UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 2

IN THE MATTER OF: PROTECO Superfund Site Peñuelas, Puerto Rico Respondents (see Appendix A), Respondents. Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	Index Number: CERCLA-02-2020-2010

**ADMINISTRATIVE SETTLEMENT AGREEMENT
AND ORDER ON CONSENT FOR
REMEDIAL INVESTIGATION / FEASIBILITY STUDY**

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I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and the Respondents identified in the attached Appendix A ("Respondents"). This Settlement provides for the performance of a remedial investigation and feasibility study ("RI/FS") by Respondents and the payment of certain response costs incurred by the United States at or in connection with the PROTECO site (the "Site") generally located at Road 385, Km 4.4, Bo. Tallaboa in Peñuelas, Puerto Rico.

2. This Settlement is issued under the authority vested in the President of the United States by Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9607 and 9622 ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 29, 1987), and further delegated to Regional Administrators by EPA Delegation Nos. 14-14C (Administrative Actions Through Consent Orders, Jan. 18, 2017) and 14-14D (Cost Recovery Non-Judicial Agreements and Administrative Consent Orders, Jan. 18, 2017). These authorities were further redelegated by the Regional Administrator of EPA Region 2 to the Director of the Superfund and Emergency Management Division by Region 2 Redelegation R-1200 dated January 29, 2017.

3. EPA and Respondents recognize that this Settlement has been negotiated in good faith and that the actions undertaken by Respondents in accordance with this Settlement do not constitute an admission of any liability. Respondents do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement, the validity of the findings of facts, conclusions of law, and determinations in Section IV (Findings of Fact) and V (Conclusions of Law and Determinations) of this Settlement. Respondents agree to comply with and be bound by the terms of this Settlement and further agree that they will not contest the basis or validity of this Settlement or its terms.

II. PARTIES BOUND

4. This Settlement is binding upon EPA and upon Respondents and their agents, successors, and assigns. Any change in ownership or corporate status of any Respondent, including any transfer of assets or real or personal property, shall not alter such Respondent's responsibilities under this Settlement.

5. Respondents are jointly and severally liable for carrying out all activities required by this Settlement. In the event of the insolvency or other failure of any one or more Respondents to implement the requirements of this Settlement, the remaining Respondents shall complete all such requirements.

6. Each undersigned representative of a Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement and to execute and legally bind that Respondent to this Settlement.

7. Respondents shall provide a copy of this Settlement to each contractor hired to perform the Work required by this Settlement and to each person representing any Respondents with respect to the Site or the Work, and shall condition all contracts entered into under this Settlement upon performance of the Work in conformity with the terms of this Settlement. Respondents or their contractors shall provide written notice of the Settlement to all subcontractors hired to perform any portion of the Work required by this Settlement. Respondents shall nonetheless be responsible for ensuring that their contractors and subcontractors perform the Work in accordance with the terms of this Settlement.

III. DEFINITIONS

8. Unless otherwise expressly provided in this Settlement, terms used in this Settlement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement or its attached appendices, the following definitions shall apply:

a. "Affected Property" shall mean all real property at the Site and any other real property where EPA determines, at any time, that access is needed to implement the RI/FS, including the 35-acre estate located at Road 385, Km 4.4, Bo. Tallaboa in Peñuelas, Puerto Rico.

b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

c. "Commonwealth" shall mean the Commonwealth of Puerto Rico.

d. "Day" or "day" shall mean a calendar day. In computing any period of time under this Settlement, where the last day would fall on a Saturday, Sunday, or federal or Commonwealth holiday, the period shall run until the close of business of the next working day.

e. "Effective Date" shall mean the effective date of this Settlement as provided in Section XXXII.

f. "EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

g. "EPA Hazardous Substance Superfund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

h. "Future Response Costs" shall mean all costs, including direct and indirect costs, that the United States incurs after the Effective Date in reviewing or developing deliverables submitted pursuant to this Settlement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement, including payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Section XI (Property Requirements) (including cost of attorney time and any monies paid to secure or enforce access, including the amount of just compensation), Section XV (Emergency Response

and Notification of Releases), Paragraph 87 (Work Takeover), Paragraph 112 (Access to Financial Assurance), community involvement, (including the costs of any technical assistance grant under Section 117(e) of CERCLA, 42 U.S.C. § 9617(e)), Section XVII (Dispute Resolution), and all litigation costs related to this Settlement.

i. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. Rates are available online at https://www.epa.gov/superfund/superfund-interest-rates.

j. "Material Defect" shall mean a substantial defect in a submission such that the submission fails to adequately address one or more requirements under CERCLA, EPA guidance, and/or this Settlement.

k. "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

l. "Owner" shall mean any person or entity that owns or controls any Affected Property.

m. "Paragraph" shall mean a portion of this Settlement identified by an Arabic numeral or an upper or lower case letter.

n. "Party" or "Parties" shall mean EPA or any Respondent or EPA and Respondents, respectively.

o. "Post-Closure Trust Fund" shall mean the trust fund required under the November 20, 1997 amended consent decree in *United States v. Proteccion Tecnica Ecologica, Inc., et. al.*, Civil Action No. 86-1698 (HL), and established pursuant to a May 1998 Trust Agreement for the purpose of funding post-closure activities at the Site.

p. "PRDENR" shall mean the Puerto Rico Department of Environment & Natural Resources and any predecessor or successor departments or agencies of the Commonwealth.

q. "PROTECO Site Special Account" shall mean the special account within the EPA Hazardous Substance Superfund, established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

r. "RCRA" shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992 (also known as the Resource Conservation and Recovery Act).

s. "Respondents" shall mean those Parties identified in Appendix A, which may be amended to include additional Parties.

t. "Section" shall mean a portion of this Settlement identified by a Roman numeral.

u. "Settlement" shall mean this Administrative Settlement Agreement and Order on Consent, Index Number 02-2020-2010, and all appendices attached hereto (listed in Section XXX (Integration/Appendices)). In the event of conflict between this Settlement and any appendix, this Settlement shall control.

v. "Site" shall mean the PROTECO Superfund Site, including approximately 35 acres, located at Road 385, Km 4.4, Bo. Tallaboa in Peñuelas, Puerto Rico, and depicted generally on the map attached as Appendix B.

w. "Statement of Work" or "SOW" shall mean the document describing the activities Respondents must perform to develop the RI/FS for "the Site", as set forth in Appendix C to this Settlement. The Statement of Work is incorporated into this Settlement and is an enforceable part of this Settlement as are any modifications made thereto in accordance with this Settlement.

x. "Transfer" shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

y. "Trust Agreement" shall mean the May 1998 agreement entered into between Resources Management, Inc. d/b/a Proteccion Tecnica Ecologica, Inc. ("PROTECO"), as the grantor, and Banco Santander de Puerto Rico, as the trustee, that establishes and governs the Post-Closure Trust Fund to fund post-closure activities at the Site. On December 22, 2006, Banco Santander de Puerto Rico resigned as trustee, and Banco Popular de Puerto Rico became the successor trustee for the Trust Agreement.

z. "United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

aa. "Waste Material" shall mean (a) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); and (c) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

bb. "Work" shall mean all activities and obligations Respondents are required to perform under this Settlement, except those required by Section XIII (Record Retention).

IV. EPA'S FINDINGS OF FACT

9. The Site is located at Road 385, Km 4.4, Bo. Tallaboa, Peñuelas, Puerto Rico. The Site is the location of a former hazardous waste treatment, storage, and disposal facility ("TSDF") that occupies approximately thirty-five (35) acres in a valley surrounded by undeveloped, vegetated hills east of the Río Tallaboa valley. Two separate, active non-hazardous

industrial waste landfills regulated under Subtitle D of the Resource Conservation and Recovery Act ("RCRA") border the property to the east and west. The Seboruco residential area lies approximately 1.5 miles to the west. There are several private, domestic, industrial, and agricultural wells located within a two-mile radius of the Site.

10. Operations at the TSDF began in 1975 under the name Servicios Carbareon, Inc.; in 1985, the name was changed to Protección Técnica Ecológica Corp., which was succeeded by Resources Management, Inc. (hereinafter, "PROTECO"). During its years of operation, the TSDF accepted a variety of wastes, including electroplating sludge, wastewater treatment plant sludge, slurries, petroleum wastes, pesticide wastes, and pharmaceutical and manufacturing wastes. A variety of RCRA characteristic and listed hazardous wastes, including spent halogenated and non-halogenated solvent wastes, also known as volatile organic compounds ("VOCs") (RCRA Waste Codes F001, F002, F003, and F005) and wastes containing mercury (RCRA Waste Code D009), were deposited in one or more of 17 unlined waste units.

11. Drums brought to the former TSDF were either stored directly on the ground surface, were buried in the ground, or had their contents transferred to surface impoundments for treatment. Throughout the years, inspections of the TSDF conducted by EPA and PRDENR revealed violations of federal and Commonwealth environmental regulations, including unpermitted waste disposal activity, inadequate groundwater monitoring, lack of runoff control, waste deposition in unlined waste units, corroded and improperly labeled drums leaking contents onto exposed soil, and mixing of potentially incompatible wastes. Evidence of vertical and horizontal seepage from waste units was observed.

12. In November 1980, PROTECO submitted a Part A Permit Application pursuant to RCRA, thus entering interim status. In 1987, EPA and PROTECO entered into a consent decree stipulating that PROTECO would perform injunctive relief with respect to RCRA violations. In November 1997, after it became apparent that PROTECO had continued to violate RCRA regulations and provisions of the 1987 consent decree, EPA and PROTECO entered into an amended consent decree requiring the TSDF to meet RCRA closure and post-closure care requirements. The amended consent decree required establishment of the Post-Closure Trust Fund, which was established for the benefit of EPA pursuant to the Trust Agreement. PROTECO conducted closure of waste units from November 1997 to February 1999; some waste units were closed in place by capping, while others were excavated for disposal into a corrective action management unit at the facility. On June 29, 1999, EPA approved PROTECO's Closure Plan Certification.

13. PROTECO conducted some post-closure maintenance but stopped performing any post-closure care by 2009. Since then, EPA inspectors have confirmed that PROTECO is not maintaining the Site and is out of compliance with post-closure care provisions of the amended consent decree. In particular, PROTECO strongly opposed conducting post-closure groundwater monitoring and has not performed any of the RCRA-required groundwater monitoring activities. The Site still does not have a groundwater monitoring system as required for hazardous waste facilities closed with waste in place, despite EPA's repeated efforts to compel these actions.

14. Analytical results for groundwater monitoring wells at the Site indicate the presence of elevated concentrations of mercury and VOCs, including 1,1-Dichloroethane ("1,1-DCA"), 1,2-Dichloroethane ("1,2-DCA"), 1,1-Dichloroethylene ("1,1-DCE"), Trans-1,2-Dichloroethylene ("trans-1,2-DCE"), Tetrachloroethylene ("PCE"), 1,1,1-Trichloroethane ("1,1,1-TCA"), and Trichloroethylene ("TCE"). Sampling of on-site monitoring wells and hydrogeological studies indicate that VOC contamination has migrated to the aquifer beneath the Site. There are public and domestic drinking water supply wells, as well as groundwater springs that have been used for drinking water supply in the Río Tallaboa valley west of the Site.

15. Mercury, 1,1-DCA, 1,2-DCA, 1,1-DCE, trans-1,2-DCE, PCE, 1,1,1-TCA, and TCE are "hazardous substances" within the meaning of Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

16. The discharge, dumping, and/or disposal of hazardous substances at the Site constitutes a "release" of hazardous substances into the environment as the term "release" is defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22). In addition, there is a threat of further releases of hazardous substances at and from the Site.

17. Exposure to the various hazardous substances present at the Site may cause a variety of adverse human health effects.

18. There is a threat of migration of the hazardous substances present at the Site that might further impact groundwater, surface water, and the surrounding environment.

19. The Site was listed on the National Priorities List by EPA pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, on May 15, 2019, 84 Fed. Reg. 21708.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

20. For purposes of this Settlement, and based on EPA's Findings of Fact set forth above, and the administrative record, EPA has determined that:

a. The Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

c. Each Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

d. Each Respondent identified in the attached Appendix A is a potentially responsible party as described in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

e. Each Respondent allegedly arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment of hazardous substances at the facility, within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

f. The conditions described in the Findings of Fact above constitute an actual and/or threatened "release" of a hazardous substance from a facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

g. The actions required by this Settlement are necessary to protect the public health, welfare, or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

h. EPA has determined that Respondents are qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), and, if carried out in compliance with the terms of this Settlement, the Work will be consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP, 40 C.F.R. § 300.700(c)(3)(ii).

VI. SETTLEMENT AGREEMENT AND ORDER

21. Based upon the Findings of Fact, Conclusions of Law and Determinations set forth above, and the administrative record, it is hereby Ordered and Agreed that Respondents shall comply with all provisions of this Settlement, including all appendices to this Settlement and all documents incorporated by reference into this Settlement.

VII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

22. **Selection of Contractors, Personnel**. All Work performed under this Settlement shall be under the direction and supervision of qualified personnel. Within thirty (30) days after the Effective Date, and before the Work outlined below begins, Respondents shall notify EPA in writing of the names, titles, addresses, telephone numbers, email addresses, and qualifications of the personnel, including contractors, subcontractors, consultants, and laboratories to be used in carrying out such Work. If, after the commencement of Work, Respondents retain additional contractors or subcontractors, Respondents shall notify EPA of the names, titles, contact information, and qualifications of such contractors or subcontractors retained to perform the Work at least ten (10) days prior to commencement of Work by such additional contractors or subcontractors. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondents. If EPA disapproves of a selected contractor or subcontractor, Respondents shall retain a different contractor or subcontractor and shall notify EPA of that contractor's or subcontractor's name, title, contact information, and qualifications within thirty (30) days after receipt of written notice of EPA's disapproval. With respect to any proposed contractor, Respondents shall demonstrate that the proposed contractor demonstrates compliance with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs – Requirements with guidance for use" (American Society

for Quality, February 2014), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," EPA/240/B-01/002 (Reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondents shall be subject to EPA's review for verification based on objective assessment criteria (e.g., experience, capacity, technical expertise) and that they do not have a conflict of interest with respect to the project.

23. Within thirty (30) days after the Effective Date, Respondents shall designate a project coordinator who shall be responsible for administration of the Work required by this Settlement ("Project Coordinator") and shall submit to EPA the proposed designated Project Coordinator's name, title, address, telephone number, email address, and qualifications. To the extent possible, the Project Coordinator shall be present on Site or readily available during the Work. EPA retains the right to disapprove of a designated Project Coordinator who does not meet the requirements of Paragraph 22 (Selection of Contractors, Personnel). If EPA disapproves of the designated Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name, title, contact information, and qualifications within twenty (20) days following receipt of written notice of EPA's disapproval. Notice or communication relating to this Settlement from EPA to Respondents' Project Coordinator shall constitute notice or communication to all Respondents.

24. EPA has designated Zolymar Luna of the Response and Remediation Branch, Region 2 as its project manager ("Project Manager"). EPA will notify Respondents in writing of a change of its designated Project Manager, and EPA will provide Respondents with the new EPA Project Manager's name, title, address, telephone number, email address. Communications between Respondents and EPA, and all documents concerning the activities performed pursuant to this Settlement, shall be directed to the EPA Project Manager in accordance with Paragraph 34.a.

25. EPA's Project Manager shall have the authority lawfully vested in a Remedial Project Manager and On-Scene Coordinator by the NCP. In addition, EPA's Project Manager shall have the authority, consistent with the NCP, to halt, conduct, or direct any Work required by this Settlement, or to direct any other response action when s/he determines that conditions at the Site constitute an emergency situation or may present a threat to public health or welfare or the environment. Absence of the EPA Project Manager from the area under study pursuant to this Settlement shall not be cause for stoppage or delay of Work.

VIII. WORK TO BE PERFORMED

26. For any regulation or guidance referenced in the Settlement, 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.

27. Respondents shall conduct the RI/FS and prepare all plans in accordance with the provisions of this Settlement, the attached SOW, CERCLA, the NCP, and EPA guidance,

including the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" ("RI/FS Guidance"), OSWER Directive # 9355.3-01 (October 1988), available at https://semspub.epa.gov/src/document/11/128301, "Guidance for Data Useability in Risk Assessment (Part A), Final," OSWER Directive #9285.7-09A, PB 92-963356 (April 1992), available at http://semspub.epa.gov/src/document/11/156756, and guidance referenced therein, and guidance referenced in the SOW.

a. The Remedial Investigation ("RI") shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from the Site, assessing risk to human health and the environment, and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. It is the intention of EPA and Respondents that the RI will be performed, to the extent technically feasible, in a manner that will prevent and/or minimize releases of hazardous substances from the Site and from the corrective measures implemented as part of the RCRA closure conducted pursuant to an EPA-approved closure plan.

b. The Feasibility Study ("FS") shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site. The alternatives evaluated must include the range of alternatives described in the NCP, 40 C.F.R. § 300.430(e), and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In evaluating the alternatives, Respondents shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and 40 C.F.R. § 300.430(e).

28. All written documents prepared by Respondents pursuant to this Settlement shall be submitted by Respondents in accordance with Section IX (Submission and Approval of Deliverables). With the exception of progress reports and the Health and Safety Plan, all such submittals will be reviewed and approved by EPA in accordance with Section IX (Submission and Approval of Deliverables). Respondents shall implement all EPA approved, conditionally-approved, or modified deliverables.

29. Upon receipt of the draft Feasibility Study Report ("FS Report"), EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed and will evaluate the cost, implementability, and long-term effectiveness of any proposed institutional controls for that alternative.

30. **Modification of the RI/FS Work Plan**

a. If at any time during the RI/FS process, Respondents identify a need for additional data, Respondents shall submit to EPA's Project Manager for approval a memorandum documenting the need for a modification of the RI/FS Work Plan within thirty (30) days of determining a modification is necessary. EPA in its discretion will approve or disapprove the proposed RI/FS Work Plan modification(s).

b. In the event of unanticipated or changed circumstances at the Site that may warrant changes to the RI/FS Work Plan, Respondents shall notify EPA's Project Manager by telephone and electronic mail within 24 hours of discovery of the unanticipated or changed circumstances. In the event that EPA determines that the unanticipated or changed circumstances warrant changes in the RI/FS Work Plan, EPA shall direct Respondents to modify and submit the modified RI/FS Work Plan to EPA for approval. If EPA is not satisfied with the revised RI/FS Work Plan, EPA reserves the right to modify it unilaterally. Respondents shall perform the RI/FS Work Plan as modified.

c. In the event that EPA determines that, in addition to tasks defined in the initially approved RI/FS Work Plan, other additional work may be necessary to accomplish the objectives of the RI/FS, EPA will notify Respondents and provide Respondents an opportunity for a consultation with EPA to take place within ten (10) days after the EPA notification. After such consultation, if EPA still considers additional work to be necessary to accomplish the objectives of the RI/FS, EPA will notify Respondents of its determination and request that Respondents submit a written modification to the RI/FS Work Plan. Respondents shall indicate their willingness to perform the additional work within ten (10) days after receipt of the EPA request and shall submit a written modification to the RI/FS Work Plan within thirty (30) days of the EPA request. Respondents shall perform these response actions in addition to those required by the initially approved RI/FS Work Plan. If Respondents object to any modification determined by EPA to be necessary pursuant to this Paragraph, Respondents may seek dispute resolution pursuant to Section XVII (Dispute Resolution). The SOW and/or RI/FS Work Plan shall be modified in accordance with the final resolution of the dispute.

d. Respondents shall complete the additional work according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the RI/FS Work Plan or written RI/FS Work Plan supplement. EPA reserves the right to conduct the additional work itself, to seek reimbursement from Respondents for the costs incurred in performing the work, and/or to seek any other appropriate relief.

e. Notwithstanding the above, EPA and Respondents agree that any EPA modifications to the RI/FS Work Plan shall not require Respondents to investigate releases or contamination unrelated to the Site.

f. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions at the Site.

31. **Off-Site Shipments**

a. Respondents may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if that facility complies 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 written notice to the appropriate state environmental official in the receiving facility's state and to EPA's Project Manager. This notice requirement shall not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. In these instances, Respondents shall also notify the state environmental official referenced above and EPA's Project Manager of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility.

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 SOW. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) that are shipped off-Site for treatability studies are not subject to 40 C.F.R. § 300.440.

32. **Meetings**. Respondents or their designated Project Coordinator shall make presentations at, and participate in, meetings at the request of EPA during the preparation of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Such meetings will be scheduled at EPA's discretion at mutually convenient times.

33. **Progress Reports**. In addition to the deliverables set forth in this Settlement, Respondents shall submit written quarterly progress reports to EPA by the fifteenth (15th) day of the following month for every quarter following the Effective Date of this Settlement. At a minimum, with respect to the preceding quarter, these progress reports shall:

a. describe the actions that have been taken to comply with this Settlement;

b. include all results of sampling and tests and all other data received by Respondents, unless the data has otherwise been submitted to EPA as required by the SOW;

c. describe Work planned for the next quarter with schedules relating such Work to the overall project schedule for RI/FS completion; and

d. describe all problems encountered in complying with the requirements of this Settlement and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

IX. SUBMISSION AND APPROVAL OF DELIVERABLES

34. **Submission of Deliverables**

a. **General Requirements for Deliverables**

(1) Except as otherwise provided in this Settlement, Respondents shall direct all submissions required by this Settlement to EPA's Project Manager, Zolymar Luna, U.S. Environmental Protection Agency, Caribbean Environmental Protection Division, City View Plaza II, Suite 7000, #48 Rd 165, km 1.2 Guaynabo, Puerto Rico 00968-8069, 787-977-5844, luna.zolymar@epa.gov and to the EPA Site Attorney, Andrea Leshak, U.S. Environmental Protection Agency, Region 2, Office of Regional Counsel, 290 Broadway, 17th Floor, New York, NY 10007, 212-637-3197, leshak.andrea@epa.gov. Respondents shall submit all deliverables required by this Settlement, the attached SOW, or any approved work plan in accordance with the schedule set forth in such plan.

(2) Respondents shall submit all deliverables in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in Paragraph 34.b. All other deliverables shall be submitted in the electronic form specified by EPA's Project Manager. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5 x 11 inches, Respondents shall also provide two paper copies of such exhibits.

b. **Technical Specifications for Deliverables**

(1) Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable ("EDD") format (information available at https://www.epa.gov/superfund/region-2-superfund-electronic-data-submission). Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.

(2) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (i) in the ESRI File Geodatabase format; and (ii) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at https://edg.epa.gov/EME/.

(3) 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.

(4) Spatial data submitted by Respondents does not and is not intended to define the boundaries of the Site.

35. **Approval of Deliverables**

a. **Initial Submissions**

(1) After review of any deliverable that is required to be submitted for EPA approval under this Settlement or the attached 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 as a result of 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 Paragraph 35.a(1) (Initial Submissions), or if required by a notice of approval upon specified conditions under Paragraph 35.a(1), Respondents shall, within thirty (30) days or such longer time as specified by EPA in such notice, or otherwise agreed upon by the Parties, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, EPA may (a) approve, in whole or in part, the resubmission; (b) approve the resubmission upon specified conditions; (c) modify the resubmission; (d) disapprove, in whole or in part, the resubmission, requiring Respondents to correct the deficiencies; or (e) any combination of the foregoing.

c. **Implementation**. Upon approval, approval upon conditions, or modification by EPA under Paragraph 35.a (Initial Submissions) or Paragraph 35.b (Resubmissions) of any deliverable, or any portion thereof (i) such deliverable, or portion thereof, will be incorporated into and enforceable under the Settlement and (ii) Respondents shall take any action required by such deliverable, or portion thereof. Implementation of any non-deficient portion of a submission shall not relieve Respondents of any liability for penalties under Section XIX (Stipulated Penalties) for violations of this Settlement.

36. Notwithstanding the receipt of a notice of disapproval, Respondents shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA.

37. In the event that EPA takes over some of the tasks in accordance with the provisions of Paragraph 87 (Work Takeover), but not the preparation of the Remedial Investigation Report ("RI Report") or the FS Report, Respondents shall incorporate and integrate information supplied by EPA into those reports.

38. Respondents shall not proceed with any activities or tasks dependent on the following deliverables until receiving EPA approval, approval on condition, or modification of such deliverables: RI/FS Work Plan; Sampling and Analysis Plan; draft RI Report; Treatability Testing Work Plan; Treatability Testing Sampling and Analysis Plan; Treatability Testing Health and Safety Plan; and draft FS Report. While awaiting EPA approval, approval on condition, or modification of these deliverables, Respondents shall proceed with all other tasks and activities that may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement.

39. For all remaining deliverables not listed in Paragraph 38, Respondents shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval of the submitted deliverable. EPA reserves the right to direct Respondents to cease from proceeding further, either temporarily or permanently, on any task, activity, or deliverable at any time during the Work.

40. **Material Defects**. If an initially submitted or resubmitted plan, report, or other deliverable contains a Material Defect, and the plan, report, or other deliverable is disapproved or modified by EPA under Paragraph 35.a (Initial Submissions) or 35.b (Resubmissions) as a result of such Material Defect, Respondents shall be deemed in violation of this Settlement for failure to submit such plan, report, or other deliverable timely and adequately. Respondents may be subject to penalties for such violation as provided in Section XIX (Stipulated Penalties).

41. Neither failure of EPA to approve or disapprove of Respondents' submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA.

X. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS

42. Respondents shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all samples consistent with "EPA Requirements for Quality Assurance Project Plans (QA/R5)," EPA/240/B-01/003 (March 2001, reissued May 2006), "Guidance for Quality Assurance Project Plans (QA/G-5)," EPA/240/R-02/009 (December 2002), and "Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A-900C (March 2005).

43. **Laboratories**

a. Respondents shall ensure that EPA personnel and its authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondents pursuant to this Settlement. In addition, Respondents shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the Quality Assurance Project Plan ("QAPP") for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that sampling and field activities are conducted in accordance with the Agency's "EPA QA Field Activities Procedure" CIO 2105-P-02.1 (9/23/2014), available at https://www.epa.gov/irmpoli8/epa-qa-field-activities-procedures. Respondents shall ensure that the laboratories that are utilized for the analysis of samples taken

pursuant to this Settlement meet the competency requirements set forth in EPA's "Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions," available at https://www.epa.gov/measurements/documents-about-measurement-competency-under-acquisition-agreements, and that the laboratories perform all analyses using EPA-accepted methods. Accepted EPA methods include methods that are documented in the EPA's Contract Laboratory Program (https://www.epa.gov/superfund/programs/clp/), SW 846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (https://www.epa.gov/hw-sw846), "Standard Methods for the Examination of Water and Wastewater" (http://www.standardmethods.org/), and 40 C.F.R. Part 136, "Air Toxics - Monitoring Methods" (https://www.epa.gov/ttnamti1/airtox.html).

b. Upon approval by EPA, Respondents may use other appropriate analytical methods, as long as (i) quality assurance/quality control ("QA/QC") criteria are contained in the methods and the methods are included in the QAPP, (ii) the analytical methods are at least as stringent as the methods listed above, and (iii) the methods have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, American Society for Testing and Materials, National Institute for Occupational Safety and Health, Occupational Safety and Health Administration, etc.

c. Respondents shall ensure that all laboratories they use for analysis of samples taken pursuant to this Settlement have a documented quality system that complies with ASQ/ANSI E4:2014 "Quality Management Systems for Environmental Information and Technology Programs – Requirements With Guidance for Use" (American Society for Quality, February 2014), and "EPA Requirements for Quality Management Plans (QA/R-2)" EPA/240/B-01/002 (March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program, or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs as meeting the quality system requirements.

d. Respondents shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Settlement are conducted in accordance with the procedures set forth in the approved QAPP.

44. **Sampling**

a. Upon request, Respondents shall provide split or duplicate samples to EPA or its authorized representatives. Respondents shall notify EPA not less than seven (7) days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall provide to Respondents split or duplicate samples of any samples it takes as part of EPA's oversight of Respondents' implementation of the Work, and any such samples shall be analyzed in accordance with the approved QAPP.

b. Respondents shall submit to EPA, in the next quarterly progress report as described in Paragraph 33 (Progress Reports), the results of all sampling and/or tests or other data (including raw data) obtained or generated by or on behalf of Respondents with respect to the Site and/or the implementation of this Settlement, unless the data has otherwise been submitted to EPA as required by the SOW. Respondents waive any objections to any data gathered, generated, or evaluated by EPA, the Commonwealth, or Respondents in the performance or oversight of the Work that has been validated that meets all quality assurance/quality control ("QA/QC") procedures and objectives required by the Settlement or any EPA-approved RI/FS Work Plans or Sampling and Analysis Plans. If Respondents object to any other data relating to the RI/FS, Respondents shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within thirty (30) days after the quarterly progress report containing the data.

XI. PROPERTY REQUIREMENTS

45. **Agreements Regarding Access and Non-Interference**. Respondents shall, with respect to any non-settling Owner's Affected Property, use best efforts to secure from such non-settling Owner an agreement, enforceable by Respondents and the United States, providing that such non-settling Owner shall, with respect to such non-settling Owner's Affected Property (i) provide EPA and all Respondents and their representatives, contractors, and subcontractors with access at all reasonable times to such Affected Property to conduct any activity regarding the Settlement, including those listed in Paragraph 45.a (Access Requirements), and (ii) refrain from using such Affected Property in any manner that EPA determines will pose an unacceptable risk to human health or to the environment as a result of exposure to Waste Material, or interfere with or adversely affect the implementation or integrity of the Work. Respondents shall provide a copy of such access agreement(s) to EPA.

a. **Access Requirements**. The following is a list of activities for which access may be required regarding the Affected Property.

b. Monitoring the Work;

c. Verifying any data or information submitted to EPA;

d. Conducting investigations regarding contamination at or near the Site;

e. Obtaining samples;

f. Assessing the need for, planning, implementing, or monitoring response actions;

g. Assessing implementation of quality assurance and quality control practices as defined in the approved QAPP;

h. Implementing the Work pursuant to the conditions set forth in Paragraph 87 (Work Takeover);

i. Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondents or their agents, consistent with Section XII (Access to Information);

j. Assessing Respondents' compliance with the Settlement;

k. Determining whether the Affected Property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under the Settlement; and

l. Implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions regarding the Affected Property.

46. **Best Efforts**. As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Respondents would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access, as required by this Section. If Respondents are unable to accomplish what is required through "best efforts" in a timely manner, they shall notify EPA and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist Respondents, or take independent action, in obtaining such access. All costs incurred by the United States in providing such assistance or taking such action, including the cost of attorney time and the amount of monetary consideration or just compensation paid, constitute Future Response Costs to be reimbursed under Section XVI (Payment of Response Costs).

47. In the event of any Transfer of the Affected Property, unless EPA otherwise consents in writing, Respondents shall continue to comply with their obligations under the Settlement, including their obligation to secure access.

48. Notwithstanding any provision of the Settlement, EPA retains all of its access authorities and rights, as well as all of its rights to require land, water, or other resource use restrictions, including enforcement authorities related thereto under CERCLA, RCRA, and any other applicable statute or regulations.

XII. ACCESS TO INFORMATION

49. Respondents shall provide to EPA, upon request, copies of all records, reports, documents, and other information including records, reports, documents, and other information in electronic form (hereinafter referred to as "Records") within Respondents' possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Settlement, including sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Work. Respondents shall also make available to EPA, for purposes of investigation or information gathering, their employees, agents, or

representatives who possess knowledge of relevant facts concerning the performance of the Work, subject to any recognized and applicable privilege asserted in accordance with Paragraph 50.

50. **Privileged and Protected Claims**

a. Respondents may assert that all or part of a Record requested by EPA is privileged or protected as provided under federal law, in lieu of providing the Record, provided Respondents comply with Paragraph 50.b, and except as provided in Paragraph 50.c.

b. If Respondents assert a claim of privilege or protection, they shall provide EPA with the following information regarding such Record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondents shall provide the Record to EPA in redacted form to mask the privileged or protected portion only. Respondents shall retain all Records that they claim to be privileged or protected until EPA has had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondents' favor.

c. Respondents may make no claim of privilege or protection regarding (1) any data generated pursuant to the requirements of this Settlement, including all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Site, or (2) the portion of any Record that Respondents are required to create or generate pursuant to this Settlement.

51. **Business Confidential Claims**. Respondents may assert that all or part of a Record provided to EPA under this Section or Section XIII (Record Retention) is business confidential to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Respondents shall segregate and clearly identify all Records or parts thereof submitted under this Settlement for which Respondents assert business confidentiality claims. Records claimed as confidential business information will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA, or if EPA has notified Respondents that the Records are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such Records without further notice to Respondents.

52. Notwithstanding any provision of this Settlement, EPA retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIII. RECORD RETENTION

53. Until ten (10) years after EPA provides Respondents with notice, pursuant to Section XXIX (Notice of Completion of Work), that all Work has been fully performed in

accordance with this Settlement, each Respondent shall preserve and retain all non-identical copies of Records (including Records in electronic form) now in its possession or control, or that come into its possession or control, that relate in any manner to its liability under CERCLA with regard to the Site, provided, however, that Respondents who are potentially liable as owners or operators of the Site must retain, in addition, all Records that relate to the liability of any other person under CERCLA with respect to the Site. Each Respondent must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above all non-identical copies of the last draft or final version of any Records now in its possession or control or that come into its possession or control that relate in any manner to the performance of the Work, provided, however, that each Respondent (and its contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

54. At the conclusion of the document retention period, Respondents shall notify EPA at least ninety (90) days prior to the destruction of any such Records, and, upon request by EPA, and except as provided in Paragraph 50 (Privileged and Protected Claims), Respondents shall deliver any such Records to EPA.

55. Each Respondent certifies individually that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the Commonwealth and that it has fully complied with any and all EPA and Commonwealth requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927, and Commonwealth or state law.

XIV. COMPLIANCE WITH OTHER LAWS

56. Nothing in this Settlement limits Respondents' obligation to comply with the requirements of all applicable state and federal laws and regulations when performing the RI/FS. No local, state, or federal permit shall be required for any portion of the Work conducted entirely on-site (i.e., within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work), including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. Respondents may seek relief under the provisions of Section XVIII (Force Majeure) for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval required for the Work, provided that they have submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals. This Settlement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XV. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

57. **Emergency Response**. 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 that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release. Respondents shall take these actions in accordance with all applicable provisions of this Settlement, including the Health and Safety Plan. Respondents shall also immediately notify EPA's Project Manager, at 787-977-5844, or, in the event of his/her unavailability, the Chief of the Response and Prevention Branch of the Caribbean Enforcement Protection Division of EPA Region 2 at 787-977-5864, of the incident or Site conditions. In the event that Respondents fail to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondents shall reimburse EPA for all costs of such response action not inconsistent with the NCP pursuant to Section XVI (Payment of Response Costs).

58. **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 orally notify EPA's Project Manager or, in the event of his/her unavailability, the Chief of the Response and Prevention Branch of the Caribbean Enforcement Protection Division of EPA Region 2 at 787-977-5864, and the National Response Center at (800) 424-8802. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103 of CERCLA, 42 U.S.C. § 9603, and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

59. For any event covered under this Section, Respondents shall submit a written report to EPA within seven (7) days after the onset of such event, setting forth the action or event that occurred and the measures taken, and to be taken, to mitigate any release or threat of release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release or threat of release.

XVI. PAYMENT OF RESPONSE COSTS

60. **Post-Closure Trust Fund**. In accordance with the terms of the Trust Agreement, Respondents may request that EPA designate one or more Respondents or other persons as parties to be reimbursed from the Post-Closure Trust Fund established under the Trust Agreement for costs incurred on post-closure expenditures at the Site. By way of example and not limitation, post-closure expenditures may include repairing fencing, conducting maintenance, assessing and repairing certain monitoring wells, repairing the closure cover, designing and installing surface water controls, ditch and sedimentation basin cleaning, and assessing and repairing the leachate collection system. All or some of the costs incurred by Respondents in implementing post-closure activities may be reimbursable, in EPA's sole discretion, using monies from the Post-Closure Trust Fund.

a. In advance of conducting any post-closure activities, Respondents shall submit a Post-Closure Activity Work Plan to be reviewed and approved by EPA in accordance with Section IX (Submission and Approval of Deliverables). The Post-Closure Activity Work Plan shall detail the planned activities, the locations of such activities, and the proposed schedule of activities. Respondents may supplement the Post-Closure Activity Work Plan, if necessary.

b. At any time, Respondents may request an initial nonbinding opinion from EPA on whether certain costs are reimbursable under this Paragraph. EPA shall respond to any such request from Respondents indicating its nonbinding opinion as to whether certain costs are reimbursable under this Paragraph within fourteen (14) days after Respondents' request.

c. Upon the successful completion of any post-closure activities, Respondents shall submit to EPA for review and approval an itemized list of completed post-closure activities and the documented cost of performing each activity. Respondents shall make such submission by March 31 of a given year for all post-closure activities completed during the prior year ending December 31. EPA shall approve or deny Respondents' request for reimbursement under this Paragraph, and shall so notify Respondents in writing. If EPA approves Respondents' request for reimbursement, EPA shall direct the trustee of the Post-Closure Trust Fund to reimburse Respondents under the Trust Agreement.

d. Respondents reserve, and this Settlement is without prejudice to, their ability to seek reimbursement from the Post-Closure Trust Fund. This Settlement does not supersede or in any way modify the terms of the Trust Agreement, including EPA's status as the beneficiary of the Post-Closure Trust Fund, and Respondents' reservation shall not be interpreted to provide for additional rights beyond those set forth in the Trust Agreement.

61. **Payments for Future Response Costs**. Respondents shall pay to EPA all Future Response Costs not inconsistent with the NCP.

a. Respondents shall make payment to EPA by Electronic Funds Transfer ("EFT") through the Pay.gov website using the following link: https://www.pay.gov/public/form/start/11751879. The payment form shall include the following information:

Amount of Payment
Name of Remitter
Docket Number (CERCLA-02-2020-2010)
Site Name (PROTECO)
Site/Spill ID Number (A27M)

b. At the time of payment, Respondents shall send notice that payment has been made to EPA's Project Manager at luna.zolymar@epa.gov, to the Site Attorney at leshak.andrea@epa.gov, and to the EPA Cincinnati Finance Office by email at cinwd_acctsreceivable@epa.gov, or by mail to the following:

EPA Cincinnati Finance Office

26 W. Martin Luther King Drive
Cincinnati, Ohio 45268

Such notice shall reference Site/Spill ID Number A27M and the EPA docket number for this action.

c. **Periodic Bill**. On a periodic basis, EPA will send Respondents a bill requiring payment that includes a Superfund Cost Recovery Package Imaging and On-line System ("SCORPIOS") Report, which includes direct and indirect costs incurred by EPA, its contractors, subcontractors, and the United States Department of Justice. Respondents shall make all payments within forty-five (45) days after Respondents' receipt of each bill requiring payment, except as otherwise provided in Paragraph 63 (Contesting Future Response Costs).

d. **Deposit of Future Response Costs Payments**. The total amount to be paid by Respondents pursuant to Paragraph 61.c (Periodic Bill) shall be deposited by EPA in the PROTECO 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 deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund if, at the time the payment is received, EPA estimates that the PROTECO 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.

62. **Interest**. In the event that any payment for Future Response Costs is not made by the date required, Respondents shall pay Interest on the unpaid balance. The Interest on Future Response Costs shall begin to accrue on the date of the bill. The Interest shall accrue through the date of Respondents' payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section, including payment of stipulated penalties pursuant to Section XIX (Stipulated Penalties).

63. **Contesting Future Response Costs**. Respondents may initiate the procedures of Section XVII (Dispute Resolution) regarding payment of any Future Response Costs billed under Paragraph 61 (Payments for Future Response Costs) if they determine that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if they believe EPA incurred excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. To initiate such a dispute, Respondents shall submit a Notice of Dispute in writing to EPA's Project Manager within thirty (30) days after receipt of the bill. Any such Notice of Dispute shall specifically identify the contested Future Response Costs and the basis for objection. If Respondents submit a Notice of Dispute, Respondents shall within the 30-day period, also as a requirement for initiating the dispute, (a) pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 61, and (b) establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation (FDIC) and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondents shall send to EPA's Project Manager a copy of the transmittal letter and check

paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. If EPA prevails in the dispute, within five (5) days after the resolution of the dispute, Respondents shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 61. If Respondents prevail concerning any aspect of the contested costs, Respondents shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to EPA in the manner described in Paragraph 61. Respondents shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVII (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondents' obligation to reimburse EPA for its Future Response Costs.

XVII. DISPUTE RESOLUTION

64. Unless otherwise expressly provided for in this Settlement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement. The Parties shall attempt to resolve any disagreements concerning this Settlement expeditiously and informally.

65. **Informal Dispute Resolution**. If Respondents object to any EPA action taken pursuant to this Settlement, they shall send EPA a written Notice of Dispute describing the objection(s) within fourteen (14) days after such action, except with respect to a dispute related to billings for Future Response Costs, in which case the written Notice of Dispute shall be submitted within thirty (30) days after receipt of the bill in accordance with Paragraph 63. EPA and Respondents shall have fourteen (14) days from EPA's receipt of Respondents' Notice of Dispute to resolve the dispute through informal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement.

66. **Formal Dispute Resolution**. If the Parties are unable to reach an agreement within the Negotiation Period, Respondents shall, within thirty (30) days after the end of the Negotiation Period, submit a statement of position to EPA's Project Manager. EPA may, within twenty (20) days thereafter, submit a statement of position. Thereafter, an EPA management official at the Deputy Director level or higher will issue a written decision on the dispute to Respondents. EPA's decision shall be incorporated into and become an enforceable part of this Settlement. Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

67. Except as provided in Paragraph 63 (Contesting Future Response Costs) or as agreed by EPA, the invocation of formal dispute resolution procedures under this Section does not extend, postpone, or affect in any way any obligation of Respondents under this Settlement. Except as provided in Paragraph 77, stipulated penalties with respect to the disputed matter shall continue to accrue but shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any

applicable provision of this Settlement. In the event that Respondents do not prevail on the disputed issue, stipulated penalties shall be assessed and paid within fifteen (15) days after resolution of the dispute.

XVIII. FORCE MAJEURE

68. A "Force Majeure" event, for purposes of this Settlement, is defined as any event arising from causes beyond the control of Respondents, of any entity controlled by Respondents, or of Respondents' contractors (possible examples may include hurricanes, earthquakes, and government restrictions or other circumstances as a result of pandemics) that delays or prevents the performance of any obligation under this Settlement despite Respondents' best efforts to fulfill the obligation. The requirement that Respondents exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (a) as it is occurring and (b) following the potential force majeure event such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. A "Force Majeure" event does not include financial inability to complete the Work or increased cost of performance.

69. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement, whether or not caused by a Force Majeure event, Respondents shall notify EPA's Project Manager orally or, in his or her absence, the alternate EPA Project Manager, or, in the event both of EPA's designated representatives are unavailable, the Director of the Waste Management Division, EPA Region 2, within five (5) days of when Respondents first knew that the event might cause a delay. Within ten (10) days thereafter, Respondents shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondents' rationale for attributing such delay to a force majeure event; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health or welfare or the environment. Respondents shall include with any notice all available documentation supporting their claim that the delay was attributable to a force majeure event. Respondents shall be deemed to know of any circumstance of which Respondents, any entity controlled by Respondents, or Respondents' contractors knew or should have known. Failure to comply with the above requirements regarding an event shall preclude Respondents from asserting any claim of a force majeure event regarding that event, provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure event under Paragraph 68 and whether Respondents have exercised their best efforts under Paragraph 68, EPA may, in its unreviewable discretion, excuse in writing Respondents' failure to submit timely or complete notices under this Paragraph.

70. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Settlement that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA

does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Respondents in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

71. If Respondents elect to invoke the dispute resolution procedures set forth in Section XVII (Dispute Resolution), they shall do so no later than fifteen (15) days after receipt of EPA's notice. In any such proceeding, Respondents shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondents complied with the requirements of Paragraphs 68 and 69. If Respondents carry this burden, the delay at issue shall be deemed not to be a violation by Respondents of the affected obligation of this Settlement identified to EPA.

72. The failure by EPA to timely complete any obligation under the Settlement is not a violation of the Settlement, provided, however, that if such failure prevents Respondents from meeting one or more deadlines under the Settlement, Respondents may seek relief under this Section.

XIX. STIPULATED PENALTIES

73. Respondents shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 74.a and 75 for failure to comply with the obligations specified in Paragraphs 74.b and 75, unless excused under Section XVIII (Force Majeure). "Comply" as used in the previous sentence includes compliance by Respondents with all applicable requirements of this Settlement, within the deadlines established under this Settlement.

74. **Stipulated Penalty Amounts: Payments, Financial Assurance, Major Deliverables, and Other Milestones**

a. The following stipulated penalties shall accrue per violation per day for any noncompliance with any obligation identified in Paragraph 74.b:

Penalty Per Violation Per Day	Period of Noncompliance
$ 1,000	1st through 14th day
$ 2,000	15th through 30th day
$ 4,000	31st day and beyond

b. **Obligations**

(1) Payment of any amount due under Section XVI (Payment of Response Costs).

(2) Establishment and maintenance of financial assurance in accordance with Section XXVII (Financial Assurance).

(3) Establishment of an escrow account to hold any disputed Future Response Costs under Paragraph 63 (Contesting Future Response Costs).

(4) Submission of the draft RI/FS Work Plan, draft Sampling and Analysis Plan, draft RI Report, Treatability Testing Work Plan, Treatability Testing Sampling and Analysis Plan, Treatability Testing Health and Safety Plan, and draft FS Report as required under this Settlement.

(5) Submission of modifications requested by EPA to the RI/FS Work Plan, Sampling and Analysis Plan, draft RI Report, Treatability Testing Work Plan, Treatability Testing Sampling and Analysis Plan, Treatability Testing Health and Safety Plan, and draft FS Report as required under this Settlement.

75. **Stipulated Penalty Amounts: Other Deliverables.** The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate deliverables required by this Settlement, other than those specified in Paragraph 74.b:

Penalty Per Violation Per Day	Period of Noncompliance
$ 500	1st through 14th day
$ 1,000	15th through 30th day
$ 2,500	31st day and beyond

76. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 87 (Work Takeover), Respondents shall be liable for a stipulated penalty in the amount of $200,000. Stipulated penalties under this Paragraph are in addition to the remedies available to EPA under Paragraphs 87 (Work Takeover) and 112 (Access to Financial Assurance).

77. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. Penalties shall continue to accrue during any dispute resolution period, and they shall be paid within fifteen (15) days after the agreement or the receipt of EPA's decision. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Section IX (Submission and Approval of Deliverables), during the period, if any, beginning on the day of EPA's receipt of such submission until the date that EPA notifies Respondents in writing of any deficiency; and (b) with respect to a decision by the EPA Management Official at the Deputy Director level or higher, under Paragraph 66 (Formal Dispute Resolution), during the period, if any, beginning after the day the Negotiation Period begins until the date that the EPA Management Official issues a final decision regarding such dispute. Nothing in this Settlement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement.

78. Following EPA's determination that Respondents have failed to comply with a requirement of this Settlement, EPA will provide Respondents with written notification of the failure and describe the noncompliance. EPA may send Respondents a written demand for the

payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of when EPA notifies Respondents of a violation.

79. All penalties accruing under this Section shall be due and payable to EPA within thirty (30) days after Respondents' receipt from EPA of a demand for payment of the penalties, unless Respondents invoke the Dispute Resolution procedures under Section XVII (Dispute Resolution) within the 30-day period. All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be made in accordance with Paragraph 61 (Payments for Future Response Costs).

80. If Respondents fail to pay stipulated penalties when due, Respondents shall pay Interest on the unpaid stipulated penalties as follows: (a) if Respondents have timely invoked dispute resolution such that the obligation to pay stipulated penalties has been stayed pending the outcome of dispute resolution, Interest shall accrue from the date stipulated penalties are due pursuant to Paragraph 77 until the date of payment; and (b) if Respondents fail to timely invoke dispute resolution, Interest shall accrue from the date of demand under Paragraph 79 until the date of payment. If Respondents fail to pay stipulated penalties and Interest when due, the United States may institute proceedings to collect the penalties and Interest.

81. The payment of penalties and Interest, if any, shall not alter in any way Respondents' obligation to complete performance of the Work required under this Settlement.

82. Nothing in this Settlement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondents' violation of this Settlement or of the statutes and regulations upon which it is based, including penalties pursuant to Section 122(*l*) of CERCLA, 42 U.S.C. § 9622(*l*), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), provided, however, that EPA shall not seek civil penalties pursuant Section 122(*l*) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Settlement, except in the case of willful violation of this Settlement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 87 (Work Takeover).

83. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement.

XX. COVENANTS BY EPA

84. In consideration of the obligations set forth in this Settlement, except as provided in Section XXI (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 Future 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 this Settlement. These

covenants extend only to Respondents and their successors and do not extend to any other person.

XXI. RESERVATIONS OF RIGHTS BY EPA

85. Except as specifically provided in this Settlement, nothing in this Settlement shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing in this Settlement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law.

86. The covenant not to sue set forth in Section XX (Covenants by EPA) above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement is without prejudice to, all rights against Respondents with respect to all other matters, including:

a. liability for failure by Respondents to meet a requirement of this Settlement;

b. liability for costs not included within the definition of Future Response Costs;

c. liability for performance of response action other than the Work;

d. criminal liability;

e. liability for violations of federal, Commonwealth, or state law that occur during or after implementation of the Work;

f. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

g. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and

h. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site not paid as Future Response Costs under this Settlement.

87. **Work Takeover**

a. In the event EPA determines that Respondents: (1) have ceased implementation of any portion of the Work; (2) are seriously or repeatedly deficient or late in

their performance of the Work; or (3) are implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Work Takeover Notice") to Respondents. Any Work Takeover Notice issued by EPA (which writing may be electronic) will specify the grounds upon which such notice was issued and will provide Respondents a period of thirty (30) days within which to remedy the circumstances giving rise to EPA's issuance of such notice.

b. If, after expiration of the thirty-day notice period specified in Paragraph 87.a, Respondents have not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portion(s) of the Work as EPA deems necessary ("Work Takeover"). EPA will notify Respondents in writing (which writing may be electronic) if EPA determines that implementation of a Work Takeover is warranted under this Paragraph 87.b. Funding of Work Takeover costs is addressed under Paragraph 112 (Access to Financial Assurance).

c. Respondents may invoke the procedures set forth in Section XVII (Dispute Resolution) to dispute EPA's implementation of a Work Takeover under Paragraph 87.b. However, notwithstanding Respondents' invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion commence and continue a Work Takeover under Paragraph 87.b until the earlier of (1) the date that Respondents remedy, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, or (2) the date that a written decision terminating such Work Takeover is rendered in accordance with Paragraph 66 (Formal Dispute Resolution).

d. Notwithstanding any other provision of this Settlement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXII. COVENANTS BY RESPONDENTS

88. Subject to Paragraph 94, 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 the Work, Future Response Costs, or this Settlement, including:

a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund through 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 claims under Sections 107 and 113 of CERCLA, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or Commonwealth or state law regarding the Work, Future Response Costs, and this Settlement; or

c. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Commonwealth of Puerto Rico Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law.

89. Except as provided in Paragraph 92 (Waiver of Claims by Respondents) 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 the reservations set forth in Section XXI (Reservations of Rights by EPA), other than in Paragraph 86.a (liability for failure to meet a requirement of the Settlement), 86.d (criminal liability), or 86.e (liability for violations of federal or state law), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

90. Nothing in this Agreement 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).

91. Respondents reserve, and this Settlement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of Respondents' deliverables or activities.

92. **Waiver of Claims by Respondents**

a. Respondents agree to waive all claims or causes of action and not to assert any claims (including claims or causes of action under Sections 107(a) and 113 of CERCLA) that they may have as follows:

(1) **De Micromis Waiver**. For all matters relating to the Site against any person where the person's liability to Respondents with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials;

(2) **MSW Waiver**. For all matters relating to the Site against any person where the person's liability to Respondents with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of municipal solid waste ("MSW") at the Site, if the volume of MSW disposed, treated, or transported by such person to the Site did not exceed 0.2 percent of the total volume of waste at the Site; and

(3) ***De Minimis*/Ability to Pay Waiver**. For response costs relating to the Site against any person that has entered or in the future enters into a final Section 122(g) *de minimis* settlement, 42 U.S.C. § 9622(g), or a final settlement based on limited ability to pay, with EPA with respect to the Site.

b. **Exceptions to Waivers**

(1) The waivers under this Paragraph 92 shall not apply with respect to any defense, claim, or cause of action that a Respondent may have against any person otherwise covered by such waivers if such person asserts a claim or cause of action relating to the Site against such Respondent.

(2) The waiver under Paragraph 92.a(1) (De Micromis Waiver) shall not apply to any claim or cause of action against any person otherwise covered by such waiver if EPA determines that: (i) the materials containing hazardous substances sent to the Site by such person contributed significantly or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration at the Site; or (ii) such person has failed to comply with any information request or administrative subpoena issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) or 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6927, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site; or if (iii) such person has been convicted of a criminal violation for the conduct to which the waiver would apply and that conviction has not been vitiated on appeal or otherwise.

93. The waiver under Paragraph 92.a(2) (MSW Waiver) shall not apply to any claim or cause of action against any person otherwise covered by such waiver if EPA determines that: (i) the materials containing hazardous substances contributed to the Site by such person contributed significantly or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration at the Site; or (ii) such person has failed to comply with any information request or administrative subpoena issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) or 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6927, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site.

94. Respondents reserve, and this Settlement is without prejudice to, claims that Respondents have or may have against the United States brought pursuant to Section 113(f) of CERCLA, 42 U.S.C. § 9613(f), relating to the Work or Future Response Costs.

XXIII. OTHER CLAIMS

95. By issuance of this Settlement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents. The United States or EPA shall not be deemed a party to any contract entered into by

Respondents or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement.

96. Except as expressly provided in Paragraph 92 (Waiver of Claims by Respondents) and Section XX (Covenants by EPA), nothing in this Settlement constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Settlement for any liability such person may have under CERCLA, other statutes, or common law, including any claims of the United States for costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

97. No action or decision by EPA pursuant to this Settlement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXIV. EFFECT OF SETTLEMENT/CONTRIBUTION

98. Except as provided in Paragraph 92 (Waiver of Claims by Respondents), nothing in this Settlement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement. Except as provided in Section XXII (Covenants by Respondents), each of the Parties expressly reserves any and all rights (including pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which 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 this Settlement 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).

99. The Parties agree that this Settlement constitutes an administrative settlement pursuant to which each Respondent 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 this Settlement. The "matters addressed" in this Settlement are the Work and Future Response Costs.

100. The Parties further agree that this Settlement constitutes an administrative settlement pursuant to which each Respondent 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).

101. Each Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement, notify EPA in writing no later than sixty (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, notify EPA in writing within ten (10) days after service of the complaint or claim upon it. In addition, each Respondent shall notify EPA within ten (10) days after service or receipt of any motion for summary judgment and

within ten (10) days after receipt of any order from a court setting a case for trial, for matters related to this Settlement.

102. 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 XX (Covenants By EPA).

XXV. INDEMNIFICATION

103. The United States does not assume any liability by entering into this Settlement 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, 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 Settlement. Further, Respondents agree to pay the United States all costs it incurs, including 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 Settlement. 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 Settlement. Neither Respondents nor any such contractor shall be considered an agent of the United States.

104. 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.

105. 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 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 claims on account of construction delays.

XXVI. INSURANCE

106. No later than thirty (30) days before commencing any on-site Work, Respondents shall secure, and shall maintain until the first anniversary after issuance of Notice of Completion of Work pursuant to Section XXIX (Notice of Completion of Work), commercial general liability insurance with limits of liability of $1 million per occurrence, automobile liability insurance with limits of liability of $1 million per accident, and umbrella liability insurance with limits of liability of $5 million in excess of the required commercial general liability and automobile liability limits, naming EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondents pursuant to this Settlement. In addition, for the duration of the Settlement, Respondents shall provide EPA with certificates of such insurance. Upon request from EPA, Respondents shall provide EPA with a copy of each insurance policy. In addition, for the duration of the Settlement, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing Work on behalf of Respondents in furtherance of this Settlement. If Respondents demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in a lesser amount, then, with respect to the contractor or subcontractor, Respondents need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Respondents shall ensure that all submittals to EPA under this Paragraph identify the Site, Peñuelas, Puerto Rico and the EPA docket number for this action.

XXVII. FINANCIAL ASSURANCE

107. In order to ensure completion of the Work, Respondents shall secure financial assurance, initially in the amount of $4,500,000.00 ("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 109; 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 109.

108. Respondents shall, within thirty (30) days of the Effective Date, submit to EPA for approval the form of Respondents' initial financial assurance. Within thirty (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 Chief, Resource Management/Cost Recovery Section, Superfund and Emergency Management Division, U.S. EPA Region 2, 290 Broadway, 18th Floor, New York, NY 10007-1866. Respondents shall send copies by email to Chief, Resource Management/Cost Recovery Section, currently at Keating.Robert@epa.gov, and additional copies by email to EPA's Project Manager and Site Attorney, currently at: Luna.Zolymar@epa.gov; and Leshak.Andrea@epa.gov.

109. Respondents seeking to provide financial assurance by means of a demonstration or guarantee under Paragraph 107.e or 107.f, must, within thirty (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/.

110. Respondents providing financial assurance by means of a demonstration or guarantee under Paragraph 107.e or 107.f must also:

a. Annually resubmit the documents described in Paragraph 109.b within ninety (90) days after the close of the affected Respondent's or guarantor's fiscal year;

b. Notify EPA within thirty (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 thirty (30) days of EPA's request, reports of the financial condition of the affected Respondent or guarantor in addition to those specified in Paragraph 109.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.

111. 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 seven (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 thirty (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 sixty (60) days. Respondents shall follow the procedures of Paragraph 113 (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 Settlement.

112. **Access to Financial Assurance**

a. If EPA issues a notice of implementation of a Work Takeover under Paragraph 87.b, then, in accordance with any applicable financial assurance mechanism, EPA is entitled to the following: (1) the performance of the Work; and/or (2) require that any funds guaranteed be paid in accordance with Paragraph 112.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 thirty (30) days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation in accordance with Paragraph 112.d.

c. If, upon issuance of a notice of implementation of a Work Takeover under Paragraph 87.b, either: (1) EPA is unable for any reason to promptly secure the resources guaranteed under any applicable financial assurance mechanism, whether in cash or in kind, to continue and complete the Work; or (2) the financial assurance is a demonstration or guarantee under Paragraphs 107.e or 107.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 thirty (30) days of such demand, pay the amount demanded as directed by EPA.

d. Any amounts required to be paid under this Paragraph 112 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 may deposit the payment into the EPA Hazardous Substance Superfund or into the PROTECO 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 112 must be reimbursed as Future Response Costs under Section XVI (Payment of Response Costs).

113. **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 108, 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 XVII (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 this Settlement or in any other forum. Within thirty (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 108.

114. **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 Notice of Completion of Work under Section XXIX (Notice of Completion of Work); (b) in accordance with EPA's approval of such release, cancellation, or discontinuation; (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 XVII (Dispute Resolution); or (d) thirty days after the issuance of the Record of Decision.

XXVIII. MODIFICATION

115. EPA's Project Manager may modify any plan or schedule or the SOW in writing or by oral direction, consistent with the NCP and this Settlement. Any such oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of EPA's Project Manager's oral direction. Any other requirements of this Settlement may be modified in writing by mutual agreement of the parties.

116. If Respondents seek permission to deviate from any approved work plan or schedule or the SOW, Respondents' Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondents may not proceed with the requested deviation until receiving oral or written approval from EPA's Project Manager pursuant to Paragraph 115.

117. No informal advice, guidance, suggestion, or comment by EPA's Project Manager or other EPA representatives regarding any deliverable submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Settlement, or to comply with all requirements of this Settlement, unless it is formally modified.

XXIX. NOTICE OF COMPLETION OF WORK

118. When EPA determines that all Work has been fully performed in accordance with this Settlement, with the exception of any continuing obligations required by this Settlement, including payment of Future Response Costs and Record Retention, EPA will provide written notice to Respondents. If EPA determines that any 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 RI/FS Work Plan, if appropriate, in order to correct such deficiencies, in accordance with Paragraph 30 (Modification of the RI/FS Work Plan). Respondents shall implement the modified and approved RI/FS Work Plan and shall submit a modified draft RI Report and/or FS Report in accordance with the EPA notice. Failure by Respondents to implement the approved modified RI/FS Work Plan shall be a violation of this Settlement.

XXX. INTEGRATION/APPENDICES

119. This Settlement and its appendices constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement. The parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement. The following appendices are attached to and incorporated into this Settlement:

a. "Appendix A" is the complete list of Respondents.

b. "Appendix B" is the description and/or map of the Site.

c. "Appendix C" is the SOW.

XXXI. ADMINISTRATIVE RECORD

120. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondents shall submit to EPA documents developed during the course of the RI/FS upon which selection of the remedial action may be based. Upon request of EPA, Respondents shall provide EPA with copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports, and other

reports in their possession. Upon request of EPA, Respondents shall additionally submit all communications between Respondents and Commonwealth, state, local, or other federal authorities concerning selection of the remedial action. Respondents shall only be responsible for providing to EPA any previous studies conducted under Commonwealth, state, local, or other federal authorities that may relate to selection of the remedial action to the extent that they possess them.

XXXII. EFFECTIVE DATE

121. This Settlement shall be effective five (5) days after the Settlement is signed by or on behalf of the Director of the Superfund and Emergency Management Division of EPA Region 2 and a fully executed copy is transmitted to Respondents' designated counsel, to be designated by Respondents.

122. This Settlement may be amended. The Parties acknowledge that within fifteen (15) days after the Effective Date of this Settlement the Parties anticipate the possibility of adding the following additional Parties who have yet to consent to become Respondents: Abbott Health Products, Inc.; Abbott Laboratories; Olay, LLC; and The Procter & Gamble Company. The Parties further acknowledge and agree that any such amendment to this Settlement within the fifteen (15) day period that solely adds additional Parties as additional Respondents shall require only the signature of (i) such additional Respondent(s); (ii) a duly designated representative of Respondents; and (iii) EPA. This Settlement may be otherwise amended under other circumstances by mutual agreement of EPA and Respondents. All amendments shall be in writing and shall be effective when signed by EPA. EPA Project Managers do not have the authority to sign amendments to the Settlement.

IT IS SO AGREED AND ORDERED:

U.S. ENVIRONMENTAL PROTECTION AGENCY:

Evangelista, Pat

Digitally signed by Evangelista, Pat
Date: 2020.09.30 20:22:44 -04'00'

_____
Dated

_____
Pat Evangelista, Director
Superfund and Emergency Management Division, Region 2

Signature Page for Settlement Regarding PROTECO Superfund Site

FOR: BASF Agrochemical Products, B.V.

Dated: 9/30/20

Ricardo Morales
General Manager
BASF Agrochemical Products B.V., Puerto Rico Branch d/b/a BASF Agricultural Products de Puerto Rico
State Road #2
P.O. Box 243
Manati, PR 00674

Signature Page for Settlement Regarding PROTECO Superfund Site

FOR Block Drug Company, Inc.:

Sep. 30, 2020
Dated

Justin T. Huang
Vice President & Secretary
5 Crescent Drive, NY0300, Philadelphia, PA 19112

Signature Page for Settlement Regarding PROTECO Superfund Site

FOR Checkpoint Caribbean Ltd.:

9/28/2020
Dated

Mark A. McClendon
Vice President & General Counsel
Checkpoint Caribbean Ltd.
17700 Foltz Parkway
Strongsville, OH. 44149

Signature Page for Settlement Regarding PROTECO Superfund Site

FOR: EMD Millipore Corporation

September 28, 2020

Christos Ross
President and CEO
EMD Millipore Corporation
400 Summit Drive
Burlington, MA 01803

Signature Page for Settlement Regarding PROTECO Superfund Site

FOR General Electric Company, for itself and on behalf of Caribe GE International of Puerto Rico, Inc., GE Industrial of PR LLC, and GEA Caribbean Export LLC:

9/30/20
Dated

Andrew J. Thomas
Associate General Counsel
GE Global Operations
c/o Angelica Todd
1 River Road
Bldg. 5, 7th Floor West
Schenectady, NY 12345-6000

FOR: Henkel Puerto Rico, Inc.

9/30/2020
Dated

[Name] Deborah Vennos
[Title] Assistant General Counsel
[Company] Henkel Corporation
[Address] 1 Henkel Way; Rocky Hill, CT 06067

9/30/2020
Dated

[Name] Robert McNamee
[Title] Vice President
[Company] Henkel Corporation
[Address] 1 Henkel Way; Rocky Hill, CT 06067

Approved as to Form
Thomas M. Lee Page
Assistant Attorney

Signature Page for Settlement Regarding PROTECO Superfund Site

FOR HP INC. **:**
HP Inc.

9/30/2020
Dated

Christopher Dirscherl
Interim Head of Americas EHS and Remediation
HP Inc.
1501 Page Mill Road, M/S 1400
Palo Alto, CA 94304

Signature Page for Settlement Regarding PROTECO Superfund Site

FOR PUERTO RICO ELECTRIC POWER AUTHORITY
[Print name of Respondent]

Sept. 30-2020
Dated

[Name] Efran Paredes Maisonet
[Title] Interim Executive Director
[Company] Puerto Rico Electric Power Authority
[Address] PO Box 364267
San Juan, Puerto Rico 00936-4267

Signature Page for Settlement Regarding PROTECO Superfund Site

FOR: Roche Products Inc.

Sep 29, 2020
Dated

Edna Jiménez
President and General Manager
Roche Products Inc.

C/O Julia Miller
Genentech, Inc., A Member of the Roche Group
Legal Department
1 DNA Way (MS-49)
South San Francisco, CA 94080

APPENDIX A

List of Respondents

BASF Agrochemical Products, B.V.

Block Drug Company, Inc.

Checkpoint Caribbean Ltd.

EMD Millipore Corporation

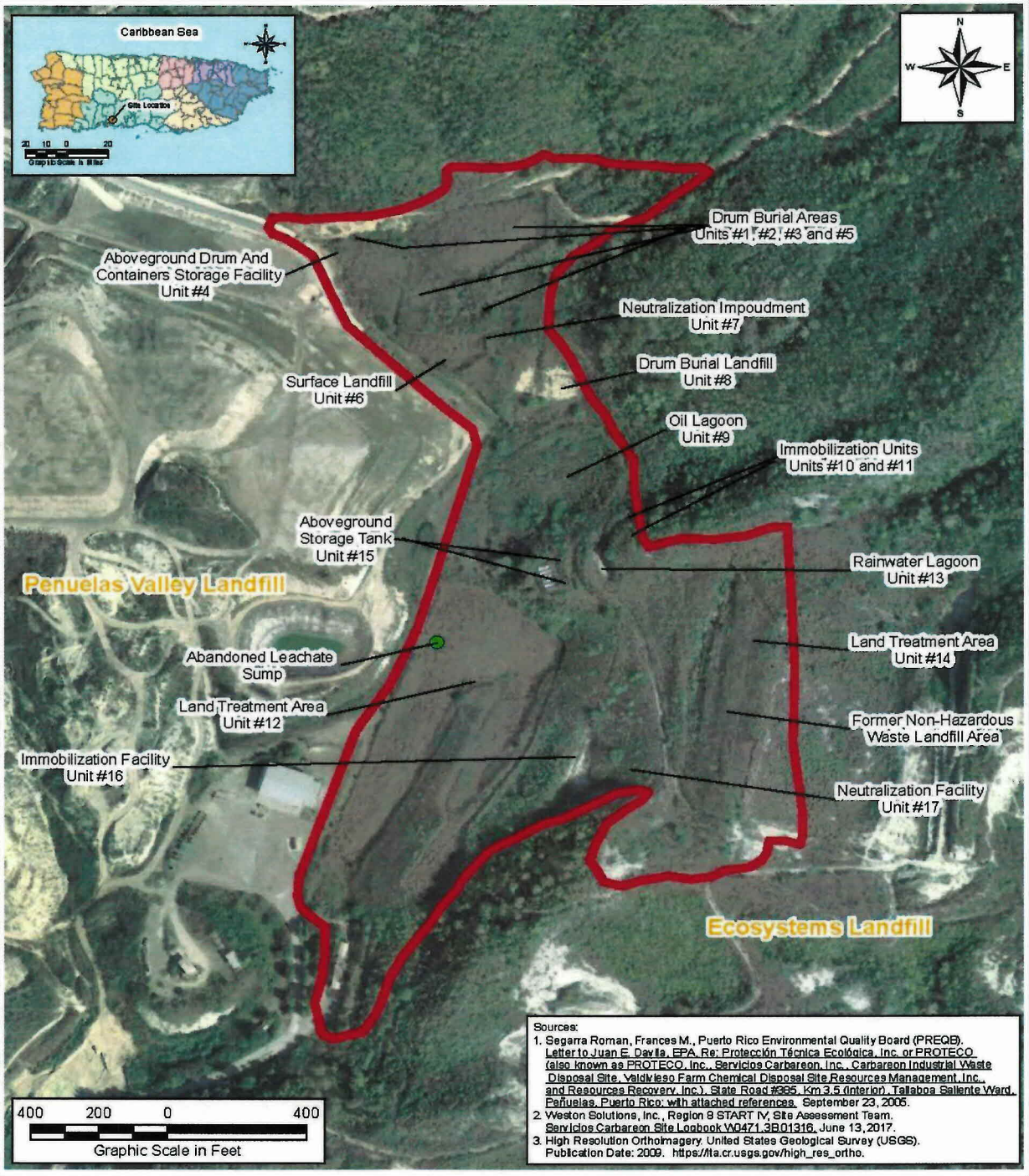
General Electric Company (for itself and on behalf of Caribe GE International of Puerto Rico, Inc., GE Industrial of PR LLC, and GEA Caribbean Export LLC)

Henkel Puerto Rico, Inc.

HP Inc.

Puerto Rico Electric Power Authority

Roche Products, Inc.



Sources:
1. Segarra Roman, Frances M., Puerto Rico Environmental Quality Board (PREQB). Letter to Juan E. Davila, EPA, Re: Protección Técnica Ecológica, Inc. or PROTECO (also known as PROTECO, Inc., Servicios Carbareon, Inc., Carbareon Industrial Waste Disposal Site, Valdivieso Farm Chemical Disposal Site,Resources Management, Inc., and Resources Recovery, Inc.), State Road #385, Km 3.5 (interior), Tallaboa Saliente Ward, Peñuelas, Puerto Rico; with attached references. September 23, 2005.
2. Weston Solutions, Inc., Region 9 START IV, Site Assessment Team. Servicios Carbareon Site Logbook W0471.3B01316, June 13, 2017.
3. High Resolution Orthoimagery. United States Geological Survey (USGS). Publication Date: 2009. https://tta.cr.usgs.gov/high_res_ortho.

LEGEND:
- Site Reference Point
- Approximate Facility Boundary

TITLE:
Site Map
PROTECO
Peñuelas, Puerto Rico

PROJECT: 0004/1707-02

CLIENT NAME: EPA

WESTON

DATE: October 2017

FIGURE#: 2

P:\SATX\2017_PR_Sites\Servicios Carbareon (0471)\MXD\020811_Servicios Carbareon_Site_Map_HRS.mxd

APPENDIX C
STATEMENT OF WORK FOR
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
PROTECCIÓN TÉCNICA ECOLÓGICA (PROTECO) SUPERFUND SITE
Tallaboa Ward, Peñuelas, Puerto Rico

I. INTRODUCTION

A. The purpose of this Remedial Investigation/Feasibility study ("RI/FS") is to investigate the nature and extent of contamination at the PROTECO Site and develop and evaluate potential remedial alternatives as provided in this Statement of Work ("SOW"). The RI and FS are interactive and may be conducted concurrently so that the data collected in the RI influences the development of remedial alternatives in the FS, which in turn affects the data needs and the scope of treatability studies.

B. This SOW has been developed for the PROTECO Site, which operated as a Treatment, Storage and Disposal ("TSD") facility of hazardous waste from 1975 through 1999. From 1997 to 1999, PROTECO closed several Solid Waste Management Units ("SWMUs"); some of these were closed with hazardous and non-hazardous waste in-place and others were excavated and disposed of on-site in a Corrective Action Management Unit ("CAMU"). Limited post-closure care maintenance, excluding groundwater monitoring, was conducted at the facility until approximately 2001. Analytical results for groundwater monitoring wells at the Site from sampling events conducted in 1984, 1988 and 1994, indicate the presence of elevated concentrations of mercury and VOCs, including: 1,1-dichloroethane (1,1-DCA); 1,2-dichloroethane (1,2-DCA); 1,1–dichloroethylene (1,1-DCE); trans-1,2-dichloroethylene (trans-1,2-DCE); tetrachloroethylene (PCE); 1,1,1-trichloroethane (1,1,1-TCA); trichloroethylene (TCE). Sampling of on-site monitoring wells and hydrogeological studies indicate that VOC contamination has migrated to the aquifer beneath the Site. Recent EPA site visits indicate that the Site has been abandoned, security fencing has been compromised, and warning signs are not visible. In addition, overgrown vegetation and cattle feeding operations have been observed at the Site.

C. Respondents shall conduct the RI/FS and shall produce RI and FS reports that are in accordance with this SOW, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (U.S. EPA, OSWER Directive # 9355.3-01, October 1988 or subsequently issued guidance), and any other guidance that EPA uses in conducting a RI/FS, as well as any additional requirements in the Administrative Settlement Agreement and Order on Consent ("Settlement Agreement"). The RI/FS Guidance describes the report format and the required report content. Respondents shall furnish all necessary personnel, materials, and services needed for, or incidental to, the performance of the RI/FS, except as otherwise specified in the Settlement Agreement.

D. The RI/FS shall be conducted in a manner that minimizes environmental impacts in accordance with EPA Region 2 Clean and Green Policy (available at https://www.epa.gov/greenercleanups/epa-region-2-clean-and-green-policy) to the extent consistent with the National Contingency Plan (NCP), 40 C.F.R. Part 300. Respondents

shall follow Guidance on Systematic Planning using the Data Quality Objectives Process (QA/G-4) EPA/240/B-06/001 February 2006, in planning and conducting the RI/FS.

E. At the completion of the RI/FS, EPA will be responsible for the selection of the remedy for the Site and will document the remedy selection in a Record of Decision ("ROD"). The remedial action alternative selected by EPA will meet the cleanup standards specified in CERCLA Section 121, 42 U.S.C. § 9621. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements of other laws ("ARARs"), will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS report, as adopted by EPA, and the baseline risk assessment will, with the administrative record, form the basis for the selection of the remedy for the Site and will provide the information necessary to support the development of the ROD.

F. As specified in CERCLA Section 104(a)(1), 42 U.S.C. § 9604(a)(1), EPA will provide oversight of Respondents' activities throughout the RI/FS. Respondents shall support EPA's initiation and conduct of activities related to the implementation of oversight activities.

G. If there is a conflict between this SOW and the Settlement Agreement, the provisions of the Settlement Agreement govern.

H. The specific RI/FS activities to be conducted at the PROTECO Site are segregated into thirteen (13) separate tasks, described in the following sections:

II. Task 1 – RI/FS Scoping and Planning
III. Task 2 – RI/FS Work Plan
IV. Task 3 – Community Relations
V. Task 4 – Site Characterization
VI. Task 5 – RI/FS Work Plan Addendum
VII. Task 6 – Implementation of RI/FS Work Plan Addendum
VIII. Task 7 – Identification of Candidate Technologies
IX. Task 8 – Treatability Studies
X. Task 9 – Baseline Risk Assessment
XI. Task 10 – Remedial Investigation Report
XII. Task 11 – Feasibility Study: Development and Screening of Remedial Alternatives
XIII. Task 12 – Monthly Progress Report
XIV. Task 13 – Feasibility Study Report

I. The Respondents shall follow the attached schedule, SOW Deliverables (Attachment I), throughout the submission of the RI/FS. Deviations and time extensions from the SOW Deliverables schedule shall be requested in writing, at least fourteen (14) days prior to the

scheduled deadline. EPA will not approve time extensions exceeding a one hundred fifty (150) day period, unless Respondents can factually demonstrate that deliverables are not attainable for reasons beyond their control or Force Majeure provisions as set forth in Section XVIII (Force Majeure) of the Settlement Agreement, apply.

II. TASK 1 –RI/FS SCOPING AND PLANNING

A. Within sixty (60) days of the effective date of the Settlement Agreement, the Respondents shall conduct a site reconnaissance. In addition, Respondents shall prepare and submit to EPA for approval, a RI/FS Scoping and Planning Technical Memorandum ("SPTM') within sixty (60) days of completion of the site reconnaissance. The SPTM shall include, at a minimum, the following information.

1. Site Location, Project Base Mapping and Database (e.g., topographic maps, aerial photographs, data collected as part of the NPL listing process)

   A Site location map(s) identifying water features, stormwater and/or runoff patterns, SWMUs, CAMU, buildings, utilities, paved areas, easements, rights-of-way, and other features on the site and within 2 miles of the Site boundary, as well as runoff patterns within a 3-mile radius of the Site. In addition, include a topographic survey of the site conducted by a Puerto Rico licensed land surveyor to determine horizontal distances of appropriate physical features and elevations. Develop a geographic information system layer or dataset, including but not limited to property ownership, results of geomorphology survey, wetlands, water features, locations of monitoring wells, irrigation wells, drinking water wells, sampling locations, and any other significant activities. The intent is not to perform a property boundary survey, but to confirm boundaries so that subsequent remedial investigations and/or remedial measures will not carry over on to neighboring properties without appropriate authorization.

2. Preliminary Conceptual Site Model

   A summary of the actual and potential onsite and offsite health and environmental effects posed by the existing contamination at the Site. Emphasis should be on providing a preliminary understanding of the sources of contamination, potential release mechanisms, potential routes of migration, and potential human and environmental receptors.

3. History of Regulatory and Response Actions

   A summary of any previous response actions conducted by local, State, Federal, or private parties. Site reference documents and their locations should be identified.

4. Preliminary Site Boundary and Site Security

A preliminary Site boundary to define the initial area(s) of the remedial investigation. This preliminary boundary may also be used to define an area of access control, identify site security measures such as physical barriers and warning signs, and to restrict access to livestock, trespassers and/or squatters.

5. Evaluate Existing Data

   All existing Site data shall be thoroughly compiled and reviewed. Specifically, this shall include presently available data relating to the type and quantities of hazardous substances and closed SWMUs at the Site. This shall also include results from any previous sampling events that may have been conducted. This information shall be utilized in determining additional data needed to characterize the Site and to better define potential ARARs.

6. The Proposed Scope of the Project

   Identify contaminants of potential concern ("COPCs")[1] and the specific investigative and analytical activities that shall be required, including but not limited to the potential locations of the monitoring wells.

7. Preliminary Remedial Action Objectives

   Identify preliminary remedial action objectives as well as a preliminary list of general response actions and associated technologies. The range of potential general response actions should encompass, where appropriate, those in which treatment significantly reduces the toxicity, mobility, or volume of the waste; those that involve containment with little or no treatment; and a no-action alternative.

8. Potential ARARs

   Provide a summary of the potential ARARs associated with the location and contaminants of the Site and the potential response actions being contemplated.

B. Technical Meeting-1 – RI/FS Work Plan and Site Characterization Summary Report Pre-Submittal: Respondents shall meet with EPA thirty (30) days after submitting the SPTM, to discuss preliminary findings, potential technical concerns, and/or the identification of best management practices to be used at the Site.

III. TASK 2 - RI/FS WORK PLAN

[1] Preliminary COPCs must be based on the Hazard Ranking System Evaluation report ("HRS Report") prepared by EPA for the PROTECO site and/or EPA approved records. Once new data is collected, selection of COPCs should be updated pursuant to Task 9, Section X of SOW.

A. Within ninety (90) days after Respondents receive written notification of EPA's approval of the SPTM, Respondents shall prepare and submit for EPA's review and approval a RI/FS Work Plan for conducting field investigations at the Site. The Work Plan shall also include and take into consideration the information that was compiled and the outcomes of the evaluations that were conducted as part of the site reconnaissance and SPTM. EPA will approve the RI/FS Work Plan or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

B. The Work Plan shall include a comprehensive description of the work to be performed, including the methodologies to be utilized, Data Quality Objectives ("DQOs"), as well as a corresponding schedule for completion. Specifically, the Work Plan shall present an evaluation of Site characteristics, a statement of the problem(s) and potential problem(s) posed by the Site and plans to achieve the following objectives of the RI/FS: (1) define the sources of contamination and the condition of the existing solid waste management units; and (2) describe the nature and extent of contamination arising from Site releases.

C. The Work Plan shall include a Field Sampling Plan ("FSP"), a Quality Assurance Project Plan ("QAPP"), and a Health and Safety Plan ("HSP"), although each plan may be delivered under separate cover.

D. In addition, the RI/FS Work Plan shall at least include the following:

1. *Standard Operating Procedures* – to evaluate the integrity of the final covers that were installed over the SWMUs located at the Site. These procedures shall identify measures to prevent field investigation activities (i.e., Site clearing, soil borings, monitoring well installation) from causing additional releases of hazardous substances.

2. *Hydrologic and Hydraulic Study* – to be used to develop a stormwater management program and identify potential pathways-receptors.

3. *Hydrogeologic Investigation* – to fulfill data gaps, if any, and update the Site's hydrogeologic description.

4. *Groundwater Characterization* – strategy to address the impacts related to the releases of hazardous substances to groundwater and the installation of shallow and deep groundwater monitoring wells (MWs) at water bearing zones, upgradient and downgradient from the SWMUs and CAMU. Refer to HRS Report Reference 29, Hazardous Waste Ground-Water Task Force, Evaluation of Proteccion Técnica Ecológica report, for information related to the previous locations of MWs. The COPCs shall be identified in the SPTM when designing the program.

5. *Groundwater Monitoring* – to detect whether groundwater migrating offsite contain COPCs at levels that pose unacceptable risk (using human health and ecological risk assessment processes).

6. *Interim Measures* – to address imminent threats to human health and the environment that may be identified during the course of the RI/FS.

E. The Respondents shall refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required work plan. The need for additional data and analyses may be identified throughout the RI/FS process. The Respondents shall submit a technical memorandum documenting the need for additional data and identifying the DQOs whenever such requirements are identified. The Respondents are responsible for providing additional data and analysis needs identified by EPA consistent with the general scope and the objectives of the RI/FS. It is the intention of EPA and Respondents that additional activities shall be designed and conducted, to the extent technically feasible, in a manner that will prevent and/or minimize releases of hazardous substances from the Site and from the corrective measures implemented as part of the RCRA closure conducted pursuant to an EPA-approved closure plan.

F. In addition, the Work Plan must include the rationale for performing the required activities, including but not limited to the process for identifying Federal and state ARARs (chemical-specific, location-specific, and action-specific).

G. The Work Plan should be developed in conjunction with the FSP, the QAPP, and the HSP.

H. All sampling and analyses performed pursuant to the Settlement Agreement shall conform to EPA policy and guidance regarding sampling, quality assurance, quality control, data validation, and chain of custody procedures. Respondents shall incorporate these procedures into the QAPP in accordance with the Uniform Federal Policy for Implementing Quality Systems ("UFP-QS").

I. The QAPP shall demonstrate that each laboratory used is qualified to conduct the proposed work. This includes the use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP.

J. The QAPP shall be prepared consistent with the UFP-QAPP, Parts 1, 2 and 3, EPA-505-B-04-900A, B and C, March 2005, "Uniform Federal Policy for Quality Assurance Project Plans – Optimized UFP-QAPP Worksheets," Part 2A, Revision 1, (March 2012), and other guidance documents referenced in the aforementioned guidance documents and in accordance with Section X (Quality, Assurance, Sampling, and Data Analysis) of the Settlement Agreement.

K. The QAPP and FSP shall provide for collection of data sufficient to meet the objectives of the RI/FS and shall specifically include the following items:

1. An explanation of the way(s) the sampling, analysis, testing, and monitoring will produce data for the RI/FS;

2. A detailed description of the sampling, analysis, and testing to be performed, including sampling methods, analytical and testing methods, sampling locations and frequency of sampling to be implemented to sample and analyze the contaminants found in soil, groundwater, surface water, and sediment as necessary;

3. A description of how sampling data and a Site base map will be submitted in a manner that is consistent with the Region 2 Electronic Data Deliverable ("EDD") format. Region 2's "Comprehensive Electronic Data Deliverable Specification Manual 5.0" (February 2018) explains the systematic implementation of EDD within EPA Region 2 and provides detailed instructions of data preparation and identification of data fields required for data submissions. Additional Region 2 EDD guidance and requirements documents, including the "Electronic Data Deliverables Valid Values Reference Manual" and tables, the "Basic Manual for Historic Electronic Data," the "Standalone EQuIS Data Processor User Guide," and EDD templates, can be found at https://www.epa.gov/superfund/region-2-superfund-electronic-data-submission. Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes; and

4. A map depicting sampling locations (to the extent that these can be defined when the QAPP and FSP are prepared).

L. In order to provide quality assurance and maintain quality control with respect to all samples to be collected, Respondents shall ensure the following:

1. Quality assurance and chain of custody procedures shall be performed in accordance with standard EPA protocol and guidance identified in this SOW, and the guidance provided in the EPA Region 2 Quality Assurance Homepage (https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures), and the guidelines set forth in the Settlement Agreement.

2. Once laboratories have been chosen, each laboratory's quality assurance plan ("LQAP") shall be submitted for review by EPA. In addition, the laboratory or Respondents on behalf of the laboratory shall submit to EPA current copies (within the past twelve (12) months) of laboratory certification provided from

either a state or federal agency which conducts certification. The certification shall be applicable to the matrices and analyses that are to be conducted. If the laboratory does not participate in the Contract Laboratory Program ("CLP"), it must submit to EPA the results of performance evaluation ("PE") samples for the constituents of concern from within the past twelve (12) months or it must complete PEs for the matrices and analyses to be conducted and the results must be submitted with the LQAP.

3. The laboratories utilized for analyses of samples must perform all analyses according to approved EPA methods or, if requested by Respondents and approved by EPA, an alternate method.

4. Unless indicated otherwise in the approved QAPP, upon receipt from the laboratory, all data used quantitatively in the risk assessment shall be validated.

5. The validation package (checklist, report and Form I's containing the final data) submitted to EPA shall be prepared in accordance with the provisions of subparagraph 6 below as part of the RI Report submittal.

6. Respondents shall assure that all analytical data that are validated as required by the QAPP are validated according to the latest version of EPA Region 2 data validation Standard Operating Procedures. Region 2 Standard Operating Procedures are available at: http://www.epa.gov/region02/qa/documents.htm.

7. Unless indicated otherwise in the QAPP, Respondents shall require deliverables equivalent to CLP data packages from the laboratory for analytical data. Upon EPA's request, Respondents shall submit to EPA the full documentation (including raw data) for this analytical data. EPA reserves the right to perform an independent data validation, data validation check, or qualification check on generated data.

8. Respondents shall insert a provision in their contract(s) with the laboratory utilized for analyses of samples that requires granting access to EPA personnel and authorized representatives of the EPA for the purpose of ensuring the accuracy of laboratory results related to the Site.

M. The Work Plan shall also include the following:

1. Data Management Procedures

   a. *Document Field Activities*. Information gathered during characterization of the Site shall be consistently documented and adequately recorded by Respondents in field logs and laboratory reports. Field logs or dedicated field log-books must be utilized to document observations, measurements, and

significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

b. *Maintain Sample Management and Tracking*. Respondents shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the risk assessment and evaluation of remedial alternatives. Analytical results developed under the Work Plan must be accompanied by, or cross-referenced to, a corresponding QA/QC report. In addition, Respondents shall safeguard chain of custody forms and other project records to prevent loss, damage, or alteration of project documentation.

N. The HSP shall conform to 29 CFR § 1910.120, "OSHA Hazardous Waste Operations Standards," and the EPA guidance document, "Standard Operating Safety Guidelines" (OSWER, 1988). EPA does not approve HSPs.

Respondents shall conduct a Stage 1A Cultural Resources Survey ("CRS") to address the requirements of the National Historic Preservation Act (see CERCLA Compliance with Other Laws Manual: Part II: Clean Air Act and Other Environmental Statutes and State Requirements, OSWER Directive 9234.1-02, August 1989. Should EPA determine after a review of the recommendations contained in the Stage 1A CRS that additional cultural resource investigations (Stage 1B CRS, Stage 2 CRS, etc.) will be necessary, Respondents shall submit a detailed CRS Work Plan for EPA approval prior to commencing the additional investigations.

IV. TASK 3 - COMMUNITY RELATIONS

To the extent requested by EPA, Respondents shall provide information relating to the work required hereunder for EPA's use in developing and implementing a Community Involvement Plan. As requested by EPA, Respondents shall participate in the preparation of appropriate information disseminated to the public and participate in public meetings which may be held or sponsored by EPA.

V. TASK 4 - SITE CHARACTERIZATION

A. Respondents shall initiate the activities described herein and submit a Site Characterization Summary Report ("SCSR") for EPA's approval. The overall objective of Site characterization is to describe areas of the Site that may pose a threat to human health or the environment. This shall be accomplished by determining the Site's physiography, geology, and hydrology. Potential surface and subsurface pathways of migration and locations of sources of contamination shall be defined. Respondents shall identify the sources of contamination and characterize the nature, extent, and volume of the sources of contamination, including their physical and chemical

constituents as well as their concentrations at incremental locations relative to background concentrations in the affected media. Potential contaminant degradation processes shall be evaluated. Using this information, contaminant fate and transport shall be estimated. The data shall be discussed and shall be summarized in graphical and tabular form. Relevant physical information and information regarding the fate and transport of chemical constituents shall be summarized.

B. The Respondents shall review the investigative activities that have taken place and describe and display Site data documenting the location and characteristics of surface and subsurface features and contamination at the Site including the affected medium, location, types, physical state, concentration of contaminants and quantity. In addition, the location, dimensions, physical condition and varying concentrations of each contaminant throughout each source and the extent of contaminant migration through each of the affected media shall be documented. The Site characterization summary shall provide EPA with a preliminary reference for developing the risk assessment and evaluating the development and screening of remedial alternatives and the refinement and identification of ARARs.

C. When performing this Task, Respondents shall include the following units and media, unless otherwise required:

    1. CAMU, defined as hazardous waste disposal unit, which was designed and constructed to contain the hazardous waste and contaminated media that was generated as part of the remediation activities that were conducted as part of PROTECO's closure activities.

    2. SWMUs, including non-hazardous and hazardous waste units that were closed with waste in-place.

    3. Groundwater, defined as all groundwater contamination at the Site and any other areas where hazardous substances have migrated.

    4. Soil, defined as all surface and subsurface soils that have been impacted by the releases of hazardous substances.

    5. Water features - Sediment, defined as all surface water and sediment that have been impacted by the releases of hazardous substances.

D. Respondents shall conduct field investigations to define the Site's physical characteristics, sources of contamination, and the nature and extent of contamination at the Site. These activities shall be performed by the Respondents in accordance with the RI/FS Work Plan. At a minimum, the following shall be conducted and included in the SCSR:

1. Implement and Document Field Support Activities

   i. *Site Characteristics*. Respondents shall review existing data and collect additional data on the physical and biological characteristics of the Site and its surrounding areas including the physiography, geology, and hydrology, and specific physical characteristics identified during the RI/FS Scoping and Planning. This information shall be ascertained through a combination of physical measurements, observations, and sampling efforts and shall be utilized to define potential transport pathways and human and ecological receptor populations. In defining the Site's physical characteristics, the Respondents shall also obtain sufficient engineering data (such as pumping characteristics) for the projection of contaminant fate and transport, and development and screening of remedial action alternatives, including information to assess treatment technologies.

   ii. *Define Sources of Contamination.* Respondents shall locate each source of contamination in each media. For each source of contamination located at the Site, the areal extent and depth of contamination shall be determined by sampling at incremental depths on a sampling grid or other appropriate sampling locations or by other sampling means, as defined in the RI/FS Work Plan. The physical characteristics and chemical constituents and their concentrations shall be determined for all such known and discovered sources of contamination. Respondents shall conduct sufficient sampling to define the boundaries of such contaminant sources to the level established in the QAPP and DQOs. Defining the source(s) of contamination shall include analyzing the potential for contaminant release, contaminant mobility and persistence, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

   iii. *Describe the Nature and Extent of Contamination.* During the field investigations, Respondents shall gather information to describe the nature and extent of contamination at the Site. To describe the nature and extent of contamination, Respondents shall utilize the information on the Site's physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated, to what extent they have migrated, and their potential to migrate further. Respondents shall then implement a monitoring program and any other study program identified in RI/FS Work Plan (which includes the QAPP) such that by using analytical techniques to detect and quantify the concentration of contaminants in all media, the amount of contaminant degradation occurring and the migration of contaminants through the various media at the Site can be determined. In addition, Respondents shall gather data for calculations of contaminant fate and transport. This process shall continue until the area and depth of contamination are known to the

level of contamination established in the QAPP and DQOs. The information on the nature, extent and migration potential of contamination shall be used to determine the level of risk. Respondents shall use this information to help to determine aspects of the appropriate remedial action alternatives to be evaluated.

2. Data Analyses

   i. *Evaluate Site Characteristics*. Respondents shall analyze and evaluate the data to: (1) describe Site physical and biological characteristics, (2) describe contaminant source characteristics, (3) determine the nature and extent of contamination, (4) determine the contaminant fate and transport; and as necessary develop Site-specific human health and ecological risk assessments. Results of the Site's physical characteristics, source characteristics, and extent and mobility of contamination analyses shall be utilized in the analysis of contaminant fate and transport. The evaluation shall include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. Models proposed to be used shall be subject to EPA's approval. Analysis of data collected for characterization of the Site shall meet the DQOs developed in the QAPP.

3. Data Management Procedures

   i. *Document Field Activities*. Information gathered during Site characterization shall be consistently documented and adequately recorded by the Respondents in well maintained field logs and laboratory reports. The method(s) of documentation must be specified in the EPA Approved RI/FS Work Plan and QAPP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

   ii. *Maintain Sample Management and Tracking*. Respondents shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. Analytical results developed under the Work Plan shall not be included in any Site

characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, the Respondents shall establish a data security system to safeguard chain-of custody forms and other project records to prevent loss, damage, or alteration of project documentation.

E. The Respondents shall notify EPA at least seven (7) days prior to initiating field work, regarding the planned dates for field activities, including but not limited to field lay out of the sampling grid, excavation, installation of wells, initiating sampling, installation and calibration of equipment, pump tests, ecological field surveys and other field investigation activities. Within seven (7) days after completion of each phase of field activities, Respondent shall so advise EPA in writing or via electronic mail message.

F. Respondents shall provide EPA with validated and unvalidated analytical data within ninety (90) days after each sampling activity. Additionally, if requested by EPA, Respondents shall make all data available to EPA upon receipt from the lab. All data submitted to EPA shall be compiled in a database format or spreadsheet acceptable to EPA and shall show the location, medium and results for each sample.

G. Within thirty (30) days after Respondents' completion of sampling, analysis, and data evaluation to update the preliminary conceptual site model presented in the RI/FS Work Plan, Respondents shall notify EPA and report any concerns and/or issues that may require immediate attention. Preliminary and validated results shall be included in the subsequent Progress Report pursuant to Section VIII (Work to be Performed) of the Settlement Agreement.

VI. TASK 5 – RI/FS WORK PLAN ADDENDUM

A. If determined necessary by EPA, Respondents shall submit a detailed RI/FS Work Plan Addendum for the completion of the RI/FS within ninety (90) days of receipt of EPA's written request. The EPA's comments on the SCSR, if any, shall be used for planning the RI/FS Work Plan Addendum. The RI/FS Work Plan Addendum shall include, among other things, a detailed description and schedule for RI Addendum and the FS.

B. The Phase 2 RI/FS Work Plan shall supplement existing data and propose appropriate investigations to satisfy the identified data gaps in current understanding of the sources of contamination, nature and extent of the contamination, and Site characteristics as they relate to the Site, in accordance with the following general requirements: (1) Define Sources of Contamination, (2) Describe the Nature and Extent of Contamination, and (3) Evaluate Site Characteristics.

C. If determined necessary by EPA, thirty (30) days following submittal of the RI/FS Work Plan Addendum, Respondents shall submit a Technical Memorandum (Groundwater Modeling/Fate and Transport Modeling Approach) to EPA. This Technical Memorandum (TM) shall describe the proposed methodology and data needs

to perform analytical and/or numerical groundwater modeling at the Site. The numerical model will be calibrated to existing conditions. Where modeling is appropriate, objectives of the TM will include summarizing data collected to date and proposed modeling software, model design, input data, calibration objectives, and sensitivity analysis. Models proposed to be used shall be subject to EPA's approval. EPA will approve the TM or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

D. In the event that additional sampling locations, testing, and analyses are required or other alterations of the QAPP are required, Respondents shall submit to EPA a memorandum documenting the need for additional data to the EPA Remedial Project Manager within seventy-five (75) days of identification. EPA in its discretion will determine whether the additional data will be collected by the Respondents and whether it will be incorporated into plans, reports, and other deliverables.

E. At EPA's request, Respondents shall perform a Reuse Assessment. If EPA determines that a Reuse Assessment is required and so notifies Respondents, Respondents shall, within forty-five (45) days thereafter, submit a Reuse Assessment Report. The Reuse Assessment Report should provide adequate information to develop realistic assumptions of the reasonably anticipated future uses for the Site. Respondents shall prepare the Reuse Assessment Report in accordance with EPA guidance including but not limited to, "Reuse Assessment: A Tool to Implement the Superfund Land Use Directive," OSWER Directive 9355.7-06P, June 4, 2001, or subsequently issued guidance. EPA will approve the Reuse Assessment Report or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

VII. TASK 6 – IMPLEMENTATION OF THE RI/FS WORK PLAN ADDENDUM

A. Within sixty (60) days of EPA's written approval, Respondents shall initiate the provisions of the RI/FS Work Plan Addendum.

B. Within ninety (90) days of EPA's approval of the Draft-TM (Section VI. C), Respondents shall submit a Final TM, which will present the findings and conclusions from groundwater modeling (numerical and/or analytical, if utilized) and fate and transport modeling (if utilized) to EPA for review. Technical Meeting-2 may be scheduled, if needed, to further discuss findings and conclusions. EPA will approve the Final TM or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

VIII. TASK 7 - IDENTIFICATION OF CANDIDATE TECHNOLOGIES

A. A Technical Memorandum Identifying Candidate Technologies (TMCT) shall be submitted by Respondents within sixty (60) days after Respondents' submission to

EPA of the last set of final validated analytical data, and prior to identification and screening of remedial alternatives under Paragraph XII.A.3 below. Upon EPA's receipt of the TMCT, Technical Meeting-3 will be scheduled to discuss findings. The candidate technologies identified shall include innovative treatment technologies (as defined in the RI/FS Guidance) where appropriate. The listing of candidate technologies shall cover the range of technologies required for alternatives analysis. Respondents shall conduct a literature survey to gather information on performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies.

B. EPA will approve the TMCT within thirty (30) days or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement. If EPA determines that practical candidate technologies have not been sufficiently demonstrated or cannot be adequately evaluated for this Site on the basis of available information, EPA may require that treatability testing be conducted as described in Section IX (Task 8: Treatability Studies; as necessary).

IX. TASK 8 - TREATABILITY STUDIES

A. If determined to be necessary by EPA, Respondents shall perform treatability testing to assist in the detailed analysis of alternatives. Once a decision has been made to perform treatability studies, the following activities shall be performed by Respondents.

1. Evaluate Treatability Studies

EPA, with input from Respondents, will decide on the type of treatability testing to use (e.g., bench versus pilot). The decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS.

2. Treatability Testing Work Plan

Within ninety (90) days after EPA's written determination that treatability testing is necessary and the decision on the type of treatability testing to be used is made, Respondents shall submit a Treatability Testing Work Plan and schedule. The Treatability Testing Work Plan shall describe the background of the Site, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing should be documented as well. If modifications to the existing FSP are necessary to perform the treatability testing, the modifications will be outlined in the Plan or in an Attachment. If pilot scale treatability testing is to be performed, the Work Plan shall include a description of pilot test installation and start-up, pilot test operation and maintenance procedures, operating conditions to be tested, and sampling plan to determine pilot test performance. If testing is to be

performed off-Site, Respondents shall address all necessary permitting requirements to the satisfaction of appropriate authorities.

EPA will approve the Treatability Testing Work Plan or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

3. Treatability Testing QAPP

If the original QAPP is not adequate for defining the activities to be performed during the treatability test, a separate Treatability Testing QAPP, or amendment to the original QAPP for the Site, shall be prepared by Respondents for EPA review and approval, and shall be submitted at the same time as the Treatability Testing Work Plan. EPA will approve the Treatability Testing QAPP or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

4. Treatability Testing HSP

If the original HSP is not adequate for defining the activities to be performed during the treatment tests, a separate or amended HSP shall be developed by Respondents and submitted for EPA review and comment. Section III.N, provides additional information on the requirements of the health and safety plan. EPA does not approve HSPs.

5. Treatability Testing Evaluation Report

Within ninety (90) days after completion of any treatability testing (including field work and receipt of all laboratory results, including validated laboratory results if data validation is required), Respondents shall submit a Treatability Testing Evaluation Report to EPA. The Treatability Testing Evaluation Report shall analyze and interpret the treatability testing results. Depending on the sequences of activities, this report may be a part of the RI/FS Report or a separate deliverable. The report shall evaluate each technology's effectiveness, implementability, cost and actual results as compared with predicted results. The report shall also evaluate full scale application of the technology, including a discussion of the key parameters affecting full-scale operation.

B. EPA will approve the Treatability Testing Evaluation Report or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

X. TASK 9 - BASELINE RISK ASSESSMENT

A. Respondents shall prepare a Baseline Risk Assessment, which shall be incorporated by Respondents into the RI Report, Section XI (Task 10). Respondents shall provide EPA with the following deliverables:

1. Baseline Human Health Risk Assessment ("BHHRA")

   Potential current and future cancer risks and non-cancer hazards to human health under current and reasonably anticipated future land uses shall be identified and characterized in accordance with CERCLA, the NCP, and EPA guidance documents including but not limited to the RI/FS Guidance, "Land Use in the CERCLA Remedy Selection Process" (OSWER Directive No. 9355.7-04), "Reuse Assessments: A Tool to Implement the Superfund Land Use Directive" (OSWER 9355.7-04, June 2001), and the definitions and provisions of "Risk Assessment Guidance for Superfund ("RAGS")," Volume 1, "Human Health Evaluation Manual," (December 1989) (EPA/540/1-89/002) and updates (RAGS Parts B, C, D, E, F and Part III available at: http://www.epa.gov/oswer/riskassessment/risk_superfund.htm).

2. Memorandum on Exposure Scenarios and Assumptions ("MESA")

   Within sixty (60) days after approval or modification of the RI/FS Work Plan, pursuant to Section IX (Submission and Approval of Deliverables) of the Settlement Agreement, Respondents shall submit a MESA describing the exposure scenarios and assumptions for the BHHRA, taking into account the current and reasonably anticipated future use based on the Site's conditions at the time the Memorandum is prepared. The MESA should include appropriate text describing the conceptual Site model and exposure routes of concern for the Site and include a completed RAGS Part D Table 1. This table shall describe the pathways that will be evaluated in the BHHRA, the rationale for their selection, and a description of those pathways that will not be evaluated and the rationale for excluding these pathways. In addition, the MESA shall include a completed RAGS Part D Table 4 describing the exposure pathway parameters with appropriate references to EPA's 1991 Standard Default Assumptions, the Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (2002) and updates to this guidance developed by the EPA Superfund Program, or, where other, Site-specific exposure assumptions are proposed, a detailed rationale and supporting basis for those assumptions, to be presented for EPA review and approval. In the event that chemicals with a mutagenic mode of action are identified (as described in USEPA 2005a,b and the Handbook for Implementing the Supplemental Cancer Guidance at Waste and Cleanup Sites), specific exposure assumptions for age groups 0 to younger than 16 shall be developed and submitted to EPA for evaluation and approval.

EPA will approve the Memorandum or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

3. Pathway Analysis Report ("PAR")

Respondents shall prepare and submit a PAR within sixty (60) days after Respondents' submission to EPA of the last set of validated data or EPA's approval of the Memorandum on Exposure Scenarios and Assumptions, whichever is later. The PAR shall be developed in accordance with OSWER Directive 9285.7-01D dated January 1998 (or more recent version), entitled, "Risk Assessment Guidelines for Superfund Part D" and other appropriate guidance in Attachment 1 and updated thereto. The PAR shall contain the information necessary for a reviewer to understand how the risks at the Site will be assessed. The PAR shall build on the Memorandum on Exposure Scenarios and Assumptions (see Section X.A.2 above) describing the risk assessment process and how the risk assessment will be prepared. The PAR shall include completed RAGS Part D Tables 2, 3, 5, and 6 as described below. EPA will approve the PAR or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement. The PAR must be reviewed and approved by EPA prior to the submission of the BHHRA. The following information shall be included in the PAR:

a. *Chemicals of Potential Concern ("COPCs")*. The PAR shall contain all the information necessary for a reviewer to understand how the risks at the Site will be evaluated. Based on the validated analytical data, Respondents shall list the hazardous substances present in all sampled media (e.g., soils, sediment, etc.), and the COPCs as described in RAGS Part A.

b. *Table 2 - Selection of COPCs*. COPCs for the Site and associated concentrations in sample media for the PAR shall be determined utilizing all currently available media-specific validated analytical data generated during the RI/FS. The selection of COPCs shall follow RAGS Part A; and before hazardous substances are eliminated as COPCs, they shall be evaluated against the applicable tap water, residential and industrial screening levels in accordance with the current version of the "Regional Screening Levels for Chemical Contaminants at Superfund Sites" screening level/preliminary remediation goal website (http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm). The industrial screening level shall not be used as a basis for eliminating any hazardous substance as a COPC. In addition, background shall not be used as a basis to exclude COPCs. The COPCs shall be presented in completed RAGS Part Table 2 format.

c. *Table 3 - Media Specific Exposure Point Concentrations*. Using the COPCs selected in Table 2, this Table shall summarize the Exposure Point Concentrations ("EPCs") for all COPCs for the various media at the Site. The calculation of the EPC shall follow the Supplemental Guidance to RAGS: Calculating the Concentration Term (1992), using EPA's ProUCL 5.1.002 Software or later versions, which evaluates the distribution of the data using Shapiro-Wilk's and Lilliefor's tests, in accordance with the 2015 ProUCL Version 5.1 User Guide and provides recommendations for EPCs, unless Respondents have previously proposed and EPA has approved use of another statistical technique for calculating the 95% Upper Confidence Limit ("UCL") on the mean of the data. In those cases where the 95% UCL exceeds the maximum, the maximum concentration shall be used as the EPC.

d. *Tables 5 and 6 - Toxicological Information*. The Respondents shall provide the toxicological data (e.g., Cancer Slope Factors, Inhalation Unit Risk Factors, Reference Doses, Reference Concentrations, Weight of Evidence Classifications for Carcinogens, and adjusted dermal toxicological factors where appropriate) for the COPCs. Chemicals with a mutagenic mode of action need to be identified in Tables 5 and 6 consistent with the EPA Cancer Guidelines (USEPA, 2005a), Supplemental Guidance for Assessing Susceptibility from Early Life Exposure to Carcinogens (USEPA, 2005b), and Handbook for Implementing the Supplemental Cancer Guidance at Waste and Cleanup Sites. The toxicological data shall be presented in completed RAGS Part D Tables 5 and 6. The sources of data in order of priority, based on the 2003 OSWER Directive 9285.7-53, are:

i. Tier 1 – Integrated Risk Information System ("IRIS") database (EPA, 2007).

ii. Tier 2 – Provisional Peer Reviewed Toxicity Values ("PPRTV") – The Office of Research and Development/National Center for Environmental Assessment/Superfund Health Risk Technical Support Center ("STSC") develops PPRTVs on a chemical specific basis when requested by EPA's Superfund program. Provisional values shall either be obtained from the PPRTV webpage available at: http://hhpprtv.ornl.gov/, the "Regional Screening Levels for Chemical Contaminants at Superfund Sites," or from Region 2.

iii. Tier 3 – Other Toxicity Values – Tier 3 includes additional EPA and non-EPA sources of toxicity information. Priority shall be given to those sources of information that are the most current,

the basis for which is transparent and publicly available, and which have been peer reviewed. Tier 3 values include toxicity values obtained from the California Environmental Protection Agency ("Cal EPA") available at: http://www.oehha.ca.gov/risk/chemicalDB/index.asp., Agency for Toxic Substances and Disease Registry's ("ATSDR's") Minimum Risk Levels ("MRLs"), and toxicity values obtained from the HEAST (EPA 1997b).

To facilitate a timely completion of the PAR, Respondents shall submit a list of chemicals for which IRIS values are not available to EPA as soon as identified thus allowing EPA to facilitate obtaining this information from EPA's National Center for Environmental Assessment.

4. Baseline Human Health Risk Assessment Reporting

Within ninety (90) days after EPA's approval of the PAR, Respondents shall submit to EPA a Baseline Human Health Risk Assessment ("BHHRA") for inclusion in the RI. The submittal shall include completed RAGS Part D Tables 7 through 10 summarizing the calculated cancer risks and non-cancer hazards and appropriate text in the risk characterization with a discussion of uncertainties and critical assumptions (e.g., background concentrations and conditions). Respondents shall perform the BHHRA in accordance with the approach and parameters described in the Memorandum of Exposure Scenarios and Assumptions and the PAR, as described above, including a discussion of uncertainties and other qualifications (if any). Text and tables from these reports previously reviewed by EPA shall be included in the appropriate sections of the BHHRA.

EPA will approve the BHHRA or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement. Upon approval by EPA, the BHHRA shall be incorporated into the RI Report.

B. Within one hundred twenty (120) days after Respondents' submission to EPA of the last set of final validated analytical data, or at such other time as is specified or agreed to by EPA, Respondents shall submit a Screening Level Ecological Risk Assessment ("SLERA") in accordance with current Superfund ecological risk assessment guidance (Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments ("ERAGS"), USEPA, 1997 [EPA/540-R-97-006], OSWER Directive 9285.7-25, June 1997)). The SLERA shall include a comparison of the 95% UCL and maximum contaminant concentrations in each medium of concern for the Site to appropriate conservative ecotoxicity screening values for such medium (if any) and should use conservative exposure estimates for the ecological receptors, considering Site-specific conditions. The SLERA shall also include a recommendation as to whether the conduct of a full Baseline Ecological

Assessment should be considered by EPA. EPA will approve the SLERA or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

C. If EPA determines that a full Baseline Ecological Risk Assessment ("BERA") is required, and so notifies Respondents in writing, Respondents shall, within sixty (60) days thereafter, submit a Scope of Work outlining the steps and data necessary to perform the BERA, including any amendments to the Phase 2 RI/FS Work Plan required to collect additional relevant data. The BERA Scope of Work shall identify any Phase 2 RI/FS Work Plan amendments or addenda, including establishment of a schedule for review and approval of additional field work, subject to EPA approval pursuant to Section IX (Submission and Approval of Deliverables) of the Settlement Agreement. EPA will approve the BERA Scope of Work or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

D. Respondents shall notify EPA in writing within seven (7) days after completion of all field activities associated with the BERA, as identified in the BERA Scope of Work and performed under the approved Phase 2 RI/FS Work Plan addenda. Within one hundred twenty (120) days after submission to EPA of the final set of BERA-related validated data, Respondents shall submit a BERA Report to EPA for inclusion in the RI Report. Actual and potential ecological risks shall be identified and characterized in accordance with CERCLA, the NCP, and EPA guidance including, but not limited to, "Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments," (1997) (EPA/540-R-97-006), ERAGS, dated June 5, 1997 (or most recent guidance). Respondents shall evaluate and assess the risk to the environment posed by contaminants. As part of this subtask, Respondents shall perform the following activities:

1. If required by EPA, Respondents shall prepare a BERA Report that addresses the following:

    a. *Hazard Identification (sources*) - Respondents shall review available information on the hazardous substances present at the Site and identify the major contaminants of concern.

    b. *Dose-Response Assessment* - Respondents shall identify and select contaminants of concern based on their intrinsic toxicological properties.

    c. *Characterization of Site and Potential Receptors* - Respondents shall identify and characterize environmental exposure pathways and the assessment endpoints, and develop an integrated ecological conceptual model. The conceptual model shall include a contaminant fate-and-

transport diagram that traces the contaminants' movement from sources through the ecosystem to receptors that include the assessment endpoints.

d. *Select Chemicals, Indicator Species, and Endpoints* - In preparing the assessment, Respondents shall select representative chemicals and indicator species (species which are especially sensitive to environmental contaminants) to represent the assessment endpoints and measurement endpoints on which to concentrate.

e. *Exposure Assessment* - The exposure assessment shall identify the magnitude of actual or potential environmental exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed, considering the results of any field studies conducted to measure exposures to ecological receptors. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels. In developing the exposure assessment, Respondents shall develop reasonable maximum estimates of exposure for both current land use conditions and reasonably anticipated future land use conditions as they pertain to ecological habitats at the Site.

f. *Toxicity Assessment/Ecological Effects Assessment* - The toxicity and ecological effects assessment shall address the types of adverse environmental effects on survival, growth, and reproduction associated with chemical exposures, the relationships between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity. If field studies are conducted to assess such effects on ecological receptors, the toxicity and ecological effects assessment shall include an evaluation of whether those studies showed adverse effects on survival, growth, or reproduction attributable to the contaminants studied and at what levels, as well as the uncertainties in the study results.

g. *Risk Characterization* - During risk characterization, chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment (which may include Site-specific field studies) shall be compared to measured levels of contaminant exposure and/or the levels predicted through environmental fate and transport modeling. Alternatively, if Site-specific field studies are conducted to assess potential ecological risks, the results of those studies shall be evaluated to characterize the risks to the ecological receptors studied. Consistent with EPA guidance (e.g., "Ecological Risk Assessment and Risk Management Principles for Superfund Sites,"

OSWER Directive 9285.7-28P, October 1999), the risk characterization shall focus on potential Site-specific risks to local populations and communities of biological receptors. These evaluations shall determine whether concentrations of contaminants at or released from the Site, are affecting or could potentially affect the environment.

h. *Identification of Limitations/Uncertainties* - Respondents shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the report.

i. *Conceptual Site Model* - Based on contaminant identification, exposure assessment, toxicity assessment, and risk characterization, Respondents shall revise the preliminary CSM discussed in Section II.A.2 of this SOW, as appropriate.

C. EPA will approve the BERA Report or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

D. Respondents shall submit a Baseline Risk Assessment Report within sixty (60) days of receiving EPA review comments, or approval, of the BHHRA Report, the SLERA Report, and (if required) the BERA Report.

XI. TASK 10 - REMEDIAL INVESTIGATION REPORT

A. Within ninety (90) days after EPA approval of the BHHRA Report, the SLERA Report, or the BERA Report (if required), whichever is latest, Respondents shall prepare and submit an RI Report that accurately establishes the Site characteristics, including but not limited to identification of the contaminated media, and the potential for the contamination to migrate further, the degree to which contaminant degradation is occurring, and the physical boundaries of the contamination. This report shall summarize the results of field activities, sources of contamination, and the fate and transport of contaminants. Pursuant to this objective, Respondents shall obtain only the minimum essential amount of detailed data necessary to determine the key contaminants movement and extent of contamination. The key contaminants shall be selected based on persistence and mobility in the environment and the degree of hazard. Respondents shall use existing standards and guidelines such as drinking water standards, water quality criteria and other criteria accepted by EPA as appropriate for the situation. The RI Report shall incorporate information presented in the approved SCSR including all addenda, the BHHRA Report, the SLERA Report, and, if required, the BERA Report.

B. The RI Report shall be written in accordance with the "Guidance for Conducting Remedial Investigations/Feasibility Studies under CERCLA," OSWER Directive 9355.3-01, October 1988, Interim Final (or latest revision) and "Guidance for Data

Usability in Risk Assessment," (EPA/540/G-90/008), September 1990 (or latest revision). Respondents shall refer to the RI/FS Guidance for an outline of the report format and contents.

C. EPA will approve the RI Report or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

XII. TASK 11 – FEASIBILITY STUDY: DEVELOPMENT AND SCREENING OF REMEDIAL ALTERNATIVES

A. Concurrently with the site characterization work described in Sections V, VI and VII (Tasks 4, 5 and 6 of this SOW), Respondents shall begin to develop and evaluate remedial action objectives for Site that at a minimum ensure protection of human health and the environment. The development and screening of remedial alternatives shall identify and develop an appropriate range of general response actions. This range of alternatives shall include the following: (1) options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, including, at a minimum, the principal threats posed by the Site, but that vary in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed; (2) options involving containment with little or no treatment; (3) options involving both treatment and containment; (4) options that remove or destroy waste; (5) innovative technologies to the extent practicable; and (6) a no-action alternative. Respondents shall discuss the results of Items 1 and 2 below during Technical Meeting-4 with EPA within sixty (60) days of EPA's approval of the RI Report and prior to proceeding further with the FS. The following activities shall be performed as a function of the development and screening of remedial alternatives.

1. <u>Development of RAOs and General Response Actions</u>

    a. *Develop Remedial Action Objectives* - Respondents shall develop remedial action objectives, which are medium-specific goals for protecting human health or the environment that specify the chemicals of concern ("COCs"), exposure route(s) and receptor(s) and preliminary remediation goals ("PRGs").

    b. *Develop General Response Actions* - Respondents shall develop general response actions for each medium of interest defining containment, treatment, excavation, pumping, or other actions, singly or in combination to satisfy the remedial action objective.

2. <u>Identify Areas or Volumes of Media</u>

    Respondents shall identify areas or volumes of media to which general response actions may apply, taking into account requirements for protectiveness as identified

in the remedial action objectives. The chemical and physical characterization of the Site shall also be taken into account.

3. Assemble and Document Alternatives

Respondents shall assemble selected representative technologies into a list of alternatives for each affected medium or operable unit.

All the alternatives shall represent a range of treatment, removal, and containment combinations that will address the releases at the Site. A summary of the assembled alternatives and their related action-specific ARARs shall be prepared by Respondents for inclusion in the Development and Screening of Remedial Alternatives Technical Memorandum.

The reasons for eliminating alternatives during the preliminary screening process must be specified.

4. Refine Alternatives

Respondents shall refine the remedial alternatives to identify contaminant volume addressed by the proposed process and sizing of critical unit operations as necessary. Enough information shall be collected for an adequate comparison of alternatives. PRGs for each chemical in each medium shall also be modified as necessary to incorporate any new risk assessment information presented in the baseline risk assessment report. Additionally, action-specific ARARs shall be updated as the remedial alternatives are refined.

6. Conduct and Document Screening Evaluation of Each Alternative

Respondents may perform a final screening process based on short- and long-term aspects of effectiveness, implementability, and relative cost. Generally, this screening process is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening shall preserve the range of treatment and containment alternatives that was initially developed. The range of remaining alternatives shall include options that use treatment technologies and permanent solutions to the maximum extent practicable. Respondents shall discuss the findings of Items 3, 4 and 6 above with EPA during Technical Meeting-5, ninety (90) days after Technical Meeting-4 and prior to proceeding with the Detailed Analysis of Alternatives in Paragraph XII.C below.

B. Within sixty (60) days after the later of (a) EPA's approval of the BHHRA Report, the SLERA Report, or (if required) the BERA Report (whichever is latest) or (b) EPA's approval of Respondents' Treatability Testing Evaluation Report(s) (if treatability studies are undertaken), or such longer time as is specified or agreed to by EPA, Respondents shall submit a Development and Screening of Remedial Alternatives Technical Memorandum, summarizing the work performed in, and the results of, each task in Section XII.A above, including an alternatives array summary. The Memorandum shall also summarize the reasoning employed in screening, arraying alternatives that remain after screening, and identifying the action-specific ARARs for the alternatives that remain after screening. The Memorandum shall also provide an explanation for choosing any institutional or engineering controls as part of any remedial alternative, and the level of effort that will be required to secure, maintain, and enforce the control. Within twenty-one (21) days after submission of the Memorandum, Respondents shall make a presentation to EPA identifying the remedial action objectives and summarizing the development and preliminary screening of remedial alternatives. EPA will approve the Memorandum or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.

C. The Detailed Analysis of Remedial Alternatives shall be conducted by Respondents and discussed during Technical Meeting-6 with EPA ninety (90) days after Technical Meeting-5. The meeting will provide EPA with the information needed to allow for the selection of a remedy for the Site. This analysis is the final task to be performed by Respondents during the Feasibility Study and will include the following:

1. Detailed Analysis of Alternatives

   Respondents shall conduct a detailed analysis of alternatives, which shall consist of an analysis of each option against a set of nine evaluation criteria as set forth in 40 C.F.R. § 300.430(e)(9)(iii) and a comparative analysis of all options using the same evaluation criteria as a basis for comparison.

2. Apply Nine Criteria and Document Analysis

   Respondents shall apply the nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria are: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) cost; (8) State (or support agency) acceptance; and (9) community acceptance.

For each alternative, Respondents shall provide: (1) a description of the alternative that outlines the remedial strategy involved and identifies the key ARARs associated with each alternative, and (2) a discussion of the individual criterion assessment. If Respondents do not have direct input on criteria (8) State (or support agency) acceptance and (9) community acceptance, these criteria will be addressed by EPA.

3. Compare Alternatives Against Each Other and Document the Comparison of Alternatives

Respondents shall perform a comparative analysis between the remedial alternatives. That is, each alternative will be compared against the others using the nine evaluation criteria as a basis of comparison. Identification and selection of the preferred alternative are reserved by EPA. Respondents shall incorporate the results of the comparative analysis in the FS Report.

XIII. TASK 12 – QUARTERLY PROGRESS REPORTS AND MEETINGS

Respondents shall provide a quarterly progress report and participate in meetings with EPA at major milestones in the RI/FS process, as described herein and outlined in the RI Report/FS Work Plan. The quarterly progress reports shall be submitted to EPA by the 15th day of the following month. At a minimum, with respect to the preceding quarter, these progress reports shall (1) describe the actions which have been taken to comply with the Settlement Agreement during that month, (2) include a summary of sampling and tests performed at Site by the Respondents, (3) describe Work planned for the next quarter with schedules relating such Work to the overall project schedule for RI/FS completion, and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

Respondents have included up to six (6), including two optional, technical meetings with EPA to discuss major deliverables and milestones as further described in this SOW and outlined in Attachment 1 to the SOW. The purpose of the technical meetings is to present and discuss technical information to facilitate consensus on the path forward. Ten (10) business days prior to the meeting, Respondents shall send an agenda to EPA and information that will be discussed in the meeting. The meetings may be postponed, combined with other milestone meetings or canceled if agreed upon by Respondents and EPA. At EPA's request, Respondents shall consider supplemental meetings or phone calls with EPA as warranted.

XIV. TASK 13 – FEASIBILITY STUDY REPORT

A. Respondents shall prepare an FS Report consisting of a detailed analysis of the several remedial alternatives, in accordance with the NCP as well as the most recent guidance. Within (90) days after EPA's approval of the Development and Screening of Remedial Alternatives Technical Memorandum or the final RI Report, or the Baseline Risk Assessment Report, whichever is later (and accounting for schedule for Technical Meetings 4, 5, and 6 in Task 11), Respondents shall submit to EPA an FS Report which reflects the findings in the approved Baseline Risk Assessment. Respondents shall refer to the RI/FS Work Plan, RI/FS Addendum, and the RI/FS Guidance and this SOW for report content and format. Within fourteen (14) days after submission of the FS Report, Respondents shall make a presentation to EPA and the State at which Respondents shall summarize the findings of the FS Report and discuss EPA's preliminary comments and concerns, if any, associated with the FS Report.

B. The FS report shall include the following:

1. Summary of Feasibility Study objectives;

2. Summary of remedial action objectives;

3. Articulation of general response actions;

4. Identification and screening of remedial technologies;

5. Descriptions of remedial alternatives;

6. Detailed analysis of remedial alternatives; and

7. Summary and conclusion.

C. Respondents' technical feasibility considerations shall include the careful study of any problems that may prevent a remedial alternative from mitigating Site problems. Therefore, the Site characteristics from the RI must be kept in mind as the technical feasibility of the alternative is studied. Specific items to be addressed are reliability (operation over time), safety, operation and maintenance, ease with which the alternative can be implemented, and time needed for implementation.

D. EPA will approve the FS Report or otherwise respond in accordance with Section IX (Submission and Approval of Deliverables) of the Settlement Agreement.