UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 9

IN THE MATTER OF:) ADMINISTRATIVE SETTLEMENT
) AGREEMENT AND ORDER ON CONSENT
TUCSON AIRPORT AUTHORITY)
	Docket No. CERCLA-9-2024-07
Respondent)
)
Tucson International Airport Area Superfund Site,) Proceeding under CERCLA
Pima County, Arizona) for a Remedial Investigation /
) Feasibility Study
))))
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I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement" or "Settlement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Tucson Airport Authority ("Respondent"), certificated operator of Tucson International Airport (TUS). The Settlement Agreement concerns the preparation and performance of a remedial investigation and feasibility study ("RI/FS") concerning per and polyfluorinated substances ("PFAS") at Respondent's facility within the Tucson International Airport Area Superfund site ("Site"). The Site is located in Pima County, Arizona. This Settlement Agreement is in response to PFAS contamination of potential sources of drinking water.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by sections 104, 106(a), and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act ("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. 14-14A (Determinations of Imminent and Substantial Endangerment, Jan. 31, 2017), 14-14C (Administrative Actions through Consent Orders, Jan. 18, 2017) and 1414D (Cost Recovery Non-Judicial Agreements and Administrative Consent Orders, Jan. 18, 2017). These authorities were further redelegated by the Regional Administrator of EPA Region 9 to the Director, Superfund and Emergency

Management Division, by Regional Delegations R9-14-14A (May 6, 2018), R9-14-14C (May 1, 2019) and R9-141-4D (May 6, 2018).

3. EPA has notified the State of Arizona of this action pursuant to section 106(a) of CERCLA.

4. EPA and the Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by the Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. The Respondent does not admit, and retains the right to controvert in any subsequent proceedings, other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact in Section V and the conclusions of law and determinations in Section VI. The Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon EPA and upon the Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter the Respondent's responsibilities under this Settlement Agreement.

6. The Respondent shall provide a copy of this Settlement Agreement to all contractors, subcontractors, laboratories, and consultants retained to conduct any portion of the Work performed pursuant to this Settlement Agreement within seven (7) calendar days of the Effective Date of this Settlement Agreement, or on the date of such retention, whichever is later; and Respondent shall condition all such contracts on compliance with the terms of this Settlement Agreement. The provisions of this Settlement Agreement shall apply to and be binding upon the Respondent, its officers, contractors, directors, agents, successors and assigns. The Respondent shall give notice of this Settlement Agreement to any successor in interest prior to Respondent's transfer of any legal interests within Respondent's facility that is the subject of this Order. Any change in ownership or corporate status of the Respondent, including but not limited to, any transfer of assets or real or personal property shall not alter Respondent's responsibilities under this Settlement Agreement. Action or inaction of any persons, firms, contractors, employees, agents, or corporations acting under, through or for the Respondent, shall not excuse any failure of the Respondent to fully perform its obligations under this Settlement Agreement.

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

8. The Respondent shall be responsible for carrying out the actions required by this Settlement Agreement. This Settlement Agreement is intended to include the facility owned and

Administrative Order on Consent, Docket Nos. CERCLA-9-2024-07

Page 2

operated by Respondent ("TAA Property") within the Site, as well as areas within the Site where PFAS may have migrated off of TAA Property. The locations of TAA Property and the Site are depicted in Appendix B hereto. Respondent's failure to comply with this Settlement Agreement shall not in any way affect or establish liability to EPA for any other Respondent. Respondent shall give notice to the EPA at least thirty (30) calendar days prior to transfer of ownership and/or operation of the facility owned or operated by it.

III. STATEMENT OF PURPOSE

9. In entering into this Settlement Agreement, the objectives of EPA and the Respondent are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by any release or threatened release of PFAS hazardous substances, pollutants, or contaminants at or from TAA Property, by conducting a remedial investigation as more specifically set forth in the Remedial Investigation/Feasibility Study Work Plan ("RI/FS Work Plan") attached hereto as Appendix A to this Settlement Agreement and the EPA-approved Sampling and Analysis Plans ("SAPs") that will be issued during the preparation and performance of the RI/FS; and (b) to identify whether removal or remedial action at TAA Property is needed and, if so, to evaluate removal and remedial alternatives to prevent, mitigate, or otherwise respond to or remedy any release or threatened release of PFAS hazardous substances, pollutants, or contaminants at or from TAA Property, by conducting a feasibility study as more specifically set forth in the RI/FS Work Plan. The United States Air Force (USAF) is performing a remedial investigation and feasibility study with respect to PFAS contamination at certain other areas within the Site, and the Work to be performed under this Settlement Agreement shall be limited to PFAS hazardous substances, pollutants, or contaminants at or from TAA Property and shall not encompass a remedial investigation or feasibility study with respect to the portion of the Site included in the work being performed by the USAF. The Work conducted under this Settlement Agreement is subject to approval by EPA and shall provide all appropriate and necessary information to assess Site conditions and evaluate alternatives to the extent necessary to select a remedy that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"). The Respondent shall conduct all Work under this Settlement Agreement in compliance with CERCLA, the NCP, and all applicable EPA guidances, policies, and procedures.

IV. DEFINITIONS

10. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement 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 Agreement or its appendices, the following definitions shall apply:

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

"ADEQ" or "DEQ" shall mean the Arizona Department of Environmental Quality and any successor departments or agencies of the Arizona Department of Environmental Quality.

"DOJ" shall mean the United States Department of Justice and its successor departments, agencies, or instrumentalities.

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

"Effective Date" shall mean the effective date of this Settlement Agreement as provided in Section XXXI (Effective Date).

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

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

"Engineering Controls" shall mean constructed containment barriers or systems that control one or more of the following: downward migration, infiltration, or seepage of surface runoff or rain; or natural leaching migration of contaminants through the subsurface over time. Examples include caps, engineered bottom barriers, immobilization processes, and vertical barriers.

"Institutional Controls" shall mean non-engineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use. Examples of institutional controls include easements and covenants, zoning restrictions, special building permit requirements, and well drilling prohibitions.

"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.

"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.

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

"Parties" shall mean EPA and the Respondent.

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

"RI/FS Work Plan" shall mean the work plan developed by the Respondent and approved by EPA to perform the Remedial Investigation and Feasibility Study as those terms are defined in Section IX (Work to Be Performed). The RI/FS Work Plan is attached hereto as Appendix A and incorporated into this Settlement Agreement and is an enforceable part of this Settlement Agreement as are any modifications made thereto in accordance with this Settlement Agreement.

"Respondent" shall mean Tucson Airport Authority.

"SAPs" shall mean sampling and analysis plans approved by EPA for activities to be performed as part of the RI/FS under this Settlement Agreement.

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

"Settlement Agreement" means this Administrative Settlement Agreement and Order on Consent, all appendixes attached hereto (listed in Section [Appendices]), and all deliverables approved under and incorporated into this Settlement Agreement. If there is a conflict between a provision in the body of the Settlement Agreement and a provision in any appendix or deliverable, the provision in the body of the Settlement Agreement controls.

"Site" shall mean the Tucson International Airport Area Superfund site, located in Pima County, Arizona, the boundaries of which are depicted in Appendix B ("The Site and TAA Property") hereto.

"State" shall mean the State of Arizona.

"TAA Property" shall mean the property located in Pima County, Arizona that is owned and/or operated by Respondent within the Site, the boundaries of which are depicted in Appendix B ("The Site and TAA Property") hereto.

"Transfer" means 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.

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

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"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); (c) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any "hazardous material" under State law.

"Work" shall mean all activities that the Respondent is required to perform under this Settlement Agreement and the RI/FS Work Plan. Should Respondent enter into an EPAapproved Future PFAS Costs Agreement pursuant to Paragraphs 64 and 65 of this Settlement Agreement, "Work" shall also include all activities that the Respondent is required to perform under that Future PFAS Costs Agreement.

"Work Takeover" means EPA's assumption of the performance of any of the Work in accordance with this Settlement Agreement.

V. EPA FINDINGS OF FACT

11. Respondent Tucson Airport Authority ("TAA") is a nonprofit corporation organized and existing under A.R.S. §§ 10–451 to 10–458 (the Arizona nonprofit corporation law), and the statutes that were replaced by such sections.

12. TAA operates the Tucson International Airport (TUS), located in Pima County, Arizona.

13. In 1978, Arizona obtained primary enforcement authority for drinking water systems in the state. 43 Fed. Reg. 38083 (Aug. 25, 1978).

14. From the 1950s through the mid-1970s, trichloroethylene ("TCE") was used as a generalpurpose solvent and degreaser at Air Force Plant 44 ("AFP44") and the Airport. At AFP44, 1,4dioxane was also used as a stabilizer to enhance the life of the solvent bath for degreasing manufactured parts. TCE and 1,4-dioxane are present in groundwater at the Site.

15. As the result of TCE groundwater contamination from AFP44 that has combined with a separate contamination plume originating at TAA Property, EPA listed the Site on the National Priorities List, 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on September 8, 1983. The Site encompasses approximately ten square miles in the southeastern part of the City of Tucson, in Pima County, Arizona, and encompasses groundwater contaminated with, among other things, volatile organic compounds, including TCE and 1,4-dioxane, as well as PFAS, located beneath TAA Property, AFP44, and the Morris Air National Guard ("MANG") Base.

16. On June 5, 1991, the United States District Court for the District of Arizona entered a consent decree in *United States v. Tucson Airport Authority, et al.,* D. Ariz. Civ. No. 90-587-TUC-RMB ("TARP Decree"), requiring the parties to the TARP Decree to install a groundwater

remediation system, including extraction wells and a treatment plant, referred to as the Tucson Airport Remediation Project ("TARP"), at the northwest portion of the Site to capture groundwater in the aquifer at the northern end of the Site's TCE plume, prevent the plume's northward migration toward the city of Tucson, and treat water from the TARP's extraction well field for TCE. Pursuant to the TARP Decree, the City of Tucson was obligated to take the effluent from the treatment plant for use in its potable water distribution system.

17. In 1994, City of Tucson, Tucson Water Department ("Tucson Water"), signatory to the TARP Decree and operator of a public water system serving the residents of Tucson, began operation of the TARP. Initially, the TARP was designed only to remove TCE.

18. In 2002, 1,4-dioxane was detected in the TARP wellfield, prompting Tucson Water to blend the contaminated water with potable water from another source to lower the 1,4-dioxane levels to below 3 parts per billion, the level above which the City of Tucson publicly stated that it would not serve water with 1,4-dioxane based on an Arizona Drinking Water Health Advisory and EPA Region 9's toxicology assessment for 70-year exposures.

19. Tucson Water installed an Advanced Oxidation Process ("AOP") Water Treatment Facility adjacent to the TARP facility in 2014. The AOP Facility uses ultraviolet light with hydrogen peroxide injection (UV-peroxide) to treat for 1,4-dioxane. Tucson Water also installed a granular activated carbon ("GAC") treatment to quench residual hydrogen peroxide in the water prior to its final treatment and delivery into the Tucson water supply.

20. On May 25, 2016, EPA published lifetime health advisories and health effects support documents for certain PFAS contaminants (PFOA and PFOS) with an advisory level of 70 parts per trillion ("ppt"). 81 Fed. Reg. 33250.

21. On June 15, 2022, EPA published interim updated lifetime drinking water health advisories for PFOA and PFOS that supersede those EPA published in 2016. 87 Fed. Reg. 36848. The interim advisory levels state that some negative health effects may occur with concentrations of PFOA or PFOS in water that are near zero (0.004 ppt for PFOA and 0.02 ppt for PFOS). At that time, EPA issued final health advisories, including health levels for two additional PFAS contaminants: "GenX" chemicals (10 ppt) and PFBS (2,000 ppt). *Id*.

22. Scientific studies have found that exposure, even at low levels, to certain PFAS chemicals may result in adverse health impacts to: the immune system, the cardiovascular system, human development (*e.g.*, decreased birth weight), and suppression of vaccine response (decreased serum antibody concentrations) in children. Furthermore, studies have linked oral exposure to adverse health effects on the liver, the kidneys, and the immune system, as well as cancer. Studies have found, following oral exposure, adverse health effects on the thyroid, reproductive organs and tissues, and developing fetuses.

23. Many PFAS chemicals are environmentally persistent, bioaccumulative, and have long half-lives in humans.

24. On April 8, 2024, EPA promulgated maximum contaminant levels (MCLs) pursuant to the Safe Drinking Water Act, for six of the PFAS. The MCLs are 4 ppt for PFOA, 4 ppt for PFOS, 10 ppt for PFHxS, 10 ppt for PFNA, 10 ppt for HFPO-DA (commonly known as GenX Chemicals), and a hazard index of 1 (unitless) as the MCL for any mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS.

25. On April 17, 2024, EPA promulgated hazardous substance designations, pursuant to CERCLA, for PFOA and PFOS, including their salts and structural isomers. The designation states that EPA reached this decision after evaluating the available scientific and technical information about PFOA and PFOS and determining that they may present a substantial danger to the public health or welfare or the environment when released.

26. Beginning in 2018, Tucson Water detected multiple PFAS chemicals at wells in the TARP well field. The concentration of PFAS chemicals at the TARP AOP facility was about 30 ppt prior to treatment. Tucson Water temporarily shut down three wells to reduce the amount of PFAS contaminated water from entering the TARP AOP facility.

27. There currently is no extraction and treatment system for containing or treating PFAS contaminated groundwater from AFP44, the Morris Air National Guard (MANG) Base, or TAA Property, which potentially allows PFAS to migrate north into the TARP system's wellfield.

28. Respondent operates a commercial service airport on TAA Property. In order to serve aircraft with more than 30 seats, Federal Aviation Administration (FAA) regulations require that Respondent must obtain and maintain "Part 139" certification by providing aircraft rescue and firefighting ("ARFF") services. To meet the ARFF requirements, which are in place for the safety of air travel and the traveling public, Respondent was required to train with and calibrate equipment with fire suppression systems that contain aqueous film-forming foam ("AFFF"). AFFF contains PFAS. To the extent that Respondent may have caused or contributed to the endangerment described immediately herein by use and/or disposal of PFAS in the course of Airport operations, Respondent contends that all such PFAS use and/or disposal was from the required usage of AFFF for purposes of maintaining Part 139 certification.

29. PFAS have been identified in the aquifer beneath the Site in concentrations as high as 53,000 ppt.

30. In 2019, Tucson Water began treating groundwater for PFAS at TARP using the GAC system originally installed at the AOP facility to quench excess hydrogen peroxide resulting from the UV AOP for 1,4-dioxane treatment; that AOP facility had been incidentally treating PFAS since 2014 when the AOP facility was first installed. With the GAC system currently serving the dual purposes of peroxide quenching and PFAS adsorption, GAC bed life is significantly reduced, requiring media

change-out multiple times per year, as opposed to every three to five years, with increased frequency of changeouts potentially required in the near future if PFAS concentrations increase in the TARP wellfield as the PFAS plume continues to migrate further into the TARP wellfield, and remedial action to address the PFAS contamination has not yet occurred.

31. The impact of PFAS on the TARP GAC filters has created an added cost to Tucson Water's operation of the TARP in a manner to ensure drinking water quality. On June 21, 2021, elevated PFAS levels caused Tucson Water to temporarily shut down the TARP because Tucson Water determined that doing so was necessary to avoid serving contaminated drinking water.

32. In November 2021, Tucson Water resumed operation of TARP to continue to treat TCE and 1,4-dioxane, but only after constructing a temporary pipeline and outfall structure to discharge treated water from the TARP/AOP facility to the Santa Cruz River, which borders the TARP to the west. This removed a significant volume from the potential supply of Tucson Water's drinking water delivery system (estimated at 8 percent). With approval by EPA, via memorandum dated September 21, 2021, EPA authorized a temporary modification of the remedy set forth in the 1988 Record of Decision, temporarily removing the specification of the end use of the TARP-treated water.

33. Since 1984, EPA has designated the Upper Santa Cruz and Avra-Altar Aquifers as the sole or principal source of drinking water for the Tucson Active Management Area. EPA has determined that these aquifers, if contaminated, would create a significant hazard to public health. EPA has determined that the City of Tucson is experiencing dramatically reduced available water supplies in the Colorado River to the Central Arizona Project, which provide Tucson's other sources of potable water supply. The local Upper Santa Cruz aquifer, which includes TARP source water, remains a vital component of Tucson's portfolio of drinking water sources. EPA has determined that the Upper Santa Cruz aquifer, which includes TARP source by PFAS.

34. EPA has determined that because PFAS levels have been observed as high as 53,000 ppt in the underground sources of drinking water at the Site and the PFAS plume is migrating toward the TARP wellfield, where Tucson Water is extracting water contaminated with TCE and 1,4-dioxane for treatment by the TARP/AOP system and has removed extraction wells from service due to high levels of PFAS, projections indicate that there is a high risk that the PFAS plume will overwhelm Tucson Water's ability to use the GAC filters to reduce the contaminants in the water to safe levels.

35. The City of Tucson, with grant funding from the State of Arizona, plans to construct an ion exchange pre-treatment system to address PFAS contamination of the aquifer. However, multiple years will pass before construction may be completed.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the EPA Findings of Fact set forth in Section V, with respect to CERCLA, EPA has determined that:

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

37. The contamination found at the Site, as identified in the Findings of Fact in Section V above, includes "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14) and "pollutants or contaminants" as defined in section 101(33), 42 U.S.C. § 9601(33), of CERCLA. The pollutants and contaminants are comingled with hazardous substances.

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

39. The Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

40. The Respondent is a responsible party under Sections 104, 107, and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607 and 9622.

41. Respondent is the current "owner" and/or "operator" of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601 (20), and within the meaning of Section 107(a)(I) of CERCLA, 42 U.S.C. § 9607(a)(1).

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

43. EPA has determined that the conditions described in Section V (Findings of Fact) above may constitute an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from the facility within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

44. The actions described in this Settlement, including the preparation of the RI/FS, are necessary to protect the public health, welfare, or the environment, are in the public interest, and EPA anticipates will be consistent with CERCLA and the NCP, and will expedite effective remedial action and minimize litigation, in accordance with Sections 104(a)(1) and 122(a) of CERCLA.

45. EPA has determined that Respondent is qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA and will carry out the Work properly and promptly, in

accordance with Sections 104(a) and 122(a) of CERCLA if Respondent complies with the terms of this Settlement.

VII. SETTLEMENT AGREEMENT AND ORDER

46. Based upon the foregoing EPA FINDINGS OF FACT and EPA CONCLUSIONS OF LAW AND DETERMINATIONS, it is hereby Ordered and Agreed that the Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all appendices to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VIII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

47. <u>Selection of Contractor Personnel.</u> All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Within 60 days after the Effective Date, and before the Work outlined below begins, the Respondent shall notify EPA in writing of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants, and laboratories to be used in carrying out such Work. With respect to any proposed contractor, the Respondent shall demonstrate that the proposed contractor has a quality system that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, Jan. 5, 1995, or most recent version), 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/B01/002, Mar. 2001; Reissued May 2006) or equivalent documentation as determined by EPA.

48. The qualifications of the persons undertaking the Work for the Respondent shall be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements. This Settlement Agreement is contingent on Respondent's demonstration to EPA's satisfaction that the Respondent is qualified to perform properly and promptly the actions set forth in this Settlement Agreement. If EPA disapproves in writing of any person's technical qualifications, the Respondent shall notify EPA of the identity and qualifications of the replacement within 30 days after the written notice. If EPA subsequently disapproves of the replacement, EPA reserves the right to terminate this Settlement Agreement and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from the Respondent. During the course of the RI/FS, the Respondent shall notify EPA in writing of any changes or additions in the personnel used to carry out such Work, providing their names, titles, and qualifications. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.

49. Respondent has designated the following individual as Project Coordinator: Kenneth S. Nichols, 7250 S. Tucson Blvd. Suite 300, Tucson, AZ 85756, (520) 573-8100,

knichols@flytucson.com. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, the Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within 10 business days following EPA's disapproval. The Respondent shall have the right to change their Project Coordinator, subject to EPA's right to disapprove. The Respondent shall notify EPA 14 days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notification. Receipt by the Respondent's Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by the Respondent. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site Work. If the Project Coordinator will not be present on Site or readily available during Site Work for longer than 14 days, the Respondent shall notify through email the EPA Remedial Project Manager (RPM) and the Arizona Department of Environmental Quality ("ADEQ") and provide the name of a back-up contact.

50. EPA has designated Mary Aycock of EPA Region 9 as its RPM. EPA will promptly notify the Respondent of a change of its designated RPM. Except as otherwise provided in this Settlement Agreement, the Respondent shall direct all submissions required by this Settlement Agreement to the EPA RPM as follows: aycock.mary@epa.gov.

51. The ADEQ has designated Christian Perkovac as its State Project Officer. ADEQ will notify EPA and the Respondent of a change in its designated State Project Officer. The Respondent shall provide a copy of all submissions to EPA to the State Project Officer by electronic mail to <u>Perkovac.chris@azdeq.gov.</u>

52. EPA's designated RPM shall have the authority lawfully vested in an RPM and On-Scene Coordinator ("OSC") by the NCP. In addition, EPA's RPM shall have the authority consistent with the NCP, to halt any Work required by this Settlement Agreement, and to take any necessary response action when s/he determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA RPM from the area under study pursuant to this Settlement Agreement shall not be cause for the stoppage or delay of Work.

53. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. § 9604(a). Such person shall have the authority to observe Work and make inquiries in the absence of EPA, but not to modify the RI/FS Work Plan or SAPs.

IX. WORK TO BE PERFORMED

54. The Respondent shall conduct the RI/FS in accordance with the provisions of this Settlement Agreement, the RI/FS Work Plan, CERCLA, the NCP, and EPA guidance, including, but not limited to the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility

Studies under CERCLA" ("RI/FS Guidance") (OSWER Directive #9355.3-01, Oct. 1988 or subsequently issued guidance), "Guidance for Data Useability in Risk Assessment" (OSWER Directive # 9285.7-09A, Apr. 1992 or subsequently issued guidance), and guidance referenced therein. The remedial investigation ("RI") shall consist of collecting data to characterize conditions related to PFAS at TAA Property, determining the nature and extent of the PFAS contamination at or from TAA Property, 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. 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 PFAS hazardous substances, pollutants, or contaminants at or from TAA Property. The alternatives evaluated must include, but shall not be limited to, the range of alternatives described in the NCP, 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, the Respondent shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and Section 300.430(e) of the NCP, 40 C.F.R. § 300.430.

55. The Parties understand and agree that there are thousands of PFAS-containing substances and that EPA-approved Method 1633 (Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS) has been approved for sampling and analysis of only some of those substances. Nothing in this Settlement Agreement or the accompanying Statement of Work shall be construed as (1) requiring TAA to perform an RI or an FS for PFAS substances for which Method 1633 or other method has not been approved for testing by EPA or (2) requiring TAA to perform additional sampling, testing, or other investigative action based on the existence of a new or different EPA-approved testing protocol at any location or area at which sampling has already occurred and valid laboratory results have already been obtained in accordance with an EPA-approved Work Plan.

56. The Respondent shall submit all deliverables to EPA and DEQ in electronic form. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5" by 11" the

57. <u>Technical Specifications for Deliverables</u>. The Respondent shall submit all sampling and monitoring data in accordance with the Electronic Data Deliverable (EDD) format prescribed in the RI/FS Work Plan.

58. <u>Geographic Information System (GIS) Deliverables.</u> The Respondent shall submit all spatial data, including spatially-referenced data and geospatial data, in accordance with the RI/FS Work Plan. Spatial data submitted by the Respondent does not, and is not intended to, define the boundaries of the Site. The delineation of Site boundaries is based upon the nature and extent of contamination, and where the contaminant(s) of concern has come to be located.

59. Modification of the RI/FS Work Plan.

- a. If at any time during the RI/FS process, the Respondent identifies a need for additional data or deletion of tasks from the RI/FS work plan, the Respondent shall submit a memorandum documenting the need for additional data or task deletion to the EPA RPM within 30 days after identification. EPA, in its discretion, will determine whether the additional data will be collected by the Respondent and whether it will be incorporated into plans, reports, and other deliverables, or the task deleted.
- b. In the event of unanticipated conditions or changed circumstances that could materially change the scope or schedule of the RI/FS Work Plan, the Respondent shall notify the EPA RPM by telephone within 24 hours of discovery of the unanticipated or changed circumstances and in writing within 7 days. The EPA may determine that changes to the RI/FS Work Plan are necessary because of the unanticipated conditions or changed circumstances.
- c. EPA may determine 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.
- d. The Respondent shall confirm its willingness to perform the additional Work in writing to EPA within 7 days after receipt of the EPA request. If the Respondent objects to any modification determined by EPA to be necessary pursuant to this Paragraph, the Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution). The RI/FS Work Plan and/or SAPs shall be modified in accordance with the final resolution of the dispute, and Respondent agrees to perform the tasks in the modified RI/FS Work Plan or SAPs.
- e. The Respondent 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 and/or SAPs. EPA reserves the right to conduct the Work itself at any point if the Respondent does not perform the Work, to seek reimbursement from the Respondent, and/or to seek any other appropriate relief.
- f. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions at TAA Property or the Site.

60. Off-Site Shipment.

a. The Respondent may ship hazardous substances, pollutants and contaminants from TAA Property to an off-site facility only if they comply with Section 121 of CERCLA, 42 U.S.C. § 9621(d)(3) and 40 C.F.R. § 300.440. The Respondent will be deemed to be in compliance with CERCLA Section 121 and 40 C.F.R. § 300.440 regarding a shipment if the Respondent obtains a prior determination from EPA that the proposed receiving facility

for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b). The Respondent may ship Investigation Derived Waste (IDW) from TAA Property to an off-site facility only if the Respondent complies with EPA's "Guide to Management of Investigation Derived Waste," OSWER Directive #9345.3-03FS (Jan. 1992).

b. The Respondent may ship Waste Material from TAA Property to an out-of-state waste management facility only if, prior to any shipment, it provides written notice to the appropriate state environmental official in the receiving facility's state and to the EPA RPM. This written 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. The Respondent also shall notify the state environmental official referenced above and the EPA RPM of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. The Respondent shall provide the written notice after the award of the contract for remedial investigation and feasibility study and before the Waste Material is shipped.

61. <u>Meetings.</u> The Respondent shall make presentations at, and participate in, meetings at the request of EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.

62. Progress Reports. In addition to the plans, reports, and other deliverables set forth in this Settlement Agreement, the Respondent shall provide to EPA and the ADEQ State Project Officer quarterly progress reports for the periods, November/December/January, by February 28th, and February/March/April, by May 30th. The Respondent shall also provide to EPA and the ADEQ State Project Officer monthly progress reports during the months of May through October by the 30th day of the following month. At a minimum, with respect to the preceding quarter or month, these progress reports shall (a) describe the actions that have been taken to comply with this Settlement Agreement during that quarter or month, (b) include, or make available by reference to a web available data site, all validated results of sampling and tests and all other validated data received by the Respondent, (c) describe Work planned for the next quarter or two months with schedules relating such Work to the overall project schedule for RI/FS completion, and (d) 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. The Respondent shall provide to EPA and the State Project Officer database updates on a quarterly basis by the end of the month following the end of the quarter. If the Respondent has no activity to report during a particular quarter or month, the Respondent shall send an email to the EPA RPM and ADEQ State Project Officer stating that there is nothing to report for that period.

63. Emergency Response and Notification of Releases.

- a. In the event of any action or occurrence during, arising from or relating to performance of the Work that causes or threatens a release of Waste Material from the Site which constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, the Respondent shall immediately take all appropriate action. The Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan (HASP), in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. The Respondent shall also immediately notify the EPA RPM or, in the event of his/her unavailability, the EPA Regional Duty Officer, Emergency Response Unit, at (303) 293-1788, and the National Response Center at (800) 424-8802 of the incident or site conditions.
- b. The Respondent shall also notify the ADEQ State Project Officer (Christian Perkovac), by email at <u>Perkovac.chris@azdeq.gov</u>, and the State of Arizona's Division of Emergency Management 24-hour telephone number. If no one can be reached at the Arizona Division of Emergency Management telephone number, the Respondent shall report the release to the ADEQ duty officer. In the event that the Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, the Respondent shall reimburse the EPA for all costs of the response action not inconsistent with the NCP.
- c. In addition, in the event of any release of a hazardous substance from the Site, the Respondent shall immediately notify the EPA RPM, the EPA Regional Duty Officer, Emergency Response Unit, at (800) 300-2193, and the National Response Center at (800) 424-8802. The Respondent shall submit a written report to EPA within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, et seq.

64. **Efforts to Coordinate with Non-Parties to the Settlement Agreement**. The Respondent shall make best efforts to coordinate in the performance of any activity undertaken to prevent or mitigate PFAS impacts at TARP by any person not a party to this Settlement Agreement who offers to perform or, in lieu of performance to pay for, in whole or in part, such activity. Best efforts to coordinate shall include, at a minimum:

- (a) Replying in writing within a reasonable period of time to offers to perform or pay for activities to prevent or mitigate PFAS impacts to TARP;
- (b) engaging in good-faith negotiations with any person not a party to this Settlement Agreement who offers to perform or to pay for, activities to prevent or mitigate PFAS impacts to TARP; and
- (c) good-faith consideration of good-faith offers to perform or pay for activities to prevent or mitigate PFAS impacts to TARP.

65. The Parties understand and agree that Respondent's efforts pursuant to Paragraph 64, above, could result in Respondent reaching an agreement with a person not a party to this Settlement Agreement under which Respondent agrees to (a) cooperate in the funding of capital improvements to the TARP system (including, but not limited to, an ion exchange system) that would improve the ability of TARP to treat PFAS and/or (2) contribute towards the operation and maintenance costs associated with the treatment of PFAS at TARP ("Future PFAS TARP Costs"). If Respondent reaches such an agreement ("Future PFAS Costs Agreement"), then Respondent may submit a Future PFAS Costs Agreement(s) to EPA as a response plan for approval in accordance with Section X (EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS) of this Settlement Agreement, and EPA will approve the Future PFAS Costs Agreement if it determines that such agreement represents a good faith settlement of Respondent's potential liability for Future PFAS TARP Costs. Implementation of any such approved response plan will be deemed Work to satisfy the obligations of Paragraph 64 of this Settlement Agreement, will constitute an activity required to be performed under this Settlement Agreement, and will be consistent with the NCP and in the public interest, and otherwise consistent with the requirements for response actions pursuant to Sections 104(a)(1) and 122(a) of CERCLA.

X.EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

66. After review of any plan, report, or other item that is required to be submitted for approval pursuant to this Settlement Agreement, EPA shall, in a notice to the Respondent: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that the Respondent modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing the Respondent at least one notice of deficiency and an opportunity to cure within 30 days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

67. In the event of approval, approval upon conditions, or modification by EPA, pursuant to the preceding paragraph, the Respondent shall proceed to take any action required by the plan, report, or other deliverable, as approved or modified by EPA subject only to their right to invoke the Dispute Resolution procedures set forth in Section XV (Dispute Resolution) with respect to

the modifications or conditions made by EPA. Following EPA approval or modification of a submission or portion thereof, the Respondent shall not thereafter alter or amend such submission or portion thereof unless directed by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to the preceding paragraph and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XVI (Stipulated Penalties).

68. <u>Resubmission.</u>

- a. Upon receipt of a notice of disapproval, the Respondent shall, within 30 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XVI (Stipulated Penalties), shall accrue during the 30-day period or otherwise specified period but shall not be payable if the resubmission is timely provided within 30 days or such longer time as specified by EPA in its notice of disapproval.
- b. Notwithstanding the receipt of a notice of disapproval, the Respondent shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. Implementation of any non-deficient portion of a submission shall not relieve the Respondent of any liability for stipulated penalties under Section XVII (Stipulated Penalties).
- c. The Respondent shall not proceed with any activities or tasks dependent on the following draft deliverables until receiving EPA approval, approval on condition, or modification of such deliverables: SAP including phase-specific SAPS, HASPs, Baseline Human Health Risk Assessment, Ecological Risk Assessment, RI Report, Treatability Studies Report, and FS Report. While awaiting EPA approval, approval on condition, or modification of these deliverables, the Respondent shall proceed with all other tasks and activities that may be conducted independently of these deliverables, in accordance with the schedule set forth in the RI/FS Work Plan.
- d. For all remaining deliverables not listed above in subparagraph c of this numbered paragraph, the Respondent shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop the Respondent from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the RI/FS.

69. If EPA disapproves a resubmitted plan, report, or other deliverable, or portion thereof, EPA may again direct the Respondent to correct the deficiencies. EPA shall also retain the right to modify or develop the plan, report, or other deliverable. The Respondent shall implement any such plan, report, or deliverable as corrected, modified, or developed by EPA, subject only to the Respondent's right to invoke the procedures set forth in Section XV (Dispute Resolution).

70. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, the Respondent shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately unless the Respondent invokes the dispute resolution procedures in accordance with Section XV (Dispute Resolution) and EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XV (Dispute Resolution) and Section XVI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is not otherwise revoked, substantially modified, or superseded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XV (Dispute Resolution), stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVI (Stipulated Penalties).

71. In the event that EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, the Respondent shall incorporate and integrate information supplied by EPA into the final reports.

72. All plans, reports, and other deliverables submitted to EPA under this Settlement Agreement shall, upon approval or modification by EPA, be incorporated into and enforceable under this Settlement Agreement. In the event that EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement.

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

XI. QUALITY ASSURANCE, SAMPLING, AND ACCESS TO INFORMATION

74. <u>Quality Assurance</u>. The Respondent shall assure that Work performed, samples taken, and analyses conducted conform to the requirements of the SOW, SAPS, and guidances identified therein. The Respondent shall assure that field personnel used by the Respondent are properly trained in the use of field equipment and in chain of custody procedures. The Respondent shall only use laboratories that have a documented quality system that complies with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, Mar. 2001; Reissued May 2006) or equivalent documentation as determined by EPA.

- 75. <u>Sampling.</u>
 - a. All validated results of sampling, tests, modeling, or other validated data generated by the Respondent, or on the Respondent's behalf, during the period that this Settlement

Agreement is effective, shall be submitted to EPA in the next progress report as described herein. EPA will make validated data generated by EPA available to the Respondent unless it is exempt from disclosure by any federal or state law or regulation.

b. The Respondent shall orally notify EPA and DEQ at least 30 days prior to conducting significant field events as described in the RI/FS Work Plan or SAPs. At EPA's oral or written request, or the request of the EPA's oversight assistant, the Respondent shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) and DEQ of any samples collected in implementing this Settlement Agreement. All split samples of the Respondent shall be analyzed by the methods identified in the applicable Quality Assurance Project Plan.

76. <u>Access to Information.</u>

- a. The Respondent shall provide to EPA and ADEQ, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form, but not including materials and communications that are otherwise protected from disclosure under the attorney-client privilege, attorney work product doctrine, or any other applicable privilege) (hereinafter referred to as "Records") within their possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. The Respondent shall also make available to EPA and ADEQ, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.
- b. The Respondent may assert business confidentiality claims covering part or all of the Records submitted to EPA and DEQ under this Settlement Agreement 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). Records determined to be confidential by EPA 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 the Respondent 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 the Respondent. The Respondent shall segregate and clearly identify all Records submitted under this Settlement Agreement for which the Respondent asserts business confidentiality claims.
- c. The Respondent may assert that certain Records are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Respondent asserts such

a privilege in lieu of providing Records, they shall provide EPA and DEQ with the following: (i) the title of the Record; (ii) the date of the Record; (iii) the name, title, affiliation (e.g., company or firm), and address of the author of the Record; (iv) the name and title of each addressee and recipient; (v) a description of the contents of the Record that is sufficiently vague so as to not reveal the substance of the privileged materials; and (vi) the privilege asserted by the Respondent.

d. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other Records evidencing conditions at or around TAA Property.

77. In entering into this Settlement Agreement, the Respondent waives any objections to any data gathered, generated, or evaluated by EPA or the Respondent in the performance or oversight of the Work that has been verified according to the quality assurance/quality control ("QA/QC") procedures required by the Settlement Agreement, or any EPA-approved work plans or SAPs. If the Respondent objects to any other data relating to the RI/FS, the Respondent 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 15 days after the next progress report containing the data.

XII. SITE ACCESS AND INSTITUTIONAL CONTROLS

78. If TAA Property, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by the Respondent, the Respondent shall, commencing on the Effective Date, provide EPA and ADEQ and EPA and ADEQ representatives, including contractors, with access at all reasonable times to TAA Property, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.

79. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than the Respondent, the Respondent shall use its best efforts to obtain all necessary access agreements within 90 days after the Effective Date, or as otherwise specified in writing by the EPA RPM. The Respondent shall notify EPA within 10 days if after using their best efforts they are unable to obtain such agreements. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access. The Respondent shall describe in writing their efforts to obtain access. If the Respondent cannot obtain access agreements, EPA may either (a) obtain access for the Respondent or assist the Respondent in gaining access, to the extent necessary to effectuate the response actions described in this Settlement Agreement, using such means as EPA deems appropriate; (b) perform those tasks or activities with EPA contractors; or (c) terminate the Settlement Agreement. The Respondent shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access. If EPA performs those tasks or activities with EPA

contractors and does not terminate the Settlement Agreement, the Respondent shall perform all other tasks or activities not requiring access to that property, and shall reimburse EPA for all costs incurred in performing such tasks or activities. The Respondent shall integrate the results of any such tasks or activities undertaken by EPA into its plans, reports, and other deliverables.

80. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIII. COMPLIANCE WITH OTHER LAWS

81. The Respondent shall comply with 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 any action conducted entirely within the Site, 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 is to be conducted off-Site and requires a federal or state permit or approval, the Respondent shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIV. RECORDS

82. **Respondent's Certification**. Respondent certifies that: (a) it has implemented a litigation hold on documents and electronically stored information relating to the TAA Property, including information relating to its potential liability under CERCLA related to PFAS regarding the Site; and (b) it has fully complied with any and all EPA requests for information under sections 104(e) and 122(e) of CERCLA, and section 3007 of RCRA.

83. **Retention of Records and Information**

- a. Respondent shall retain, and instruct its contractors and agents to retain, the following documents and electronically stored data ("Records") until 10 years after the Notice of Completion of the Work:
 - il. All records regarding Respondent's liability and the liability of any other person under CERCLA related to PFAS regarding TAA Property;
 - ii. All reports, plans, permits, and documents submitted to EPA in accordance with this Settlement, including all underlying research and data; and
 - iii. All data developed by, or on behalf of, Respondent in the course of performing the Work.

b. At the end of the Record Retention Period, the Respondent shall notify EPA and ADEQ that it has 90 days to request the Respondent's Records subject to this Section. The Respondent shall retain and preserve its Records subject to this Section until 90 days after EPA's and ADEQ's receipt of the notice. These record retention requirements apply regardless of any corporate record retention policy.

84. The Respondent shall provide to EPA and ADEQ, upon request, copies of all Records and information required to be retained under this Section. The Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

85. Privileged and Protected Claims

- a. Respondent 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 that Respondent comply with subparagraph b of this Paragraph, and except as provided in subparagraph c of this Paragraph.
- b. If the Respondent asserts a claim of privilege or protection, it 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, the Respondent shall provide the record to EPA in redacted form to mask the privileged or protected portion only. The Respondent 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.
- c. The Respondent shall not make any claim of privilege or protection regarding: (1) any data regarding TAA Property, 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 TAA Property; or (2) the portion of any record that the Respondent is required to create or generate in accordance with this Settlement.

86. **Confidential Business Information Claims**. The Respondent is entitled to claim that all or part of a record submitted to EPA under this Section is Confidential Business Information ("CBI") that is covered by section 104(e)(7) of CERCLA and 40 C.F.R. § 2.203(b). The Respondent shall segregate all records or parts thereof submitted under this Settlement which it claims is CBI and label them as "claimed as confidential business information" or "claimed as CBI." Records that a submitter properly labels in accordance with the preceding sentence will be afforded the protections specified in 40 C.F.R. part 2, subpart B. If the records are not properly labeled when

they are submitted to EPA, or if EPA notifies the submitter that the records are not entitled to confidential treatment 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 the submitter.

87. 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.

XV. DISPUTE RESOLUTION

88. Unless otherwise provided in this Settlement Agreement, Respondent shall use the dispute resolution procedures of this Section to resolve any dispute arising under this Settlement Agreement.

89. A dispute will be considered to have arisen when one or more parties sends a written notice of dispute ("Notice of Dispute") to EPA. Disputes arising under this Settlement must in the first instance be the subject of informal negotiations between the parties to the dispute. If Respondent objects to any EPA action taken pursuant to this Settlement, it shall send EPA a Notice of Dispute describing the objection(s) within 7 days after such action. The period for informal negotiations may not exceed 15 days after the dispute arises, unless EPA otherwise agrees. If the parties cannot resolve the dispute by informal negotiations, the position advanced by EPA is binding unless Respondent initiates formal dispute resolution under the following Paragraph (Formal Dispute Resolution). By agreement of the parties, mediation may be used during this informal negotiation period to assist the parties in reaching a voluntary resolution or narrowing of the matters in dispute.

90. Formal Dispute Resolution

- a. Statements of Position. Respondent may initiate formal dispute resolution by submitting, within seven days after the conclusion of informal dispute resolution under the first paragraph of this Section, an initial Statement of Position regarding the matter in dispute. The EPA's responsive Statement of Position is due within 20 days after receipt of the initial Statement of Position. All Statements of Position must include supporting factual data, analysis, opinion, and other documentation. If appropriate, EPA may extend the deadlines for filing statements of position for up to 15 days and may allow the submission of supplemental statements of position.
- b. Formal Decision. The Director of the Superfund & Emergency Management Division, EPA Region 9, will issue a formal decision resolving the dispute ("Formal Decision") based on the statements of position and any replies and supplemental statements of position. The Formal Decision is binding on Respondents, and shall be incorporated into and become an enforceable part of this Settlement Agreement.

91. The initiation of dispute resolution procedures under this Section does not extend, postpone, or affect in any way any requirement of this Settlement, except as EPA agrees. Stipulated penalties with respect to the disputed matter will continue to accrue, but payment is stayed pending resolution of the dispute, as provided in the Accrual of Penalties paragraph of Section XVI (Stipulated Penalties).

XVI. STIPULATED PENALTIES

92. The Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in the next paragraph for failure to comply with any of the requirements of this Settlement Agreement specified below unless excused under Section XVII (Force Majeure).

93. Stipulated Penalty Amounts - Work (Including Payments).

a. Major Deliverables. Stipulated penalties shall accrue for each day of noncompliance for failure to timely submit the following deliverables or to submit such deliverables in compliance with the terms of this Settlement Agreement, the RI/FS Work Plan or any SAP:

Major Deliverables	Stipulated Penalty Amount
1. Draft and Final Baseline Risk Assessment	\$1,000 per day for the first 14 days of noncompliance
2. Draft and Final Remedial Investigation Report	\$2,000 per day for the 15th through 30th day of noncompliance
3. Draft and Final Feasibility Study Report	\$4,000 per day per violation lasting beyond 30 days

b. Interim Deliverables. Stipulated penalties shall accrue for each day of noncompliance for failure to timely submit the following deliverables or to submit such deliverables in compliance with the terms of this Settlement Agreement, the RI/FS Work Plan or any SAP:

Interim Deliverables	Stipulated Penalty Amount
1. Any revised work plan	\$1,000 per day for the first 14 days of noncompliance
2. An initial HASP, and revised tas	•
specific HASPs	\$2,000 per day for the 15th through 30th day of noncompliance
3. Phase-specific sampling and	, .
analysis plans	\$4,000 per day per violation lasting beyond 30 days
4. Summary report for eac investigative phase of the RI	
5. An original and any revised technical memorandum	
6. An original and any revised letter report	
7. Draft and Final Treatability Studies Technical Report	
8. Project database and any project database updates	t

c. Other Violations. Stipulated penalties shall accrue for each day of noncompliance for the following violations.

Other Violations	Stipulated Penalty Amount

 \$1,000 per day for the first 14 days of noncompliance \$2,000 per day for the 15th through 30th day of noncompliance
\$4,000 per day per violation lasting beyond 30 days

94. **Work Takeover Penalty**. If EPA commences a Work Takeover under the Work Takeover Paragraph, in Section XIX (Reservation of Rights by EPA), Respondent is liable for a stipulated penalty in the amount of <u>\$1.2 million</u>.

95. Accrual of Penalties. Stipulated penalties accrue from the date performance is due, or the day a noncompliance occurs, whichever is applicable, until the date the requirement is completed or the final day of the correction of the noncompliance. Nothing in this Settlement prevents the simultaneous accrual of separate penalties for separate noncompliances with this Settlement. Stipulated penalties accrue regardless of whether Respondent has been notified of its noncompliance, and regardless of whether Respondent has initiated dispute resolution under Section XV, provided, however, that no penalties will accrue as follows:

a. with respect to a submission that EPA subsequently determines is deficient, during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; or

b. with respect to a matter that is the subject of dispute resolution under Section XV during the period, if any, beginning on the 21st day after EPA's Statement of Position is received until the date of the Formal Decision under Section XV.

96. **Demand and Payment of Stipulated Penalties.** EPA may send Respondent a demand for stipulated penalties. The demand will include a description of the noncompliance and will specify the amount of the stipulated penalties owed. Respondent may initiate dispute resolution under Section XV within 30 days after receipt of the demand. Respondent shall pay the amount demanded or, if they initiate dispute resolution, the uncontested portion of the amount demanded, within 30 days after receipt of the demand. Respondent shall pay the contested portion of the penalties determined to be owed, if any, within 30 days after the resolution of the dispute. Each payment for: (a) the uncontested penalty demand or uncontested portion, if late, and; (b) the contested portion of the penalty demand determined to be owed, if any, must include an additional amount for Interest accrued from the date of receipt of the demand through the date of payment. Respondent shall make payment at https://www.pay.gov using the link for "EPA Miscellaneous Payments Cincinnati Finance Center," including references to the Site Name, Docket Number, and Site/Spill ID number and the purpose of the payment. Respondent shall send notices of this payment to EPA. The payment of stipulated penalties and Interest, if any, does not alter any obligation by Respondent under the Settlement.

97. Nothing in this Settlement limits the authority of the EPA to seek any other remedies or sanctions available by virtue of Respondent's noncompliances with this Settlement or of the statutes and regulations upon which it is based, including penalties under Sections 106(b) and 122(I) of CERCLA, and punitive damages pursuant to Section 107(c)(3), provided, however, that the EPA may not seek civil penalties under Section 122(I) of CERCLA for any noncompliance for which a stipulated penalty is provided for in this Settlement, except in the case of a willful noncompliance with this Settlement or in the event that EPA assumes performance of a portion or all of the Work pursuant to the Work Takeover Paragraph of Section XIX (EPA Reservation of Rights).

98. Notwithstanding any other provision of this Section, the EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued under this Settlement.

XVII. FORCE MAJEURE

99. "Force majeure," for purposes of this Settlement, means any event arising from causes beyond the control of Respondent, of any entity controlled by Respondent, or of Respondent's contractors that delays or prevents the performance of any obligation under this Settlement despite Respondent's best efforts to fulfill the obligation. Given the need to protect public health and welfare and the environment, the requirement that Respondent exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse

effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work, or increased cost of performance.

If any event occurs for which Respondent will or may claim a force majeure, Respondent 100. shall notify EPA's RPM by email. The deadline for the initial notice is 3 days after the date Respondent first knew or should have known that the event would likely delay performance. Respondent shall be deemed to know of any circumstance of which any contractor of, subcontractor of, or entity controlled by Respondent knew or should have known. Within 7 days thereafter, Respondent shall send a further notice to EPA that includes: (a) a description of the event and its effect on Respondent's completion of the requirements of the Settlement; (b) a description of all actions taken or to be taken to prevent or minimize the adverse effects or delay; (c) the proposed extension of time for Respondent to complete the requirements of the Settlement; (d) a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or welfare, or the environment; and (e) all available proof supporting their claim of force majeure. Failure to comply with the notice requirements herein regarding an event precludes Respondent from asserting any claim of force majeure 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 under this Section (Force Majeure) and whether Respondent has exercised best efforts under this Section (Force Majeure), EPA may, in its unreviewable discretion, excuse in writing Respondent's failure to submit timely or complete notices under this Paragraph.

101. EPA will notify Respondent of its determination whether Respondent is entitled to relief under this Section (Force Majeure), and, if so, the duration of the extension of time for performance of the obligations affected by the force majeure. An extension of the time for performance of the obligations affected by the force majeure shall not, of itself, extend the time for performance of any other obligation. Respondent may initiate dispute resolution under Section XV (Dispute Resolution) regarding EPA's determination within 15 days after receipt of the determination. In any such proceeding, Respondent has the burden of proving that it is entitled to relief under this Section (Force Majeure) and that its proposed extension was or will be warranted under the circumstances.

102. The failure by EPA to timely complete any activity under the Settlement is not a violation of the Settlement, provided, however, that if such failure prevents Respondent from timely completing a requirement of the Settlement, Respondent may seek relief under this Section.

XVIII. COVENANTS BY EPA

103. In consideration of the actions that will be performed by the Respondent under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against the Respondent pursuant to Section 106 of CERCLA, 42 U.S.C. 9606, for the Work. This covenant not to sue shall take effect upon the Effective Date. This covenant not to sue is conditioned upon the

Respondent pursuant to Section 106 of CERCLA, 42 U.S.C. 9606, for the Work. This covenant not to sue shall take effect upon the Effective Date. This covenant not to sue is conditioned upon the complete and satisfactory performance by the Respondent of its obligations under this Settlement Agreement. This covenant not to sue extends only to the Respondent and does not extend to any other person.

XIX. RESERVATION OF RIGHTS BY EPA

104. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement 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 Agreement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring the Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

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

- a. liability for failure by the Respondent to meet a requirement of this Settlement Agreement;
- b. liability for costs;
- c. liability for performance of response action other than the Work;
- d. criminal liability;
- e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
- g. liability for costs incurred or to be incurred by the ATSDR related to the Site.

106. <u>Work Takeover</u>. In the event that EPA determines that the Respondent has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner that may cause an

endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. The Respondent may invoke the procedures set forth in Section XV (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

107. The EPA hereby reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, which may pertain to Respondent's failure to comply with any of the requirements of this Settlement Agreement. Nothing in this Settlement Agreement shall diminish, impair, or otherwise adversely affect the authority of the EPA to enforce the provisions of this Settlement Agreement.

108. This Settlement Agreement shall not limit or otherwise preclude the EPA from taking additional enforcement action pursuant to any other available legal authority, should the EPA determine that such action is warranted and necessary to protect human health and the environment.

XX. COVENANTS BY RESPONDENT

109. Covenants by the Respondent

- a. Subject to subparagraph 109(c), the Respondent covenants not to sue and shall not assert any claim or cause of action against the United States under CERCLA, section 7002(a) of RCRA, the United States Constitution, the Tucker Act, 28 U.S.C.
 § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, the State Constitution, State law, or at common law regarding the Work, and this Settlement Agreement.
- b. Subject to the next subparagraph, Respondent covenants not to seek reimbursement from the Fund through CERCLA or any other law for costs of the Work.
- c. Notwithstanding the foregoing Covenants by Respondent, the Parties agree that Respondent expressly reserves any claims Respondent may have against any agency or instrumentality of the United States other than EPA that handled, stored, used or directed the use of products containing PFAS at the Site: (1) under CERCLA Section 113, based on the United States' alleged status as a potentially responsible party with respect to PFAS contamination at the Site; (2) under any other theory or liability, whether legal or equitable, arising from the release or threatened release of PFAS by the United States in or around the Site, including claims brought under the Federal Tort Claims Act; and/or (3) under any contractual obligation or other agreement that it has, whether written or oral and whether express or implied, related to PFAS contamination at or around the Site.

110. **Respondent's Reservation**. The covenants in the preceding paragraph do not apply to any claim or cause of action brought, or order issued, after the Effective Date by the United States to the extent such claim, cause of action, or order is within the scope of a reservation under the second paragraph of Section XIX (Reservation of Rights by EPA).

111. De Minimis/Ability to Pay/Community PFAS Waiver.

- a. Respondent shall not assert any claims and waives all claims or causes of action (including claims or causes of action under Sections 107(a) and 113 of CERCLA) that it may have against any third party who enters or has entered into a *de minimis* or "ability-to-pay" settlement with EPA in relation to PFAS contamination at the Site to the extent Respondent's claims and causes of action are within the scope of the matters addressed in the third party's settlement with EPA. EPA represents and warrants that, as of the Effective Date, it has not entered into any such settlements related to PFAS. This waiver does not apply if the third party asserts a claim or cause of action regarding the Site against the Respondent. Nothing in this Settlement limits Respondent's rights under Section 122(d)(2) of CERCLA to comment on any *de minimis* or ability-to-pay settlement proposed by EPA.
- b. Respondent shall not assert any claims and waives all claims or causes of action (including claims or causes of action related to PFAS under Sections 107(a) and 113 of CERCLA) that it may have against any: (1) Community water systems and publicly owned treatment works (POTWs); (2) Municipal separate storm sewer systems (MS4s); (3) Publicly owned/operated municipal solid waste landfills; (4) Publicly owned airports and local fire departments; (5) Farms where biosolids are applied to the land; and (6) any third party who enters or has entered into a settlement with EPA in relation to PFAS contamination at the Site based on equitable factors that do not support seeking PFAS response actions or costs under CERCLA to the extent that Respondent's claims and causes of action are within the scope of the matters addressed in this Settlement Agreement, provided, however, that: (1) this waiver does not apply if the third party asserts a claim or cause of action regarding the Site against the Respondent; and (2) this clause does not restrict Respondent from bringing an action against any "major PRP," which means a party that has played a significant role in releasing or exacerbating the spread of PFAS into the environment, even if that party fits within one or more of the six categories identified in this paragraph. Nothing in this Settlement limits Respondent's rights under section 122(d)(2) of CERCLA to comment on any settlement with such third party(ies).

XXI. OTHER CLAIMS

112. Subject to Paragraph 109(c), the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of the Respondent.

113. Except as expressly provided in Section XVIII (Covenants by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against the Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to 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.

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

XXII. EFFECT OF SETTLEMENT/CONTRIBUTION

115. The Parties agree that: (a) this Settlement constitutes an administrative settlement under which the Respondent has, as of the Effective Date, resolved its liability to EPA within the meaning of sections 113(f)(2), 113(f)(3)(B), and 122(h)(4) of CERCLA; and (b) the Respondent 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 Agreement are the Work, and provided, however, that if EPA exercises rights under the reservations in the second paragraph of Section XIX (Reservation of Rights by EPA), the "matters addressed" in this Settlement do not include those response actions that are within the scope of the exercised reservation.

116. The Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement, notify EPA no later than 60 days prior to the initiation of such suit or claim. The Respondent shall, with respect to any suit or claim brought against it for matters related to this Settlement, notify EPA within 10 days after service of the complaint on such Respondent. In addition, each Respondent shall notify EPA within 10 days after receipt of any order from a court setting a case for trial.

117. **Res Judicata and Other Defenses**. In any subsequent administrative or judicial proceeding initiated against any Respondent by EPA or by the United States on behalf of EPA for injunctive relief, recovery of response costs, or other appropriate relief relating to PFAS contamination at the Site, the Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, claim preclusion (res judicata), issue preclusion (collateral estoppel), claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case.

118. Except as provided in the *De Minimis*/Ability to Pay Waiver Paragraph of Section XX (Covenants by Respondent) nothing in this Settlement creates any rights in, or grants any defense or cause of action to, any person not a Party to this Settlement. Except as provided in

Section XX (Covenants by Respondent), each of the Parties expressly reserves any and all rights (including pursuant to section 113 of CERCLA), defenses, claims, demands, and causes of action that each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement diminishes the right of the United States under section 113(f)(2) and (3) of CERCLA to pursue any person not a party to this Settlement 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).

XXIII. INDEMNIFICATION

119. The Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees, and representatives from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of the Respondent and its officers, directors, employees, agents, contractors, subcontractors, and representatives in carrying out actions pursuant to this Settlement Agreement. In addition, the Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys' fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of the Respondent, its officers, directors, employees, agents, contractors, subcontractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of the Respondent in carrying out activities pursuant to this Settlement. Neither the Respondent nor any such contractor shall be considered an agent of the United States.

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

121. Except as provided in Paragraph 109(c), the Respondent waives all claims 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 the Respondent and any person for performance of Work on or relating to the Site. In addition, the Respondent 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 person for performance of Work on or relating to the Site. In addition, the Respondent 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 the Respondent and any person for performance of Work on or relating to the Site.

XXIV. INSURANCE

122. At least 14 days prior to commencing any on-Site Work on TAA Property under this Settlement Agreement, the Respondent shall secure, and shall maintain for the duration of this Settlement Agreement, commercial general liability insurance with limits of one million dollars,

for any one occurrence, and automobile insurance with limits of one million dollars, combined single limit, naming EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of the Respondent pursuant to this Settlement Agreement. Within the same period, the Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. The Respondent shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, the Respondent 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 the Work on behalf of the Respondent in furtherance of this Settlement Agreement. If the Respondent demonstrates 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 an equal or lesser amount, then the Respondent needs provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXV. FINANCIAL ASSURANCE

123. In order to ensure completion of the Work, the Respondent shall establish and maintain financial assurance in the amount of \$12 million dollars 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 the "Financial Assurance" category on the Cleanup Enforcement Model Language and Sample Documents Database at http://cfpub.epa.gov/compliance/models/, and satisfactory to EPA. Respondent 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 unconditionally guaranteeing payment and/or performance of the Work;
- b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA equaling the total estimated cost of the Work;
- c. a trust fund administered by a trustee acceptable in all respects to EPA;
- d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the work;
- e. a written guarantee to pay for or perform the Work provided by one or more parent companies of the Respondent, or by one or more unrelated companies that have a substantial business relationship with the Respondent, including a demonstration that any such guarantor company satisfies the financial test requirements of 40 C.F.R. Part 264.143(f); and/or

f. a demonstration of sufficient financial resources to pay for the Work made by the Respondent, which shall consist of a demonstration that any such Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).

124. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, the Respondent shall, within 30 days after receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in the first paragraph of this Section XXV (Financial Assurance). In addition, if at any time EPA notifies the Respondent that the anticipated cost of completing the Work has increased, then, within 30 days after such notification, the Respondent shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. The Respondent's inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

125. If, after the Effective Date, the Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in the first paragraph of this Section XXV (Financial Assurance), the Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. The Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA.

126. In the event of a dispute, the Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution). The Respondent may reduce the amount of security in accordance with EPA's written decision resolving the dispute.

127. The Respondent may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, the Respondent may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

XXVI. APPENDICES

128. The following appendices are attached to and incorporated into this Settlement Agreement.

Appendix A: Statement of Work Appendix B: The Site and TAA Property

XXVII. MODIFICATIONS

129. The Parties may modify any plan or schedule or SOW in writing or by oral agreement. EPA will promptly memorialize in writing any oral modification, which will be effective on the date of the oral agreement. Any other requirements of this Settlement may be modified only in writing by mutual agreement of the parties. If the Respondent seeks permission to deviate from any approved Work Plan or schedule or the SOW, the Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. The Respondent may not proceed with a requested deviation until receiving oral or written approval from the EPA RPM pursuant to the preceding paragraph.

130. No informal advice, guidance, suggestion, or comment by the EPA RPM or other EPA representatives regarding any deliverable submitted by Respondent relieves Respondent 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.

XXVIII. NOTICE OF COMPLETION OF WORK

131. When EPA determines that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including but not limited to record retention, EPA will provide written notice to the Respondent. If EPA determines that any Work has not been completed in accordance with this Settlement Agreement, EPA will notify the Respondent, provide a list of the deficiencies, and require that the Respondent modify the RI/FS Work Plan and SAPS if appropriate in order to correct such deficiencies, in accordance with the Paragraph titled Modification of the RI/FS Work Plan in Section IX (Work to Be Performed). Failure by the Respondent to implement the approved modified RI/FS Work Plan or SAPS shall be a violation of this Settlement Agreement.

XXIX. SIGNATORIES

132. The undersigned representative of EPA and undersigned representative of the 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 such party to this Settlement.

XXX. INTEGRATION

133. This Settlement constitutes the entire agreement among the Parties regarding the subject matter of the Settlement and supersedes all prior representations, agreements and understandings, whether oral or written, regarding the subject matter of the Settlement.

XXXI. EFFECTIVE DATE

Administrative Order on Consent, Docket Nos. CERCLA-9-2024-07

134. This Settlement Agreement shall be effective on the day that it is signed by the Director of the Superfund and Emergency Management Division of Region 9 of EPA, who shall be the last signatory to this Settlement Agreement.

IT IS SO AGREED AND ORDERED:



Dated

Michael Montgomery Director, Superfund and Emergency Management Division EPA Region 9

Administrative Order on Consent, Docket Nos. CERCLA-9-2024-07

Signature Page for Settlement Regarding Tucson International Airport Area Superfund Site

FOR: TUCSON AIRPORT AUTHORITY

8 28 24

Dated

mentery

Name:Danette BewleyTitle:President/CEOAddress:7250 S. Tucson Blvd., Suite 300Tucson, AZ 85756

Administrative Order on Consent, Docket Nos. CERCLA-9-2024-07

APPENDIX A

REMEDIAL INVESTIGATION/FEASIBILITY STUDY STATEMENT OF WORK TUCSON AIRPORT AUTHORITY OPERABLE UNIT 6 TUCSON INTERNATIONAL AIRPORT AREA SUPERFUND SITE Tucson, Pima County, State of Arizona EPA Region IX

CONTENTS

1.	INTRODUCTION	3
2.	COMMUNITY INVOLVEMENT	3
3.	REMEDIAL INVESTIGATION	5
4.	FEASIBILITY STUDY	. 11
5.	MEETINGS, PERMITS, and REPORTS	. 14
6.	DELIVERABLES	. 16
7.	SCHEDULE	. 20
8.	REFERENCES	. 21

1. INTRODUCTION

- **1.1 Purpose of the SOW**. This SOW sets forth the procedures, requirements, and recommendations for implementing the Work to develop and perform the remedial investigation ("RI") and the feasibility study ("FS") for Per- and Polyfluoroalkyl substances at the Tucson Airport Authority property ("TAA Property") in Operable Unit 6 ("Site") of the Tucson International Airport Area Superfund Site. Further, this SOW is a part of and incorporated into the Administrative Settlement Agreement and Order on Consent, Docket Nos. CERCLA-9-2024-07 ("Settlement Agreement")
- **1.2** The terms used in this SOW that are defined in CERCLA, in regulations promulgated under CERCLA, or in the Settlement, have the meanings assigned to them in CERCLA, in such regulations, or in the Settlement, except that the term "Paragraph" or "¶" means a paragraph of the SOW and that the term "Section" means a section of the SOW, unless otherwise stated. If there is a conflict between this SOW and the Settlement, the provisions of the Settlement shall govern.
- **1.3** At the completion of the RI/FS, EPA will be responsible for identifying a preferred remedy, soliciting, and reviewing public comments on the proposed plan, and the selection of a site remedy, and will document this selection in a record of decision ("ROD"). The remedial action alternative selected by EPA will meet the cleanup standards specified in CERCLA § 121. As specified in CERCLA § 104(a)(1), as amended, EPA or its representatives will provide oversight of Respondents' activities throughout the RI/FS.
- 1.4 Modifications to the SOW will follow procedures described in Sections VII (Performance of the Work) and XXI in the Settlement. Respondents shall refer to the Guidance for Conducting Remedial Investigations and Feasibility Studies, OSWER 9355.3-01, EPA/540/G-89/004 (Oct. 1988) ("RI/FS Guidance") in performing their responsibilities under this SOW.
- **1.5** This SOW is not intended to modify current EPA guidance or regulations, including but not limited to the guidance documents referenced in ¶ 8.1. Current EPA guidance and regulations shall control in the event of any conflict between the SOW and current EPA guidance and regulations.

2. COMMUNITY INVOLVEMENT

2.1 As requested by EPA, Respondents shall conduct community involvement activities under EPA's oversight as provided for, and in accordance with this Section. Such activities must include designation of a Community Involvement Coordinator ("CI Coordinator".

2.2 Community Involvement Responsibilities

EPA has the lead responsibility for developing and implementing community involvement ("CI") activities at sites. This includes compliance with 40 C.F.R. § 300.430(c)(2) (outlining the lead agency's community involvement responsibilities) and the preparation of a Community Involvement Plan (CIP) specifying the CI activities expected to be undertaken during the remedy response.

- (a) EPA is responsible for compliance with § 300.815(a) (making administrative record available to the public) and § 300.430(f)(3)(i)(C) (providing reasonable opportunity for submission of comments on the RI/FS and Proposed Plan), respectively.
- (b) **Respondents' CI Coordinator.** As requested by EPA, Respondents shall designate and notify EPA of Respondents' CI Coordinator. Respondents may hire a contractor for this purpose. Respondents' notice shall include the name, title, and qualifications of their CI Coordinator. Respondents' CI Coordinator is responsible for providing support regarding EPA's CI activities, including coordinating with EPA's CI Coordinator regarding responses to the public's inquiries and/or requests for information or data about the site.
- (c) As requested by EPA, Respondents shall participate in and/or conduct community involvement activities, including participation in (1) the preparation of information regarding the field sampling activities for dissemination to the public, with consideration given to including local and mass media and/or internet notification, and (2) public meetings that may be held or sponsored by EPA to explain activities at or relating to the site and (3) add other activities EPA decides are necessary to protect and address the concerns of communities with EJ concerns and overburdened communities, e.g., "giving presentations" or providing interpretation and/or translation services. Respondents' support of EPA's community involvement activities may include providing online access to initial submissions and updates of deliverables to (1) any Community Advisory Groups and (2) other entities to provide them with a reasonable opportunity for review and comment. EPA may describe in its CIP Respondents' responsibilities for community involvement activities. All community involvement activities conducted by Respondents at EPA's request are subject to EPA's oversight. Upon EPA's request, Respondents shall establish, as early as feasible, a community information repository at or near the site, as provided in the CIP, to house one copy of the administrative record.
- 2.3 Information for the Community. As requested by EPA, Respondents shall develop and provide to EPA information about the RI/FS including: (1) any validated data from field sampling activities as provided in ¶ (a) below; (2) schedules prepared under Section 7; (3) dates that Respondents completed each task listed in the schedules; and (4) digital photographs of the Work being performed, together with descriptions of the Work depicted in each photograph, the purpose of the Work, the equipment being used, and

the location of the Work. The EPA Project Coordinator may use this information for communication to the public via EPA's website, social media, or local and mass media. The information provided to EPA shall be suitable for sharing with the public (*e.g.,* drafted in plain language) and the education levels of the community as indicated in EJScreen. Translations shall be in the dominant language(s) of community members with limited English proficiency.

 (a) As requested by EPA, Respondents shall describe all community impact mitigation activities to be performed: (i) to reduce impacts (e.g., air emissions, dust, odor, traffic, noise, temporary relocation, negative economic effects) to residential areas, schools, playgrounds, healthcare facilities, or recreational public areas frequented by community members ("Community Areas") during field sampling activities; (ii) to conduct monitoring in Community Areas of impacts from field sampling activities; (iii) to communicate validated sampling data; and (iv) to make adjustments during field sampling activities in order to further reduce negative impacts to affected Community Areas. Descriptions shall contain information about impacts to Community Areas that is sufficient to assist EPA's site team in performing the evaluations recommended under the *Superfund Community Involvement Handbook*, OLEM 9230.0-51(Mar. 2020). EPA's Remedial Project Manager ("RPM") and CI Coordinator will review and approve all proposed activities.

3. **REMEDIAL INVESTIGATION**

- **3.1 Preliminary Assessment Report**. Respondents shall finalize the September 2023 Preliminary Assessment (PA) Report for EPA and State review and EPA approval. The report shall identify areas of concern (AOCs), or areas where the use of storage of AFFF may have resulted in the potential release of PFAS. Further, the PA shall evaluate each AOC in terms of a potential threat to human health and/or the environment. Respondents will refer to Table 2-1 of the *Guidance for Conducting Remedial Investigations and Feasibility Studies,* OSWER 9355.3-01, EPA/540/G-89/004 (Oct. 1988) for a comprehensive list of data collection information sources. The report shall also describe known and potential releases of Per- and Polyfluoroalkyl substances from AFFF into the environment.
- **3.2** Conceptual Site Model Development and Report. The Conceptual Site Model ("CSM") is a representation of the site that summarizes and helps project teams visualize and understand available information, and which is updated as additional information becomes available. Respondents shall update the existing CSM for EPA and State review and EPA approval. The CSM shall be based upon all available site-specific information, including known and potential Per-and Polyfluoroalkyl substances and affected media, known and potential routes of migration, and known or potential human and environmental receptors. Respondents shall provide the CSM and an accompanying summary report that documents the information used in developing the CSM, why any

available information was not used, and recommendations regarding data gaps. Respondents shall update the CSM, as requested by EPA, to account for information obtained during the RI.

- 3.3 Identification of Preliminary RAOs, PRGs and ARARs. Respondents shall develop preliminary remedial action objects ("RAOs"), which are medium-specific goals for protecting human health or the environment that specify the chemicals of concern, exposure route(s) and receptor(s) and preliminary remediation goals ("PRGs"). Respondents shall prepare a memo for EPA and State review and EPA approval providing preliminary identification of potential state and federal chemical-specific, location-specific and action-specific applicable or relevant and appropriate requirements ("ARARs") to assist in the refinement of RAOs, and the initial identification of remedial alternatives and ARARs associated with particular actions. ARAR identification will continue as site conditions, contamination, and remedial action alternatives are refined. A schedule for making formal updates to ARARs shall be formally defined and mutually agreed upon by Respondents and EPA. Respondents shall also incorporate federal and State potential ARAR and "to be considered" materials provided by EPA before or with review comments on each deliverable.
 - (a) Remedial Investigation Work Plan. Respondents shall submit an RI work plan ("RIWP") to EPA and the State for review and EPA approval, consistent with OSWER 9835.1(c). The RIWP shall include a comprehensive description of the RI Work to be performed, including the scope, methodologies, and schedule for completion. The RIWP shall also include all requirements under ¶ 3.3 unless EPA decides that one or more provisions is not necessary. The RI is typically conducted over multiple years where tasks are sequenced and scoped based on the best available information and the CSM. Therefore, there is high probability that either the sequence or scope may change as the CSM is refined and the RI progresses. A schedule for making formal updates to either sequence of scope shall be formally defined and mutually agreed upon by Respondents and EPA. The RIWP describes areas of a site that may pose potential current or future unacceptable risk to public health or welfare or the environment due to the release or threat of release of chemicals. The RIWP will present a statement describing the release or threat of release of Per- and Polyfluoroalkyl substances at or from TAA Property. Respondents will develop a specific project scope based on EPA's remedial strategy for the Site ("Site Strategy"). Because commingled contamination (e.g., Per- and Polyfluoroalkyl substances comingled with hazardous substances, pollutants or contaminants) may exist at TAA Property, addressing the constituents contaminated in the commingled contamination shall be incorporated into the FS. The RI shall consist of collecting data to characterize site conditions (including meteorology affecting the site, 40 C.F.R. § 300.430(d)(2)(i)), determining the nature and extent of the contamination at or from TAA Property, assessing risk to human health, sensitive populations (40 C.F.R. § 300.430(d)(2)(vii)) and the environment, and conducting treatability

testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. Respondents shall identify which climate-related or environmental hazards (e.g., sea level changes, increased severity of wildfire, increased storm intensity, increased flood risk, etc.) may affect the potential remedies at the site. Respondents shall use forward-looking climate data to evaluate the current and potential chemical releases and unacceptable exposure pathways.

- (b) In its description of the methodologies to be used to perform any RI Work, the RIWP shall consider the environmental footprint of all such activities and, to the extent practicable, take actions to minimize said footprint. The RIWP shall be consistent with the *Consideration of Greener Cleanup Activities in the Superfund Cleanup Process* (Aug. 2, 2016). These considerations for greener cleanups are not intended to allow cleanups that do not satisfy threshold requirements for protectiveness, or do not meet other site-specific cleanup objectives. Greener cleanup activities refer to strategies designed to help minimize the environmental footprint of cleaning up contaminated sites and ensure a protective remedy within the applicable CERCLA statutory and regulatory framework.
- **3.4 RIWP Deliverables.** The Respondents shall submit the following deliverables for EPA review and approval unless EPA decides that one or more provisions is not necessary:
 - (a) Quality Assurance Project Plan Respondents shall collect, produce, evaluate, or use environmental information under a Quality Assurance Project Plan ("QAPP") reviewed and approved by EPA with State consultation. No environmental information, as defined by AQS/ANSI E-4, will be collected, produced, evaluated, or used without an EPA approved QAPP. The QAPP will be consistent with EPA Directive CIO 2105.1 (Environmental Information Quality Policy, 2021), consistent with the most recent version of ASQ/ANSI E-4 (Quality Management Systems for Environmental Information and Technology Programs Requirements with Guidance for Use) and consistent with EPA/G-5 (EPA requirements for QAPPs).
 - (1) **Field Sampling Plan**. The field sampling plan ("FSP") shall be written so that personnel unfamiliar with the project will be able to gather the samples and field information required. The FSP shall be prepared in accordance with RI/FS Guidance.
 - (b) **Emergency Response (ER) and Notification Plan**. The ER and Notification Plan shall describe procedures to be used in the event of an accident or emergency at the site (*e.g.*, power outages, water impoundment failure, treatment plant failure, slope failure, etc.). The ER and Notification Plan shall include:

- (1) Name of the person or entity responsible for responding in the event of an emergency incident;
- Plan and date(s) for meeting(s) with the local community, including local, State, and federal agencies involved in the cleanup, as well as local emergency squads and hospitals;
- If applicable, a Spill Prevention, Control, and Countermeasures Plan consistent with the requirements of 40 C.F.R. part 112 (describing measures to prevent, and contingency plans for, spills and discharges);
- (4) Notification activities in accordance with ¶ 5.6(b) (Release Reporting) in the event of a release of hazardous substances requiring reporting under sections 103 or 111(g) of CERCLA, or section 304 of the Emergency Planning and Community Right-to-know Act ("EPCRA"), 42 U.S.C. § 11004; and
- (5) A description of all necessary actions to ensure compliance with Section 5 (Meetings, Reporting, and Permits) in the event of an occurrence during the performance of the Work that causes or threatens a release of a hazardous substance, pollutant or contaminant at or from the site that constitutes an emergency or may present an immediate threat to human health or welfare or the environment.
- (c) Health and Safety Plan. The Health and Safety Plan ("HASP") shall describe all activities to be performed to protect on-site personnel from physical, chemical, and all other hazards posed by the field sampling. The HASP shall: (1) be prepared in accordance with EPA's *Emergency Responder Health and Safety Manual* and Occupational Safety and Health Administration ("OSHA") requirements under 29 C.F.R. §§ 1910 and 1926; and (2) shall address RI Work and include contingency planning. EPA does not approve the HASP but will review it to ensure that all necessary elements are included and that the plan provides for the protection of human health and the environment.
- (d) Field Summary Reports. Respondents shall provide a report after the field activity demobilization that addresses the collection, processing, management, distribution, analysis, and archival of data and information. These reports will be reviewed and approved by EPA with State consultation.
- (e) **Reuse Assessment**. Respondents will prepare a reuse assessment in accordance with the SOW, RIWP, and applicable EPA guidance. The reuse assessment will inform the development of realistic land use assumptions. The reuse assessment also informs the baseline risk assessments when estimating potential future risks and preliminary RAOs and supports the remedy selection process. Respondents

shall update the reuse assessment, as requested by EPA, to account for information obtained during the RI.

- (f) **Baseline HHRA and ERA.** Respondents shall perform the Baseline Human Health Risks Assessment ("Baseline HHRA") and Ecological Risk Assessment ("ERA") in accordance with the SOW and the NCP, including the 40 C.F.R. § 300.430(d)(2)(vii) provision on sensitive populations, RIWP, and applicable EPA guidance. Additionally, Respondents shall ensure that risk assessments incorporate site-specific exposure assumptions based on: (1) awareness of community practices, (2) environmental justice¹ concerns, and (3) anticipated changes to weather and climate. Respondents shall use current EPArecommended environmental justice screening tools (e.g., EJScreen as identified by EPA during the scoping of the Baseline HHRA). If requested by EPA, Respondents shall conduct more detailed evaluations of community practices, environmental justice concerns, and potentially exposed populations as identified by EPA as a result of community outreach. If requested by EPA, Respondents shall use climate change screening tools (e.g., forward-looking climate data) to evaluate the affect that anticipated changes to weather and climate have on the results of the Baseline HHRA and ERA. The evaluation of sitespecific exposure assumptions shall be discussed in the risk assessment as appropriate. Potential overestimation and/or underestimation of risk associated with community practices, environmental justice concerns, and impacts of climate change shall be presented in the uncertainty discussion. Risk assessments will be reviewed and approved by EPA with State consultation. Respondents shall identify and document all sources of information reviewed to address the human health and ecological assessment endpoints.
- (g) Preliminary IC Evaluation. The Respondents shall submit a preliminary institutional control (IC) evaluation for EPA and State review and EPA approval. The IC evaluation will describe potential land and/or resource use restrictions and their relationship to the preliminary RAOs. The IC evaluation will also identify potential IC instruments (or layered instruments), including those who potentially are responsible for implementing, maintaining, and enforcing the ICs. The IC evaluation will include an estimate for how long IC instruments (or layered instruments) shall remain in place. The IC evaluation will inform development of the FS (comparative analysis of alternatives) and Institutional Controls Implementation and Assurance Plan ("ICIAP").

¹ Environmental justice means the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

- (h) Draft RI Report. Respondents shall submit to EPA and the State for review and approval pursuant to ¶ 6.5 (Approval of Deliverables), a draft RI report consistent with the SOW, RIWP, and with EPA guidance and regulations. This report shall summarize results of field activities to characterize the portion of the Site that is to be addressed in the RI, including the sources of, nature and extent of, and fate and transport of contamination. Respondent will refer to the RI/FS Guidance for an outline of the report format and contents. Following comments by EPA and the State, Respondents will prepare a final RI report which satisfactorily addresses these comments.
- **3.5 Treatability Study**. Respondents shall conduct treatability studies, except where the Respondents can demonstrate to EPA's satisfaction that they are not needed. Respondents shall provide EPA and the State with the following deliverables for review:
 - (a) Identification of Candidate Treatability Study Technologies Memorandum. This summarizes a literature review of applicable technologies to gather information on performance, relative costs, applicability, removal efficiencies, operation and maintenance requirements, and implementability of candidate treatability study technologies. This memorandum shall be submitted as specified by EPA for EPA approval.
 - (b) **Treatability Test Work Plan**. If EPA determines that treatability testing is required, Respondents shall submit a treatability test work plan, including a schedule, FSP, QAPP and HASP, for EPA review and approval as appropriate.
 - (c) **Treatability Study Evaluation Report**. Upon completion of the treatability studies, if required by EPA, Respondents shall submit a treatability study evaluation report that includes:
 - (1) An evaluation of the effectiveness, implementability, and cost of each technology.
 - (2) An evaluation of the actual results of each technology as compared with predicted results.
 - (3) An analysis and interpretation of testing results.
 - (4) An evaluation of full-scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

Following comments by EPA and the State, Respondents will prepare a final report which satisfactorily addresses these comments.

4. FEASIBILITY STUDY

- 4.1 Feasibility Study. The FS shall identify and evaluate (based on treatability testing, where appropriate and if required by EPA) remedial alternatives to prevent, mitigate, or otherwise respond to or remediate the release or threatened release of Per- and Polyfluoroalkyl hazardous substances, pollutants or contaminants at or from TAA Property. Due to the potential commingling of Per- and Polyfluoroalkyl substances with other pollutants or contaminants at the site, the evaluation of the potential performance and cost of the treatment technologies should also take into account the ability of those treatment technologies to address the commingled contamination and any adverse impacts the commingled contamination may have on the ability and cost of the treatment technologies to address the release or threatened release at TAA Property. The remedial alternatives evaluated shall include, but shall not be limited to, 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. Respondents shall also evaluate potential impacts that treatment technologies have on other hazardous substances, pollutants or contaminants at or from the site. In evaluating the alternatives, Respondents shall address the factors required by section 121 of CERCLA, and 40 C.F.R. § 300.430(e).
- **4.2 FS Deliverables.** The Respondents shall develop the FS deliverables in accordance with the RI/FS Guidance. The Respondents shall submit the following deliverables for EPA review and approval unless EPA decides that one or more provisions is not necessary:
 - (a) Refine RAOs, PRGs and ARARs. Respondents shall prepare a memorandum revising the RAOs, PRGs and ARARs to include potential ARARs specific to actions and locations described in ¶ 3.3 with the findings of the RI. Respondents will review and, if necessary, modify the site-specific RAOs, specifically the PRGs, that were established by EPA prior to or during discussions between EPA and Respondents. The revised RAOs and PRGs will be documented in this memorandum that will be reviewed and approved by EPA. These modified PRGs will specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at locations for each exposure route), basis for the value, and the associated residual risk. This memorandum will discuss the consideration of sensitive subgroups in determining the acceptable exposure levels for sites with systemic toxicants, in accordance with 40 C.F.R. § 300.430(e)(2)(i)(A)(1). In addition, the memorandum will discuss whether the ARARs may not be sufficiently protective given the presence of multiple contaminants at the site or multiple pathways of exposure for sites with known or suspected carcinogens, in accordance with 40 C.F.R. § 300.430(e)(2)(i)(A)(2).

- (b) Identify and Evaluate Remedial Technologies and Assemble Alternatives. Concurrent with ¶ 4.2(a), Respondents shall assemble combinations of technologies, and the media to which they would be applied, into remedial alternatives that address contamination at or from TAA Property. Deliverables will be reviewed and approved by EPA with State consultation. Respondents shall: (i) develop general response actions for each medium of interest defining containment, treatment, excavation, pumping, or other actions, singly or in combination, that may be taken to satisfy the RAOs for the site; (ii) identify volumes or areas of media to which general response actions might be applied, taking into account the requirements for protectiveness as identified in the RAOs and the chemical and physical characterization of the site; and (iii) identify and screen the technologies applicable to each general response action to eliminate those that cannot be implemented technically at the site. The general response actions are further refined to specify remedial technology types (e.g., the general response action of treatment can be further defined to include chemical or biological technology types). Respondents shall assemble the selected representative technologies into alternatives representing a range of treatment and containment combinations, as appropriate.
- (c) Comparative Analysis of Alternatives. Upon EPA approval of ¶ 4.2(a) and (b), Respondents shall conduct a comparative analysis of alternatives to evaluate the relative performance of each alternative in relation to the nine evaluation criteria identified below in this paragraph and prepare a summary report. This range of alternatives shall include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but varying in the types of treatment, the amount treated, and long-term residuals or untreated wastes are managed. The analysis will include options involving treatment and/or containment; and a no-action alternative. The evaluation criteria include: (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 through treatment; (5) short-term effectiveness; (6) implementability; (7) cost; (8) state acceptance; and (9) community acceptance. The analysis shall (consistent with 40 C.F.R. § 300.430(e)(9)(iii)(C) and Consideration of Climate Resilience in the Superfund Cleanup Process for Non-Federal National Priorities List Sites OLEM 9355.1-120, June 30, 2021) include an assessment of the vulnerability of the protectiveness of each alternative to the impacts of climate change and, for each alternative where appropriate, an evaluation of the possible addition of further measures to ensure the resilience a particular alternative's protectiveness to the impacts of climate change. In addition, where appropriate for particular evaluation criteria, Respondents shall also evaluate, to the extent practicable, opportunities to reduce the environmental footprint of each alternative. Such evaluation shall include the consideration of green remediation best management practices and/or application of the ASTM Standard for Greener Cleanups, consistent with

Consideration of Greener Activities in the Superfund Cleanup Process (Aug. 6, 2016). These considerations for greener cleanups are not intended to allow cleanups that do not satisfy threshold requirements for protectiveness, or do not meet other site-specific cleanup objectives.

For each alternative, Respondents shall provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative, and (2) a discussion of the individual criterion assessment. If the Respondents do not have direct input on criteria (8), state acceptance, and criteria (9), community acceptance, these will be addressed by EPA. Note that criteria (8) and (9) are not addressed until after the Proposed Plan.

- (d) Environmental Justice Concerns about Disproportionate Impacts. Consistent with 40 C.F.R. § 300.430(e)(2)(i)(A)(1) and with consideration of communities with environmental justice concerns identified in the Baseline HHRA, Respondents shall identify different remedial alternatives in the FS to address. where applicable and in consultation with and as approved by EPA, environmental justice concerns regarding the potential for disproportionate impacts from the contaminated site, including through the site's contribution to cumulative impacts on the affected community. Evaluation of the potential for disproportionate impacts shall consider indicators of population vulnerability and pollutant burden using EJScreen; as well as other available data on population vulnerability and pollution burden (including public health outcomes reflecting cumulative impacts) and information obtained during community outreach efforts. Respondents shall identify and document in a memorandum for EPA review and approval all sources of information reviewed and implemented to address the environmental justice concerns.
- (e) Refine IC Evaluation. Concurrent with ¶ 4.2(d), Respondents shall prepare a memorandum revising the ICs in ¶ 3.4 (g) with the findings of the RI. Respondents will review and, if necessary, modify the site-specific interim and permanent ICs that were established by EPA prior to or during discussions between EPA and Respondents. ICs need to be enforceable under CERCLA, rather than relying on local controls, such as zoning. The ICs evaluation shall also identify how the ICs response actions components fit with the relevant criteria outlined in the NCP (40 C.F.R. § 300.430(e)(9)(iii)) such as: compliance with ARARs; long-term effectiveness and permanence; short-term effectiveness; implementability; cost; state acceptance; and community acceptance. The IC analysis shall be submitted for review and approval by EPA and added as an appendix to the draft FS Report.
- (f) **Draft FS Report**. Following ¶¶4.2(d) and (e), Respondents shall submit to EPA and the State a draft FS report for review and approval pursuant to ¶ 6.5

(Approval of Deliverables). Respondents shall refer to Table 6-5 of the RI/FS Guidance for report content and format. The FS report and the administrative record shall provide sufficient information to support the remedial alternatives analysis and remedy selection under sections 113(k) and 117(a) of CERCLA. Respondents will prepare a final FS report which satisfactorily addresses EPA and State comments.

5. MEETINGS, PERMITS, and REPORTS

5.1 Meetings

- (a) Kickoff meeting. Within 30 days of the Effective Date of the Settlement, Respondents shall schedule a kickoff meeting with technical staff, EPA, and the State to discuss the statement of work, a site visit and document review needs. EPA will determine the site-specific objectives of the RI and will provide Respondents a strategic approach, per ¶ 3.4 of this SOW. The meeting will also be used to outline project-specific requirements including: project objectives, data gaps, potential sampling and analysis methods, and performance goals. The deliverable after the kickoff meeting will be a project schedule and RI work plan under ¶ 3.4. The kickoff meeting and systematic planning meetings referenced in ¶ 5.1(b) will be documented in the QAPP.
- (b) Systematic Project Planning Meetings. Within the schedule set forth in the RI Work Plan, Respondents shall schedule systematic project planning meetings with EPA and the State. Systematic project planning is a process that requires Respondents, State and EPA to convene during key milestones in the RI/FS schedule in order to update the CSM, and to review the sequence and scope of upcoming RI/FS tasks to determine if they are still appropriate or need modification.
- (c) Meetings. Respondents shall participate in meetings and make presentations at the request of EPA during the preparation of the RI/FS. Topics will include anticipated problems, RI/FS updates, or new issues. Meetings will be scheduled at EPA's discretion.
- **5.2 Progress Reports**. Commencing the month following the Effective Date of the Settlement and until EPA approves the FS report, Respondents shall submit progress reports to EPA on a monthly basis, or as otherwise requested by EPA. The reports shall cover all activities that took place during the prior reporting period, including:
 - (a) Describe the actions that have been taken under this SOW;
 - (b) Include all results of sampling and tests and all other data received by Respondents;

- (c) Describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion;
- (d) Describe all problems encountered in complying with the requirements of this SOW and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays;
- (e) Describe any modifications to the work plans or other schedules Respondents have proposed or that have been approved by EPA; and
- (f) Describe all activities undertaken in support of the CIP during the reporting period and those to be undertaken in the next six weeks.
- **5.3** Notice of Schedule Changes. If the schedule for any activity described in the Progress Reports, including deliverables required under Section 6, changes, Respondents shall notify EPA of such change at least seven days before they perform the activity.
- 5.4 Investigation Derived Waste. 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, section 300.440 ("Off-Site Rule") of the NCP, *EPA's Guide to Management of Investigation Derived Waste*, OSWER 9345.3-03FS (Jan. 1992). 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) shipped off-site for treatability studies, are not subject to section 300.440 of the NCP.
- 5.5 Permits
 - (a) As provided in CERCLA § 121(e), and section 300.400(e) of the NCP, no permit is required for any portion of the Work conducted entirely on-site (*i.e.*, within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work). Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondents shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.
 - (b) Respondents may seek relief under the provisions of Section XII (Force Majeure) of the Settlement for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval referenced in ¶ 5.5(a) and required for the Work, provided that they have submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals.
 - (c) Nothing in the Settlement or this SOW constitutes a permit issued under any federal or state statute or regulation.

5.6 Emergency Response and Reporting

- (a) Emergency Action. If any event occurs during performance of the Work that causes or threatens to cause a release of hazardous substances, pollutants or contaminants on, at, or from the site and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Respondents shall: (1) immediately take all appropriate action to prevent, abate, or minimize such release or threat of release; (2) immediately notify the authorized EPA officer (as specified in ¶ 5.6(b)) orally; and (3) take such actions in consultation with the authorized EPA officer and in accordance with all applicable provisions of the Health and Safety Plan, the Emergency Response Plan, and any other deliverable approved by EPA under the SOW.
- (b) **Release Reporting**. Upon the occurrence of any event during performance of the RI Work that Respondents are required to report pursuant to sections 103 and 111(g) of CERCLA, or section 304 of EPCRA, Respondents shall immediately notify the authorized EPA officer orally.
- (c) The "authorized EPA officer" for purposes of immediate oral notifications and consultations is the EPA Project Coordinator, the EPA Alternate Project Coordinator (if the EPA Project Coordinator is unavailable), or the EPA Emergency Response Unit, Region IX if neither EPA Project Coordinator is available.
- (d) For any event covered by ¶ 5.6, Respondents shall: (1) within 14 days after the onset of such event, submit a report to EPA describing the actions or events that occurred and the measures taken, and to be taken, in response thereto; and (2) within 30 days after the conclusion of such event, submit a report to EPA describing all actions taken in response to such event.
- (e) The reporting requirements under ¶ 5.6 are in addition to the reporting required by CERCLA §§ 103 and 111(g) or EPCRA § 304.

6. DELIVERABLES

- 6.1 General Requirements for Deliverables
 - (a) Respondents shall submit deliverables for EPA's approval. EPA may elect to only provide comments instead of approval for a particular deliverable. If EPA decides to only provide comments instead of approval, EPA will notify the Respondent. Paragraph 6.3 (Data Format Specifications) applies to all deliverables. Paragraph 6.4 (Certification) applies to any deliverable that is required to be certified. Paragraph 6.5 (Approval of Deliverables) applies to any deliverable that is required to be submitted for EPA approval. All deliverables shall be submitted by the deadlines in the RI/FS Schedule in ¶ 7.1.

- (b) Respondents shall submit all deliverables in electronic form. Data format specifications for sampling, analytical and monitoring data, and spatial data are addressed in ¶ 6.3. All other deliverables shall be submitted in the electronic form specified by EPA's Project Coordinator. Respondents shall not submit deliverables to EPA that are marked as "copyright," "trademark," or confidential", as the deliverables are part of the administrative record for the Site and as such are available to the public.
- **6.2 State Copies**. Respondents shall, at any time they send a deliverable to EPA, send a copy to the State. EPA shall, at any time it sends a notice, authorization, approval, disapproval, or certification to Respondents, send a copy to the State.

6.3 Data Format Specifications

- (a) Sampling, analytical and monitoring data shall be submitted in standard regional Electronic Data Deliverable format.
- (b) Spatial data, including spatially-referenced data and geospatial data, shall be submitted: (1) in the ESRI File Geodatabase format; and (2) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions shall include the collection method(s). Projected coordinates may optionally be included but shall be documented. Spatial data shall be accompanied by metadata, and such metadata shall 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 complies with these FGDC and EPA metadata requirements and is available at <u>https://www.epa.gov/geospatial/epa-metadata-editor</u>.
- (c) Each file shall include an attribute name for each site unit or sub-unit submitted. Consult <u>https://www.epa.gov/geospatial/geospatial-policies-and-standards</u> for any further available guidance on attribute identification and naming.
- (d) Spatial data submitted by Respondents does not, and is not intended to, define the boundaries of the site.
- **6.4 Certification**. All deliverables that require compliance with this Section must be signed (which may include electronically signed) by Respondents' Project Coordinator, or other responsible official of Respondents, and shall contain the following statement:

I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

6.5 Approval of Deliverables

(a) Initial Submissions

- After review of any deliverable that is required to be submitted for EPA approval under this SOW, EPA shall: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.
- (2) EPA also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.
- (b) Resubmissions. Upon receipt of a notice of disapproval under ¶ 6.5(a) (Initial Submissions), or if required by a notice of approval upon specified conditions under ¶ 6.5(a), Respondents shall, within 30 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, EPA may: (1) approve, in whole or in part, the resubmission; (2) approve the resubmission upon specified conditions; (3) modify the resubmission; (4) disapprove, in whole or in part, the resubmission; (5) any combination of the foregoing.
- (c) Implementation. Upon approval, approval upon conditions, or modification by EPA under ¶ 6.5(a) (Initial Submissions) or ¶ 6.5(b) (Resubmissions), of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and enforceable under the Settlement; and
 (2) Respondents shall take any action required by such deliverable, or portion thereof. The implementation of any non-deficient portion of a deliverable submitted or resubmitted under ¶ 6.5(a) or ¶ 6.5(b) does not relieve Respondents of any liability for stipulated penalties under Section XIV (Stipulated Penalties) of the Settlement.

- (d) 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.
- (e) In the event that EPA takes over some of the tasks, Respondents shall incorporate and integrate information supplied by EPA into those reports.
- (f) 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: PA, RI/FS Work Plan; Sampling and Analysis Plan; draft RI Report; Treatability Testing Work Plan (if required by EPA); Treatability Testing Sampling and Analysis Plan (if required by EPA); Treatability Testing Health and Safety Plan (if required by EPA) 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.
- (g) For all remaining deliverables not listed in ¶ 5.5(f), Respondents shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval of the submitted deliverable. EPA reserves the right to stop Respondents from proceeding further, either temporarily or permanently, on any task, activity, or deliverable at any point during the Work.
- (h) 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 ¶ 6.5(a) (Initial Submissions) or (b) (Resubmissions) due to 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 XIV (Stipulated Penalties) of the Settlement.
- **6.6 State Review and Comment**. The State will have a reasonable opportunity for review and comment prior to any EPA approval or disapproval under ¶ 6.5 of any deliverables that are required to be submitted for EPA approval.
- 6.7 Notice of Completion of RI/FS Work. When EPA determines that all RI/FS Work has been fully performed in accordance with this Settlement, with the exception of any continuing obligations required by this Settlement, 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. Respondents shall implement the modified and approved RI 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.

7. SCHEDULE

7.1 All deliverables and tasks required under this SOW shall be submitted or completed by the deadlines or within the time durations listed in the RI/FS schedule set forth below. Respondents may submit proposed revised RI/FS schedules for EPA approval. Upon EPA's approval, the revised RI/FS schedule supersedes any prior RI/FS schedule.

Description	Reference	Deadline
Designate CI Coordinator	¶ 2.2	Within 14 days after EPA request
Preliminary Assessment Report	¶ 3.1	Within 30 days after Effective Date
Conceptual Site Model Report	¶ 3.2	Within 90 days after implementation of Remedial Investigation Work Plan
Remedial Investigation Work Plan	¶ 3.3(a)	Within 90 days after Effective Date
Identification of Candidate Treatment Technologies Memorandum	¶ 3.5(a)	Within 60 days after EPA request
Treatability Test Work Plan	¶ 3.5(b)	If required by EPA, 60 days after EPA approval of Identification of Candidate Treatment Technologies Memorandum (¶ 3.5(a))
Treatability Study Evaluation Report	¶ 3.5(c)	If required by EPA, 90 days after the completion of the Treatability Test Work Plan (¶3.5(b))
Refine RAOs and ARARs	¶ 4.2(a)	Within60 days after EPA request
Identify and Evaluate Remedial Technologies	¶ 4.2(b)	Within 60 days after EPA request and concurrent with Refine RAOs and ARARs (¶ 4.2(a))
Comparative Analysis of Alternatives	¶ 4.2(c)	60 days after EPA approval of Refine RAOs and ARARs (¶ 4.2(a)) and Identify and Evaluate Remedial Technologies (¶ 4.2(b))

Environmental Justice Concerns about Disproportionate Impacts	¶ 4.2(d)	60 days after EPA approval of Comparative Analysis of Alternatives (¶ 4.2(c))
Refine IC Evaluation	¶ 4.2(e)	60 days after EPA approval of Comparative Analysis of Alternatives (¶ 4.2(c)) and concurrent with Environmental Justice Concerns about Disproportionate Impacts (¶ 4.2(d))
Draft FS Report	¶ 4.2(f)	120 days after EPA approval of Environmental Justice Concerns about Disproportionate Impacts (¶ 4.2(d)) and Refine IC Evaluation (¶ 4.2(e))
Kickoff Meeting	¶ 5.1(a)	Within 30 days after Effective Date

8. **REFERENCES**

- 8.1 The following regulations and guidance documents, among others, apply to the Work. Any item for which a specific URL is not provided below is available on one of the two EPA web pages listed in ¶ 8.2:
 - (a) A Compendium of Superfund Field Operations Methods, OSWER 9355.014, EPA/540/P-87/001a (Aug. 1987).
 - (b) CERCLA Compliance with Other Laws Manual, Part I: Interim Final, OSWER 9234.1-01, EPA/540/G-89/006 (Aug. 1988).
 - (c) Guidance for Conducting Remedial Investigations and Feasibility Studies, OSWER 9355.3-01, EPA/540/G-89/004 (Oct. 1988).
 - (d) CERCLA Compliance with Other Laws Manual, Part II, OSWER 9234.1-02, EPA/540/G-89/009 (Aug. 1989).
 - (e) Guide to Management of Investigation-Derived Wastes, OSWER 9345.303FS (Jan. 1992).
 - (f) Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, OSWER 9355.703 (Feb. 1992).
 - (g) Guidance for Conducting Treatability Studies under CERCLA, OSWER 9380.3-10, EPA/540/R-92/071A (Nov. 1992).
 - (h) National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, 40 C.F.R. part 300 (Oct. 1994).

- (i) EPA Guidance for Data Quality Assessment, Practical Methods for Data Analysis, QA/G-9, EPA/600/R-96/084 (July 2000).
- (j) Guidance for Quality Assurance Project Plans, QA/G-5, EPA/240/R-02/009 (Dec. 2002).
- (k) Institutional Controls: Third Party Beneficiary Rights in Proprietary Controls (Apr. 2004).
- (I) Quality management systems for environmental information and technology programs -- Requirements with guidance for use, ASQ/ANSI E4:2014 (American Society for Quality, Feb. 2014).
- (m) Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A though 900C (Mar. 2005).
- (n) Superfund Community Involvement Handbook, OLEM 9230.0-51 (Mar. 2020). More information on Superfund community involvement is available on the Agency's Superfund Community Involvement Tools and Resources web page at <u>https://www.epa.gov/superfund/community-involvement-tools-and-resources</u>.
- (o) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).
- (p) EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006).
- (q) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (r) EPA Directive CIO 2105.1 (Environmental Information Quality Policy (Mar. 31, 2021), <u>https://www.epa.gov/sites/production/files/2021-04/documents/environmental information quality policy.pdf</u>.
- (s) USEPA Contract Laboratory Program Statement of Work for Organic Superfund Methods (Multi-Media, Multi-Concentration), SOM02.4 (Oct. 2016), <u>https://www.epa.gov/clp/epa-contract-laboratory-program-statement-work-organic-superfund-methods-multi-media-multi-1</u>.
- (t) EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2008), <u>https://www.epa.gov/geospatial/geospatial-policies-and-standards</u> and <u>https://www.epa.gov/geospatial/epa-national-geospatial-data-policy</u>.
- (u) Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, OSWER 9283.1-33 (June 2009).

- Principles for Greener Cleanups (Aug. 28, 2009), <u>https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups.</u>
- (w) Consideration of Greener Cleanup Activities in the Superfund Cleanup Process (Aug. 2, 2016), <u>https://semspub.epa.gov/work/HQ/100000160.pdf</u>.
- (x) Close Out Procedures for National Priorities List Superfund Sites, OSWER 9320.2-22 (May 2011), <u>https://www.epa.gov/superfund/close-out-procedures-national-priorities-list-superfund-sites</u>.
- (y) Groundwater Road Map: Recommended Process for Restoring Contaminated Groundwater at Superfund Sites, OSWER 9283.1-34 (July 2011).
- (z) Recommended Evaluation of Institutional Controls: Supplement to the "Comprehensive Five-Year Review Guidance," OSWER 9355.7-18 (Sept. 2011).
- (aa) Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012).
- (bb) Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012).
- (cc) EPA's Emergency Responder Health and Safety Manual, OSWER 9285.3-12
 (July 2005 and updates), <u>https://www.epaosc.org/ HealthSafetyManual/manual-index.htm.</u>
- (dd) Guidance on Systematic Planning Using the Data Quality Objectives Process, EPA QA/G-4, EPA/240/B-06/001, Office of Environmental Information (Feb. 2006), <u>https://www.epa.gov/sites/production/files/2015-06/documents/g4-final.pdf</u>.
- (ee) Consideration of Tribal Treaty Rights and Traditional Ecological Knowledge in the Superfund Remedial Program, OLEM 9200.2-177 (Jan. 2017), <u>https://semspub.epa.gov/src/document/11/500024668</u>.
- (ff) Smart Scoping for Environmental Investigation Technical Guide, EPA/542/G-18/004 (Nov. 2018), <u>https://semspub.epa.gov/work/HQ/100001799.pdf</u>.
- (gg) Strategic Sampling Approaches Technical Guide, EPA/542/-F-18/005 (Nov. 2018), https://semspub.epa.gov/work/HQ/100001800.pdf.
- (hh) Best Practices for Data Management, EPA/542/F-18/003, (Nov. 2018), https://semspub.epa.gov/work/HQ/100001798.pdf.

- Smart Scoping of an EPA-Lead Remedial Investigation/Feasibility Study, EPA/542/F-19/0006 (Oct. 2020), <u>https://semspub.epa.gov/work/HQ/100002571.pdf</u>.
- (jj) Interim Final Risk Assessment Guidance for Superfund, Volume I Human Health Evaluation Manual (Part A), RAGS, EPA/540/1-89/002, OSWER 9285.7-01A (Dec. 1989), <u>https://www.epa.gov/risk/risk-assessment-guidance-superfundrags-part</u>.
- (kk) Interim Final Risk Assessment Guidance for Superfund, Volume I Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments), OSWER 9285.7-47 (Dec. 2001), <u>https://www.epa.gov/risk/risk-assessment-guidance-superfund-rags-part-d</u>.
- Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, ("ERAGS"), EPA/540/R-97/006, OSWER 9285.7-25 (June 1997).
- (mm) Reuse Assessments: A Tool to Implement the Superfund Land Use Directive. OSWER 9355.7-06P (June 4, 2001), http://www.epa.gov/superfundlcommunity/relocationireusefinaLpdf.
- (nn) ECO Update: The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments, EPA/540/F-01/014 (June 2001).
- (oo) EPA QA Field Activities Procedure CIO 2105-P-02.1 (Sept. 23, 2014)
- (pp) EPA Requirements for Quality Management Plans (QA/R-2) EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (qq) Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, OSWER 9283.1-33 (June 2009).
- (rr) Considering Reasonably Anticipated Future Land Use and Reducing Barriers to Reuse at EPA-lead Superfund Remedial Sites. OSWER 9355.7-19 (Mar. 2010).
- (ss) Consideration of Climate Resilience in the Superfund Cleanup Process for Non-Federal National Priorities List Sites (June 30, 2021).
- 8.2 A more complete list may be found on the following EPA web pages:
 - (a) Superfund Laws, Policy, and Guidance: <u>https://www.epa.gov/superfund/superfund-policy-guidance-and-laws</u>.

- (b) Collection of Methods: <u>https://www.epa.gov/measurements/collection-</u> <u>methods</u>.
- (c) Quality Assurance:
 - (1) EPA QA Field Activities Procedures: <u>https://www.epa.gov/irmpoli8/epa-ga-field-activities-procedures</u>.
 - (2) Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions: <u>https://www.epa.gov/sites/default/files/2016-11/documents/fem-labcompetency-policy_policy_updated_nov2016.pdf</u>.
 - (3) Superfund Contract Laboratory Program: <u>https://www.epa.gov/clp</u>.
 - Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846), Second edition (July 1982): <u>https://www.epa.gov/hw-sw846</u>.
 - (5) Standard Methods for the Examination of Water and Wastewater: <u>http://www.standardmethods.org/</u>.
 - (6) Air Toxics Monitoring Methods: <u>https://www.epa.gov/amtic/compendium-methods-determination-toxic-organic-compounds-ambient-air.gov.</u>
- (d) Superfund Redevelopment Basics: Policy, Guidance, and Resources: <u>https://www.epa.gov/superfund-redevelopment-initiative/superfund-redevelopment-basics#policy</u>.
- (e) Superfund Green Remediation: <u>https://www.epa.gov/superfund/superfund-green-remediation</u>.
- (f) Superfund Climate Resilience: <u>https://www.epa.gov/superfund/superfund-</u> <u>climate-resilience</u>.
- (g) Ecological Risk Assessment: <u>https://www.epa.gov/risk/ecological-risk-assessment</u>.
- 8.3 For any regulation or guidance referenced in the Settlement or SOW, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondents receive notification from EPA of the modification, amendment, or replacement.

