

SECTION C
STATEMENT OF WORK

C.1 BACKGROUND

The U.S. Department of Energy (DOE) Hanford Site in Southeastern Washington State sits adjacent to the Columbia River and is home to 53 million gallons of chemical and radioactive wastes. This waste is the result of more than three decades of plutonium production. The DOE Office of River Protection (ORP) mission is to retrieve and treat Hanford's tank waste as well as close the tank farms in order to protect the Columbia River. ORP was established by the U.S. Congress in 1998, as an independent office at the Hanford Site with the exclusive focus of solving the Hanford tank cleanup challenge. The goal of ORP is to complete tank cleanup quickly, safely, and cost effectively. To this end, ORP provides contract management, safety oversight, and project integration of its major prime contractors, Washington River Protection Solutions, Inc. (WRPS), and Bechtel National, Inc. (BNI), to ensure tank waste cleanup is accomplished as an integrated waste treatment operation.

C.2 SCOPE OF WORK

- (a) In general, the contractor shall provide ORP with engineering, environmental, and related technical and administrative services and advice, assistance, guidance or counseling including support for policy development, management and administration, program and/or project management and administration, professional advice or assistance to improve the effectiveness of ORP processes and/or processes including those of an engineering and technical nature in support of ORP contract management, safety oversight, and project integration functions in the following categories:
- (1) Management and professional support services to provide assistance, advice, and training for the efficient and effective management and operation of ORP such as efforts that support or contribute to improved organization of program management, logistics management, project monitoring and reporting, data collection, budgeting, accounting, performance auditing, and administrative technical support for conferences and training programs.
 - (2) Studies, analyses and evaluations to provide services that provide organized, analytical assessments/evaluations in support of policy development, decision-making, management, administration; and, acquisitions of models, methodologies, and related software supporting studies, analyses or evaluations.
 - (3) Engineering and technical services to provide support to the program office during the acquisition cycle with systems engineering and technical direction to ensure the effective operation and maintenance of a major system essential to research, development, production, operation or maintenance of the system.
- (b) The contractor shall provide engineering, environmental, and related technical and administrative services to the ORP Waste Treatment and Immobilization Treatment Plant Project Office (WTP) pertaining to, but not limited to, the following functional areas:
- (1) Construction-related inspection and oversight of BNI quality assurance and control organizations and reporting significant issues to WTP & BNI management.

- (2) Structural design of facilities and equipment including technical support focused on design revisions necessitated by the revised ground motion criteria to include equipment qualification (structural) and piping design.
 - (3) Technical & scientific support including resolution of design and technology issues including assisting with DOE strategy, planning and risk management decisions.
 - (4) Nuclear safety oversight support to include use of DOE complex experts and industry recognized individuals to provide recommendations to ORP for emergent issues to address DOE Headquarters and Defense Nuclear Facilities Safety Board (DNFSB) nuclear safety concerns, maintenance of the nuclear safety basis for WTP in accordance with 10 CFR 830, "Nuclear Safety Management", review and recommend disposition of changes to the authorization basis, assist ORP management in providing guidance for safety control selection and safety classification, as well as requests for temporary deviations from the authorization basis.
 - (5) Project controls support including preparation of government fair cost estimates for BNI requests for equitable adjustment, support independent project reviews, internal and external project controls, Earned Value Management System Reporting Work Scope.
 - (6) Technical editing support including editing, analyzing and providing recommendations on document flow, formatting issues on daily and weekly reports, white papers, and technical reports.
 - (7) Qualifications program support including implementing the Safety Management Program (SMP) and Safety System Oversight (SSO) qualification program for the WTP, support actions critical to the successful qualification of SMP personnel and SSO personnel.
 - (8) WTP management and business analysis support related to subcontract services for the WTP and WTP management, including support to the WTP Cost Account Managers, funds management of WTP cost accounts, work plan cost account development and maintenance, preparation of baseline change requests, monthly estimate at completion reviews and work scheduling.
 - (9) Project enhancement support including assistance with WTP strategy, planning, & risk management decisions; review & analyze WTP cost & schedule baseline documents; provide construction management, design management, & engineering consulting; review compliance with project requirements for facility design, construction, & critical decision reviews.
 - (10) Risk manager support including implementation of the process for the identification, assessment, handling, monitoring, and reporting of critical technical, programmatic, and engineering, procurement, construction, and commissioning risks facing the project.
 - (11) Contract costs/scheduling analysis support including review and analysis of the WTP performance measurement baseline, baseline changes proposals, and requests for equitable adjustments.
 - (12) Start-up and commissioning oversight support including assisting with DOE strategy, planning and evaluation of BNI programs.
- (c) The contractor shall provide engineering, environmental, and related technical and administrative services to the ORP Tank Farms Project Office (TFP) pertaining to, but not limited to, the following functional areas.

- (1) Project planning, scheduling, performance analysis, and cost estimating support to the Tank Closure and Waste Management environmental impact statement team.
 - (2) Resource Conservation and Recovery Act permits support (as well as other legal/regulatory requirements) required by law for WTP construction, commissioning, demonstration bulk vitrification system operations and ongoing tank farm operations.
 - (3) Vadose zone closure support including coordination of Hanford Site groundwater and vadose zone (GW/VZ) activities and supports implementation of the Memorandum of Agreement on GW/VZ integration.
 - (4) Support to ensure Single-Shell Tank (SST) Closure Plan and strategy documents are integrated with site-wide strategies for the Central Plateau completion.
 - (5) GW/VZ core team support including maintenance of technical agenda for the core team, support the team by maintaining and tracking the issues to be addressed, supports multi-project teams that are chartered by the core team that have direct interface with ORP.
 - (6) Support for the Vadose Zone Project with technical reviews of WRPS products including work plans, milestone change packages, data quality objectives, sampling and analysis plans, tank leak monitoring plans and priorities, revisions to the past leak volume report.
 - (7) Support to the Risk Integration Core Team chartered by the GW/VZ Executive Council, support the Core Team efforts to ensure ORP project needs are represented and Core Team efforts support ORP project risk assessment schedules.
 - (8) Authorization Basis (AB) maintenance support including special topic reviews/updates or changes to AB documents submitted to ORP, each update includes a description of the change, hazard analysis, and the associated benefit of implementation, assist ORP in the preparation of various Safety Evaluation Reports.
 - (9) Engineering support to the Tank Farms Project for Engineering Program Management Oversight and Chemical Process Engineering.
 - (10) Cost estimating support in reviewing Government fair cost estimates and conducting reviews of tank farms contractor-prepared estimates.
- (d) The contractor shall provide engineering, environmental, and related technical and administrative services in support of ORP Environmental Safety & Quality pertaining to, but not limited to, the following functional areas:
- (1) Program management and project controls support, including (many of the functions performed herein support all ORP functions): program planning and control; cost estimating; baseline maintenance; performance analysis; cost analysis; cost forecasting; P3 schedule development; coordination and tracking of the ORP Assessment Program Committee actions; resource allocation decisions; subcontract administration; annual update of the ORP Safety Management Functions, Responsibilities, and Authorities Manual (FRAM) and Integrated Safety Management System (ISMS) Description; monthly cost performance reports; program plan development; and procedures development.
 - (2) Assessment support including support to ORP oversight of the WTP Project, Tank Farm Project, and 222-S Laboratory contractors.

- (3) Employee Concerns Program (ECP) support including independent investigation services for employee concerns as needed, part-time administrative support (filing, report development, case management, etc.) to the ORP ECP Manager, and administrative support to the Federal Building ECP office when required.
 - (4) Directives/Management system coordination support to ensure the RPP management system is established to communicate management's expectations, controls, and processes for successful oversight.
 - (5) ORP technical qualification program support for DNFSB Recommendation 93-3, Improving Technical Capability in Defense Nuclear Facilities Programs, which was issued to DOE on June 1, 1993, identified numerous training and qualification deficiencies within the Department.
 - (6) Quality assurance program support including DOE implementation of the ORP Quality Assurance (QA) and ISMS Programs: Administer, interpret, and monitor effective implementation of ORP QA policies and associated documents such as ORP ISMS description; Administer the ORP Annual Assessment Plan.
 - (7) Quality assurance program assessment support of oversight of the WTP Project, Tank Farm Project, and 222-S Laboratory contractor, including: Quality Assurance Programs; Price Anderson Amendment Act Programs; Trending and Analysis Programs; Management Assessment and Independent Assessment Programs; Lessons Learned Programs; Construction, Accident Investigation Program; and ORP ECP for QA related concerns.
- (e) The contractor shall provide engineering, environmental, and related technical and administrative services in support of ORP Engineering and Nuclear Safety pertaining to, but not limited to, the following functional areas:
- (1) Assist in developing an Integrated Assessment Program, and assist in the evaluation of quality issues involving the ORP Integrated Project Team, specifically in the area of Welding, and compliance.
 - (2) Independent engineering reviews of the WTP and TF projects to ensure the proper technical solutions and project effectiveness will be applied, and WTP engineering hours including any project-to-date engineering overrun against the approved baseline.
 - (3) Support for DNFSB to ensure identified radiological and nuclear safety issues and concerns are tracked; maintain the office specific database/issues tracking systems; manage correspondence and the issues tracking database. Assistance for ORP Senior Management by coordinating DNFSB Board and staff visits and other activities at Hanford. Assist in maintaining an interface with cognizant ORP personnel, DNFSB staff, and contractor personnel.
 - (4) Training Support including establishment and population of a tracking database; inform employees and their supervisors of upcoming training needs; ensure all employees are scheduled for required training; and enter completion dates in the database.
 - (5) Safety Analysis Training support to improve ORP management knowledge of the Safety Basis (SB) and educate new ORP staff on the TFP and WTP SB. This includes understanding how the safety analysis is developed when an Unreviewed Safety Question is required, the differences between pages changes (Amendments), Technical Safety Requirements violations, Potential Inadequacy in Safety Analysis, and major requirement drivers. Additionally, the contractor shall provide training to staff regarding the use of Lines of Inquiry for ORP when reviewing SB documents.

- (f) The contractor shall provide engineering, environmental, and related technical and administrative services in support of ORP Project Administration and Communications pertaining to, but not limited to, the following functional areas:
 - (1) Performance of invoice reviews in accordance with ORP implementing procedures, OMB Circular A-123 assessments of internal controls over financial reporting, preparation and/or updating of implementing and desk procedures, budget formulation and execution activities.
 - (2) Communications, graphics design, outreach assistance to promote ORP programs and facilities through printed materials, exhibits and oral presentations
- (g) All work specified above will be issued by detailed Task Assignments in accordance with the Task Assignment Procedures in Section H.
- (h) The contractor shall provide expert resources, typically on very short notice, to perform the services specified in written Task Assignments issued by the Contracting Officer.
- (i) The contractor shall maintain electronic copies of all Task Assignments, Task Plans/Proposals, approvals, up-to-date Task Assignment tracking reports, and all related documentation in a shared drive location accessible to the Contracting Officer and other AMD contracting staff as necessary.
- (j) In performing the work set forth in this contract and applicable Task Assignments, the contractor shall ensure compliance with the ORP Quality Assurance Program as specified in ORP management system policies and procedures MGT-PM-PL-04 Quality Assurance Program Description.

C.3 DELIVERABLES

- (a) The contractor shall provide deliverables in the form of reports, analyses, evaluations recommendations, training, day-to-day support of ORP staff for the successful performance of ongoing ORP contract management, safety oversight, and project integration operations. When applicable, deliverables will be specified in each Task Assignment issued by the Contracting Officer.
- (b) The contractor shall provide an accurate, complete, and timely contract budget/cost report accompanying each invoice which provides the budget and cost status of the overall contract and of each Task Assignment, in a format approved by the Contracting Officer.