted in accordance with the schedule in ¶ 6.2
 - (3) O&M Plan as discussed in ¶ 5.7(k) and submitted in accordance with the schedule in ¶ 6.2
 - (4) O&M Manual as discussed in ¶ 5.7(l) submitted in accordance with the schedule in ¶ 6.2
- (c) A complete draft set of construction drawings and specifications that are intended to be: (1) ready for certification by a registered professional engineer; (2) suitable for procurement; and (3) follow the most recent Construction Specifications Institute's Master Format (See <https://www.csiresources.org/home>);
- (d) A survey and engineering drawings showing existing Site features, such as property boundaries, easements, and Site conditions;
- (e) A specification for photographic documentation of the RA;

3.9 Final (100%) RD. Respondents shall submit the draft Final (100%) RD for EPA review in accordance with the schedule in ¶ 6.2. Respondents shall submit the draft Final (100%) RD for EPA approval that addresses EPA's comments on the Pre-final RD and must include draft final versions of all RD deliverables. Once all the modifications and revisions to the draft Final (100%) RD have been accepted by EPA, the Final (100%) Design must include the respondent's certification of the Design, including all drawings and specifications, by a Missouri registered professional engineer for formal approval by EPA.

3.10 Emergency Response and Reporting

- (a) **Emergency Response and Reporting.** If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site and that either constitutes an emergency situation or that may

present an immediate threat to public health or welfare or the environment, Respondents shall: (1) immediately take all appropriate action to prevent, abate, or minimize the release or threat of release; (2) immediately notify the authorized EPA officer (as specified in ¶ 3.10 (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 Respondents are required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004, Respondents shall immediately notify the authorized EPA officer orally.
- (c) The “authorized EPA officer” for purposes of immediate oral notifications and consultations under ¶ 3.10(a) and ¶ 3.10(b) is the EPA Project Coordinator, the EPA Alternate Project Coordinator (if the EPA Project Coordinator is unavailable), or the EPA Region 7 Emergency Response Line (if neither EPA Project Coordinator is available).
- (d) For any event covered by ¶ 3.10 (a) and ¶ 3.10 (b), Respondents 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 ¶ 3.10 are in addition to the reporting required by CERCLA § 103 or EPCRA § 304.

3.11 Off-Site Shipments

- (a) Respondents may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents will be deemed to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if Respondents obtain a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).
- (b) Respondents may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, they provide notice to the appropriate state environmental official in the receiving facility’s state and to the EPA Project Coordinator. This notice requirement will not apply to any off-Site shipments when the total quantity of all such shipments does not exceed 10 cubic yards provided that these Waste Materials do not include RIM. 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)

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. Respondents 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. Respondents shall provide the notice as soon as practicable after the award of the contract and before the Waste Material is shipped.

- (c) Respondents may ship Investigation Derived Waste (IDW) from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, *EPA's Guide to Management of Investigation Derived Waste*, OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the RODA. 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.

3.12 Notice of Work Completion

- (a) When EPA determines, after EPA's review of the Final (100%) RD under ¶ 3.12(c) that all Work has been fully performed in accordance with this Settlement, with the exception of any continuing obligations as provided in ¶ 3.12(c), EPA will provide written notice to Respondents. If EPA determines that any such Work has not been completed in accordance with this Settlement, EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the RDWP if appropriate in order to correct such deficiencies.
- (b) Respondents shall implement the modified and approved RDWP and shall submit a modified Final (100%) RD for EPA approval in accordance with the EPA notice. If approved, EPA will issue the Notice of Work Completion.
- (c) Issuance of the Notice of Work Completion does not affect the following continuing obligations: (1) obligations under Sections [XV] (Access), [XIII] (Progress Reports), and [XVIII] (Record Preservation) of the ASAOC; (2) any actions required in this scope of work to monitor for or prevent the potential for releases of site-related contaminants until the final remedy is implemented; and (3) reimbursement of EPA's Future Response Costs under Section [XXII] (Reimbursement of Response and Oversight Costs) of the ASAOC.

4. REPORTING

- 4.1 Progress Reports.** Respondents shall submit progress reports to EPA and the State on a monthly basis, or as otherwise requested by EPA, from the date of receipt of EPA's

approval of the RD Work Plan until issuance of Notice of Work Completion pursuant to ¶ 3.12 unless otherwise directed in writing by EPA's Project Coordinator. The reports must cover all activities that took place during the monthly reporting period, including:

- (a) The actions that have been taken toward achieving compliance with the ASAOC;
- (b) A summary of all results of sampling, tests, and all other data received or generated by Respondents;
- (c) A description of all deliverables that Respondents submitted to EPA;
- (d) A description of all activities scheduled for the next month;
- (e) A description of anticipated coordination meetings for the next month including number of meetings and topics/documents;
- (f) Information regarding percentage of completion, unresolved 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;
- (g) A description of any modifications to the work plans or other schedules that Respondents have proposed or that have been approved by EPA; and
- (h) A description of all activities undertaken in support of the CIP during the reporting period and those to be undertaken in the next month.

4.2 Notice of Progress Report Schedule Changes. If the schedule for any activity described in the Progress Reports changes, including activities required to be described under ¶ 4.1(d), Respondents shall notify EPA of such change at least 7 days before performance of the activity.

5. DELIVERABLES

5.1 Applicability. Respondents shall submit deliverables for EPA approval or for EPA comment as specified in the SOW and approved RDWP. If neither is specified, the deliverable does not require EPA's approval or comment. Paragraphs 5.2 (In Writing) through 5.4 (Technical Specifications) apply to all deliverables. Paragraph 5.5 (Certification) applies to any deliverable that is required to be certified. Paragraph 5.6 (Approval of Deliverables) applies to any deliverable that is required to be submitted for EPA approval.

5.2 In Writing. All deliverables under this SOW must be in writing unless otherwise specified.

5.3 General Requirements for Deliverables.

- (a) Except as otherwise provided in this ASAOC, Respondents shall direct all deliverables required by this ASAOC to the EPA Project Coordinator at:

Christine Jump
Project Manager
U.S. Environmental Protection Agency
Region 7 - SUPR/REMB
11201 Renner Boulevard
Lenexa, Kansas 66219
913-551-7141
jump.chris@epa.gov

- (b) All deliverables provided to the State in accordance with ¶ 7 (State Participation) shall be directed to:

Ryan Seabaugh
Federal Facilities Section
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- (c) All deliverables must be submitted by the deadlines in the RD Schedule in ¶ 6.2, as applicable. Respondents shall submit all deliverables to EPA and State in electronic format. Technical specifications for sampling and monitoring data and spatial data are addressed in ¶ 5.4. All other deliverables shall be submitted to EPA in the electronic format specified by the EPA Project Coordinator. If any deliverable includes maps, drawings, or other exhibits that are larger than 11" by 17", Respondents shall also provide EPA and State with paper copies of such exhibits.

5.4 Technical Specifications

- (a) Sampling and monitoring data should be submitted in an Electronic Data Deliverable (EDD) format in accordance with the approved Data Management Plan and QAPP. Other delivery methods may be allowed if approved by EPA.
- (b) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (1) in accordance with the R7 Geospatial Data Deliverables Standard Operating Procedure (SOP 2341.01A); and (2) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the

Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at <https://www.epa.gov/geospatial/epa-metadata-editor>.

- (c) Each file must include an attribute name for each site unit or sub-unit submitted. Consult <https://www.epa.gov/geospatial/geospatial-policies-and-standards> for any further available guidance on attribute identification and naming.
- (d) Spatial data submitted by Respondents does not, and is not intended to, define the boundaries of the Site.

5.5 Certification. All deliverables that require compliance with this ¶ 5.5 must be signed by the Respondents' Project Coordinator, or other responsible official of Respondents, 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.

5.6 Approval of Deliverables

(a) **Initial Submissions**

- (1) After review of any deliverable that is required to be submitted for EPA approval under the ASAOC or the SOW, EPA shall: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.
- (2) EPA also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

- (b) **Resubmissions.** Upon receipt of a notice of disapproval under ¶ 5.6(a) (Initial Submissions), or if required by a notice of approval upon specified conditions under ¶ 5.6(a), Respondents shall, within 30 days or such longer time as specified

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 Respondents to correct the deficiencies; or (5) any combination of the foregoing.

- (c) **Implementation.** Upon approval, approval upon conditions, or modification by EPA under ¶ 5.6(a) (Initial Submissions) or ¶ 5.6(b) (Resubmissions), of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and enforceable under the ASAO; and (2) Respondents 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 ¶ 5.6(a) or ¶ 5.6(b) does not relieve Respondents of any liability for stipulated penalties under Section [XX] (Stipulated Penalties) of the ASAO, as amended.

5.7 Supporting Deliverables. Respondents shall submit each of the following supporting deliverables for EPA approval, except as specifically provided. Respondents shall develop the deliverables in accordance with all applicable regulations, guidance, and policies (see Section 8 (References)). Respondents shall update each of these supporting deliverables as necessary or appropriate during the course of the Work, and/or as requested by EPA. The supporting deliverables listed below will be submitted in accordance with the schedule included in ¶ 6.2.

- (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. Respondents 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 Design Investigation and 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.
- (b) **Emergency Response Plan.** The Emergency Response Plan (ERP) must describe site-specific procedures to be used in the event of an accident or emergency at the Site (for example, a fire, water impoundment failure, treatment plant failure, slope failure, etc.). The ERP can build upon existing emergency or incident response planning documents and must, at a minimum, include the following:
 - (1) Description and contact information for personnel responsible (primary and alternate) for notifications and response elements of the plan, as well as individuals with the authority to commit resources;

- (2) Plan and date(s) for meeting(s) with the local community, including local, State, and federal agencies involved in the cleanup, as well as local emergency squads and hospitals;
 - (3) Spill Prevention, Control, and Countermeasures (SPCC) Plan (if applicable), consistent with the regulations under 40 C.F.R. Part 112, describing measures to prevent, and contingency plans for, spills and discharges;
 - (4) Notification activities in accordance with ¶ 3.10(b) (Release Reporting) in the event of a release of hazardous substances requiring reporting under Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004;
 - (5) Identification of when and how notifications will be made to local emergency responders as well as to the regulatory agencies, including EPA, MDNR, and the Missouri Department of Health and Senior Services (MDHSS), including a notification checklist to be used in the event of an emergency;
 - (6) Description of appropriate training for any and all potential emergency responders on requirements and implementation of this ERP, and;
 - (7) A description of all necessary actions to ensure compliance with ¶ 3.10 (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) **Site Management Plan.** The site management plan details security provisions and pollution prevention measures to be taken during the RD/RA. Components of the Site Management Plan include:
- (1) Methods for controlling access to the site;
 - (2) Methods for monitoring site conditions during RD/RA;
 - (3) Description of environmental monitoring to be performed during the RD activities, including items 1 through 6 in ¶ 5.7 (f);
 - (4) Pollution Control and Mitigation Plan, including demonstration of effectiveness of existing controls for storm water and air media;
 - (5) Secure waste management, staging or disposal practices; and

- (6) Site Management responsibilities.
- (d) **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. Respondents shall develop the FSP in accordance with *Guidance for Conducting Remedial Investigations and Feasibility Studies*, EPA/540/G 89/004 (Oct. 1988).
- (e) **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 Respondents' quality assurance, quality control, and chain of custody procedures for all treatability, design, compliance, and monitoring samples. Respondents 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 their authorized representatives have reasonable access to laboratories used by Respondents in implementing the ASAO (Respondents' Labs);
 - (2) To ensure that Respondents' Labs analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring;
 - (3) To ensure that Respondents' 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 Respondents' Labs participate in an EPA-accepted QA/QC program or other program QA/QC acceptable to EPA;
 - (5) For Respondents to provide EPA with notice at least 28 days prior to any sample collection activity;
 - (6) For Respondents to provide split samples and/or duplicate samples to EPA upon request;
 - (7) For EPA to take any additional samples that it deems necessary;

- (8) For EPA to provide to Respondents, upon request, split samples and/or duplicate samples in connection with EPA's oversight sampling; and
 - (9) For Respondents to submit to EPA all sampling and tests results and other data in connection with the implementation of the ASAOC.
- (f) **Site Wide Monitoring Plan.** The purpose of the Site Wide Monitoring Plan (SWMP) is to describe the environmental monitoring that will be required during the performance of the RA; to obtain baseline information regarding the extent of contamination in affected media at the Site; to obtain information, through short- and long- term monitoring, about the movement of and changes in contamination throughout the Site, before, during, and after implementation of the RA; to obtain information regarding contamination levels to determine whether the remedial action objectives are achieved; and to obtain information to determine whether to perform additional actions, including further Site monitoring. The SWMP must include:
- (1) Description of each of the environmental media to be monitored and the objectives of that monitoring¹;
 - (2) Description of the data collection parameters, including existing and proposed monitoring devices and locations, schedule and frequency of all monitoring, analytical parameters to be monitored, and analytical methods employed;
 - (3) Description of how performance data will be analyzed, interpreted, and reported, and/or other Site-related requirements;
 - (4) Description of verification sampling procedures;
 - (5) Description of deliverables that will be generated in connection with monitoring, including sampling schedules, laboratory records, monitoring reports, and monthly and annual reports to EPA and State agencies; and
 - (6) Description of proposed additional monitoring and data collection actions (such as increases in frequency of monitoring, and/or installation of additional monitoring devices in the affected areas) in the event that results from monitoring devices indicate changed conditions (such as higher than expected concentrations or movement of the contaminants of concern).

¹ A groundwater monitoring program will be developed in the RD. The groundwater monitoring program will provide data to evaluate the performance of the OU-1 Amended Remedy and to demonstrate that the engineered cover functions as intended and minimizes the potential for precipitation or surface water to infiltrate the waste materials. Development of a site-wide groundwater monitoring plan is currently envisioned to be conducted as part of the OU-3 RI/FS, and will consider the details of the groundwater monitoring developed in the OU-1 RD.

- (g) **Data Management Plan.** The purpose of the Data Management Plan or DMP is to describe the site-wide approach to the collected data, including:
- (1) The types of data being collected;
 - (2) The tools being used to collect, store, manage, and display the data;
 - (3) The requirements for data documentation, deliverables and presentation;
 - (4) Descriptions of how the data will be used (i.e. standardized reports, GIS viewers, Models);
 - (5) Description of Roles and Responsibilities for individuals and organizations responsible for reporting and managing the data;
 - (6) A flowchart of data transmission and data functions;
 - (7) Description of the technical resource requirements; and
 - (8) Site specific procedures/checklists/SOP
- (h) **Construction Quality Assurance/Quality Control Plan (CQAP/CQCP).** The purpose of the Construction Quality Assurance Plan (CQAP) is to describe planned and systemic activities that provide confidence that the RA construction will satisfy all plans, specifications, and related requirements, including data and construction quality objectives. The purpose of the Construction Quality Control Plan (CQCP) is to describe the activities and data used to verify that RA construction has satisfied all plans, specifications, and related requirements, including quality objectives. The CQAP/CQCP must:
- (1) Identify, and describe the responsibilities of, the organizations and personnel implementing the CQAP/CQCP;
 - (2) Describe the performance standards or 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 CQAP/CQCP;
 - (5) Describe industry standards and technical specifications used in implementing the CQAP/CQCP;
 - (6) Describe procedures for tracking construction deficiencies from identification through corrective action;
 - (7) Describe procedures for documenting all CQAP/CQCP activities; and

- (8) Describe procedures for retention of documents and for final storage of documents.
- (i) **Loading, Transportation and Off-Site Disposal Plan.** The Loading, Transportation and Off-Site Disposal Plan (LTODP) describes plans to ensure compliance with ¶ 3.11 (Off-Site Shipments). The LTODP will include procedures for identifying the following items with final requirements to be provided in the Pre-Final (90%) and Final (100%) Design and proof that requirements are met to be provided during the Remedial Action as part of the selection of a transportation and disposal subcontractor, subject to USEPA approval:
 - (1) Name and location of disposal facility or facilities
 - (2) If radioactive waste from the site is anticipated to be disposed in a non-NRC licensed disposal facility, the LTODP shall define the process and requirements to:
 - (i) ensure the facility is designed and operated to accept the waste while protecting human health and the environment.
 - (ii) ensure that the community surrounding the disposal facility is informed and provided the opportunity to comment.
 - (3) Description of RIM or other waste loading and transfer techniques for shipping;
 - (4) Description of shipping method(s) and containers;
 - (5) Location and description of loading facility;
 - (6) Anticipated routes for off-site shipment of Waste Material;
 - (7) Identification of communities that may be affected, if any, by shipment of Waste Material; and
 - (8) Description of preliminary plans to minimize impacts, if any, on affected communities.
- (j) **Wildlife Hazard Mitigation Plan.** The wildlife hazard mitigation plan (WHMP) shall describe the actions that will be taken to satisfy the FAA's and City of St. Louis's requirements with regard to wildlife hazard management prior to and during the investigation and excavation of waste material. EPA does not approve the WHMP. The WHMP should include, at a minimum the following:
 - (1) Description of preliminary wildlife studies determined to be necessary

- (2) Description of coordination activities with other entities, such as the City of St. Louis, the FAA, the USDA and EPA;
 - (3) Description of actions and techniques used to mitigate wildlife hazards, including control measures, if necessary, to address potential increase in wildlife populations;
 - (4) Identification of resources necessary to implement the plan;
 - (5) Designation of personnel responsible for implementing, coordinating, and overseeing the procedures;
 - (6) Description of required training or certifications for designated personnel;
 - (7) Description of weekly, and monthly reports of wildlife populations when putrescible waste is exposed;
 - (8) Description of contingency plans; and
 - (9) Any other requirements identified by the FAA or St. Louis Lambert International Airport
- (k) **Operation & Maintenance Plan.** The Operation & Maintenance Plan (O&M Plan) describes the requirements for inspecting, operating, maintaining and monitoring the RA. Respondents 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.
- (l) **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. Respondents shall develop the O&M Manual in accordance with *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017).
- (m) **Institutional Controls Implementation and Assurance Plan.** The Institutional Controls Implementation and Assurance Plan (ICIAP) describes plans to implement, maintain, and enforce the Institutional Controls (ICs) at the Site. Respondents shall develop the ICIAP in accordance with *Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites*, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012), and *Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites*, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012). The ICIAP must include the following additional requirements:
 - (1) Locations of recorded real property interests (e.g., easements, liens) and resource interests in the property that may affect ICs (e.g., surface, mineral, and water rights) including accurate mapping and geographic information system (GIS) coordinates of such interests; and
 - (2) Legal descriptions and survey maps that are prepared according to current American Land Title Association (ALTA).
- (n) Any other plans required to meet ARARs or necessary for planning, designing, implementing, and monitoring the remedy identified in the RODA.

6. SCHEDULES

- 6.1 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 Schedule set forth below. Respondents may submit a proposed revised RD Schedule for EPA approval. Upon EPA's approval, the revised RD Schedule supersedes the RD Schedules set forth below, and any previously-approved RD Schedules.
- 6.2 RD Schedule**

	Description of Deliverable, Task	¶ Ref.	Deadline
1	RDWP	3.1	Within 90 days of the Effective Date of the Third Amendment to the OU-1 RI/FS ASAOC
2	Design Criteria Report	3.2	Within 90 days of the Effective Date of the Third Amendment to the OU-1 RI/FS ASAOC
3	Emergency Response Plan	5.7 (b)	Within 60 days of the Effective Date of the Third Amendment to the OU-1 RI/FS ASAOC
4	Site Management Plan	5.7 (c)	Within 60 days of the Effective Date of the Third Amendment to the OU-1 RI/FS ASAOC
5	Preliminary Excavation Plan	3.4	Within 45 days of EPA approval of the RDWP and DCR
6	Preliminary (30%) RD	3.5	Within 60 days of EPA approval on Preliminary Excavation Plan
7	LTODP	5.7 (i)	Within 60 days of EPA approval on Preliminary Excavation Plan
8	Design Investigation Workplan	3.6 (a)	Within 45 days of EPA approval on the Preliminary Excavation Plan
9	Field Sampling Plan	5.7 (d)	Within 45 days of EPA approval on the Preliminary Excavation Plan
10	Quality Assurance Project Plan	5.7 (e)	Within 45 days of EPA approval on the Preliminary Excavation Plan
11	Health and Safety Plan	5.7 (a)	Within 45 days of EPA approval on the Preliminary Excavation Plan
12	Data Management Plan	5.7 (g)	Within 45 days of EPA approval on the Preliminary Excavation Plan
13	Wildlife Hazard Mitigation Plan	5.7 (j)	Within 90 days of EPA approval of Design Investigation Workplan
14	Site Wide Monitoring Plan	5.7 (f)	Within 90 days of EPA approval of the Design Investigation Work Plan
15	Design Investigation Evaluation Report	3.3(b)	Within 60 days of receipt of all validated data packages for the Design Investigation or within 120 days of completion of the Design Investigation fieldwork, whichever comes first.
16	Revised Excavation Plan	3.7	Within 30 days of approval of Design Investigation Evaluation Report
17	CQAP/CQCP	5.7 (h)	Within 75days of EPA approval of Design Investigation Evaluation Report
18	O&M Plan	5.7 (k)	Within 75 days of EPA approval of Design Investigation Evaluation Report
19	O&M Manual	5.7 (l)	Within 75 days of EPA approval of Design Investigation Evaluation Report
20	ICIAP	5.7 (m)	Within 75 days of EPA approval of Design Investigation Evaluation Report

21	Pre-final (90%) RD	3.8	Within 75 days of EPA approval of the revised excavation plan
22	draft Final (100%) RD	3.9	Within 75 days of EPA comments on the Pre-Final (90%) plan
23	PE Sealed Final (100%) RD	3.9	Within 30 days of EPA acceptance of Final (100%) RD

7. STATE PARTICIPATION

- 7.1 Copies.** Respondents shall, at any time they send any deliverable or supporting information to EPA, send a copy of such submittal to the State. EPA shall, at any time it sends a notice, authorization, approval, disapproval, or certification to Respondents, send a copy of such document to the State.
- 7.2 Review and Comment.** The State will have a reasonable opportunity for review and comment prior to:
- (a) Any EPA approval or disapproval under ¶ 5.6 (Approval of Deliverables) of any deliverables that are required to be submitted for EPA approval; and
 - (b) Any disapproval of, or Notice of Work Completion under, ¶ 3.11 (Notice of Work Completion).

8. REFERENCES

- 8.1** 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 ¶ 8.2:
- (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) National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, 40 C.F.R. Part 300 (Oct. 1994).
- (j) Guidance for Scoping the Remedial Design, OSWER 9355.0-43, EPA/540/R-95/025 (Mar. 1995).
- (k) Remedial Design/Remedial Action Handbook, OSWER 9355.0-04B, EPA/540/R-95/059 (June 1995).
- (l) EPA Guidance for Data Quality Assessment, Practical Methods for Data Analysis, QA/G-9, EPA/600/R-96/084 (July 2000).
- (m) Comprehensive Five-year Review Guidance, OSWER 9355.7-03B-P, 540-R-01-007 (June 2001).
- (n) Guidance for Quality Assurance Project Plans, QA/G-5, EPA/240/R-02/009 (Dec. 2002).
- (o) Institutional Controls: Third Party Beneficiary Rights in Proprietary Controls (Apr. 2004).
- (p) Quality management systems for environmental information and technology programs -- Requirements with guidance for use, ASQ/ANSI E4:2014 (American Society for Quality, February 2014).
- (q) Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A through 900C (Mar. 2005).
- (r) Superfund Community Involvement Handbook, SEMS 100000070 (January 2016), <https://www.epa.gov/superfund/community-involvement-tools-and-resources>.
- (s) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).
- (t) EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006).

- (u) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (v) USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, ILM05.4 (Dec. 2006).
- (w) USEPA Contract Laboratory Program Statement of Work for Organic Analysis, SOM01.2 (amended Apr. 2007).
- (x) 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>.
- (y) Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, OSWER 9283.1-33 (June 2009).
- (z) Principles for Greener Cleanups (Aug. 2009), <https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups>.
- (aa) USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration), ISM01.2 (Jan. 2010).
- (bb) Close Out Procedures for National Priorities List Sites, OSWER 9320.2-22 (May 2011).
- (cc) Groundwater Road Map: Recommended Process for Restoring Contaminated Groundwater at Superfund Sites, OSWER 9283.1-34 (July 2011).
- (dd) Recommended Evaluation of Institutional Controls: Supplement to the "Comprehensive Five-Year Review Guidance," OSWER 9355.7-18 (Sep. 2011).
- (ee) Construction Specifications Institute's Master Format (**current edition**), available from <https://www.csiresources.org/home>.
- (ff) Updated Superfund Response and Settlement Approach for Sites Using the Superfund Alternative Approach, OSWER 9200.2-125 (Sep. 2012)
- (gg) 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).
- (hh) 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).
- (ii) EPA's Emergency Responder Health and Safety Manual, OSWER 9285.3-12 (July 2005 and updates), <https://www.epaossc.org/HealthSafetyManual/manual-index.htm>.

- (jj) Broader Application of Remedial Design and Remedial Action Pilot Project Lessons Learned, OSWER 9200.2-129 (Feb. 2013).
- (kk) Guidance for Evaluating Completion of Groundwater Restoration Remedial Actions, OSWER 9355.0-129 (Nov. 2013).
- (ll) Groundwater Remedy Completion Strategy: Moving Forward with the End in Mind, OSWER 9200.2-144 (May 2014).
- (mm) Guidance for Management of Superfund Remedies in Post Construction, OLEM 9200.3-105 (Feb. 2017), <https://www.epa.gov/superfund/superfund-post-construction-completion>.
- (nn) Radiation Risk Assessment at CERCLA Sites: Q & A, OSWER 9200.4-40, EPA540-R-012-13
- (oo) Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), August 2000, EPA 402-R-97-016
- (pp) Multi-Agency Radiation Survey and Assessment of Materials and Equipment (MARSAME), January 2009, 402-R-09-001
- (qq) The Multi-Agency Radiological Laboratory Analytical Protocols Manual (MARLAP), July 2004, EPA 402-B-04-001A

8.2 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>

8.3 For any regulation or guidance referenced in the ASAO 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 Respondents receive notification from EPA of the modification, amendment, or replacement.