

Office of River Protection		
PBS	ABB Title	ABB Description/Scope
ORP-0014	242A Evaporator/222-S Laboratory	* Operate and maintain the 242-A Evaporator * 222-S Safe and Compliant Operations * 222-S Facility Reliability * 222-S Analytical Support/Equipment * 222-S Process Chemistry and Waste Handling
ORP-0014	A/AX - Farm Retrieval	Design, procurement, construction, readiness assessments, start-up, and operations of waste retrieval systems for 241-A and 241-AX Tank Farms. New systems will: 1) retrieve waste from 241-A and 241-AX SSTs, 2) convey the waste through a transfer system to DSTs Includes new and upgraded infrastructure systems to retrieve waste from the farm and deliver it to the DST system.
ORP-0014	AY-102 Remedial Action	*Continue enhanced tank monitoring * Revise and initiate the execution of the AY-102 Pumping Plan (RPP-PLAN-55220) with performing the Engineering and Design of the AY-102 Waste Retrieval and Transfer System. *Includes Activities to support Engineering during construction, procurment, statup and readiness, mixing demonstrations results analysis, reconfiguration for the WFD mission, project support and retrieval operations
ORP-0014	B/BY/BX - Farm Retrieval	Design, procurement, construction, readiness assessments, start-up, and operations of waste retrieval systems for 241-B, 241-BX, and 241-BY Tank Farms. New systems will: 1) retrieve waste from 241-B, 241-BX, and 241-BY SSTs, 2) convey the waste to a transfer system or receiving facility (WRF) for transfer to DSTs or convey the waste to a TRU packaging facility Includes new and upgraded infrastructure systems to retrieve waste from the tank and deliver it to the TRU Packaging interface or the WRF Scope excludes the WRF and the TRU packaging facility or the transfer lines between the WRF and the DST Tank Farm
ORP-0014	C - Farm Tank Waste Retrieval	* Design, procurement, construction, readiness assessments, start-up, and operations of waste retrieval systems for 241-C Tank Farm. * New systems will: 1) retrieve waste from 241-C SSTs, 2) convey the waste through a transfer system to DSTs * Includes new and upgraded infrastructure systems to retrieve the waste and deliver it to the DST system.
ORP-0014	CH TRU	* Includes all activities required to: design, construct, test, operate, and decommission a system to package CH TRU such that the packages can be sent to WIPP (9 tanks are currently thought to contain CH TRU: four T-200 series SSTs, four B-200 series SSTs and T-111. Volume of TRU-CH waste in these tanks is approximately 730K gallons) * Includes all activities required to design, construct, test, operate, and decommission a system to package RH TRU such that the packages can be sent to WIPP. (3 tanks are currently thought to contain RH TRU: AW-103, AW-105 and SY-102. Volume of TRU-RH waste in these tanks is approximately 600K gallons) * Includes all activities required to operate a system to package LLW for disposal at a licensed facility. (One tank, T-110, is currently thought to contain LLW. The volume of LLW in this tank is approximately 400K gallons)
ORP-0014	Direct Feed HLW	*Includes activities to support, final design, procurement, construction, commissioning, permitting, operations, and decommissioning* Includes initiation of tank waste characterization and staging capability in the tank farms to support HLW. * Completion of a tank waste characterization and staging capabilities. *Includes activities to support commissioning of the interim Hanford Storage Facility.
ORP-0014	Direct Feed LAW	* Includes activities to support, final design, procurement, construction, commissioning, permitting, operations, and decommissioning *Provides support for the tank farm infrastrucutre and an interim pretreatment capability (for removal of cesium and miscellaneous solids) needed to directly feed the LAW Facility. * Completion, commissioning and startup of the LAW facility. * Final Permitting of the onsite Integrated Disposal Facility for low-activity waste
ORP-0014	DST Retrieval and Closure	* Activities necessary for final closure of the AN, AP, AW, AY, AZ, and SY DST Farms and associated ancillary support structures, systems, components. * Interim tank closure includes heel retrieval, post retrieval characterization, engineering evaluations, and field activities necessary to deactivate equipment, isolate transfer lines, pits and penetrations to the tank and preparation for interim closure. * Interim Closure Characterization, including procurement and fabrication of necessary sampling equipment, sample collection and analysis, tank volume measurement, and Best Basis Inventory (BBI) updates. * Interim Closure Reporting, restricted to individual tank (component) documentation, specifically the RCRA Closure Plan, Closure data report, and DOE 435.1 Waste Incidental to Reprocessing (WIR) determination. * Tank Interim Closure field activities, including project management, engineering, procurement, readiness review, installation and demobilization of closure systems/equipment. * Project management, Waste Management Area (WMA) characterization, engineering evaluation and reporting, and field activities necessary to support final Tank Farm closure. Field activities include: - Tank subsidence control measures, - Ancillary equipment stabilization, Surface barrier design and installation
ORP-0014	IHLW Storage & Shipping	* Coordinate and prepare Immobilized High-Level Waste (IHLW) canisters for shipment to an offsite geological repository * D&D of operations support systems for the Hanford Shipping Facility and the IHLW storage facility, upon completion of shipping facility operations and transfer of IHLW canisters to the final geologic repository.
ORP-0014	ILAW Disposal Program	Provide Program management and oversight over the design and procurement of ILAW glass canister transportation, sample certifications, long term waste form testing, disposal of the ILAW and ILAW melter disposal. Over 95,000 canisters of ILAW glass will be produced at WTP during the treatment of tank waste. Since WTP has essentially no lag storage capability for ILAW glass canisters, removal of ILAW canisters from WTP will be critical to continued operations. *Typical activities include: · Participating in status meetings with ORP, WTP and stakeholders · Review of ILAW reports · Providing input to ILAW document updates · Providing input to monthly performance reporting · Responding to technical inquiries from ORP, WTP and stakeholders
ORP-0014	Interim Measures	* Interim Measures Monitoring and Characterization * Waste Site Surveillance/Maintenance
ORP-0014	LI Construction: Low Activity Waste (LAW) Pretreatment System (Construction)	
ORP-0014	LI Construction: Low Activity Waste (LAW) Pretreatment System (PED)	Post CD-1 *Include activities to support, final design, procurement, construction, commissioning, permitting, operations, and decommissioning. ** The Low Activity Waste Pretreatment System (LAWPS) pretreats tank farm supernatant delivered by the AP-farm upgrades by separating solids and removing the radioactive Cs from the tank farm supernatant feed. In addition, the LAWPS stores treated LAW liquids in lag storage, samples treated LAW to confirm treatment process efficacy and transfers treated LAW feed directly to the WTP LAW Vitrification Facility.
ORP-0014	LI Construction: Tank Waste Characterization and Staging Facility (TWSCF) (Construction)	Include activities to support, final design, procurement, construction, commissioning, permitting, operations, and decommissioning. * TWSCF provides staging,mixing,characterization and in an enhanced role, preconditioning of the waste.
ORP-0014	LI Construction: Tank Waste Characterization and Staging Facility (TWSCF) (PED)	Include activities to support, final design, procurement, construction, commissioning, permitting, operations, and decommissioning. * TWSCF provides staging,mixing,characterization and in an enhanced role, preconditioning of the waste.
ORP-0014	Low Activity Waste (LAW) Pretreatment System (OPC)	* Includes Pre-Critical Decision-1 Project Management Scope, Project Support , permitting, safety analysis, technology development, and preliminary design.
ORP-0014	Modeling and Planning	* RPP System Planning * Process Models * Tank Waste Database Management
ORP-0014	S/SX - Farm Retrieval	Design, procurement, construction, readiness assessments, start-up, and operations of waste retrieval systems for 241-S and 241-SX Tank Farms New systems will: 1) retrieve waste from 241-S and 241-SX SSTs, 2) convey the waste through a transfer system to DSTs Includes new and upgraded infrastructure systems to retrieve the waste and deliver it to the DST system.
ORP-0014	Secondary Waste/ETF	* Secondary Waste Treatment/ETF Project Mgmt * Secondary Waste Treatment/ETF Project Support * Secondary Waste Treatment/ETF Permitting * Secondary Waste Treatment/ETF Safety Analysis * Secondary Waste Treatment/ETF Design * Secondary Waste Treatment/ETF Eng during Construction * Secondary Waste Treatment/ETF Construction * Secondary Waste Treatment/ETF Startup * Secondary Waste Treatment/ETF ORR This WBS element includes activities required to operate ETF from its turnover from RL to ORP. This WBS element also includes activities required to transport solidified waste from ETF to the IDF during startup and testing. Disposal costs are also included. This WBS element includes activities required to test and demonstrate improved ETF solid waste performance and to investigate methods of minimizing 99Tc in WTP secondary waste
ORP-0014	Site Wide Services	These services represent day-to-day operations and maintenance of fire protection, emergency services, roads, potable water, sanitary sewer, electrical and other utilities, as well environmental, safety, health, quality and analytical services. These are the minimum services that must be made available in order for workers to be on-site and safely perform work. Furthermore, facilities cannot be occupied without these essential services and no work can be performed in those facilities. Failure to fund this element will result in immediate shutdown of the Hanford site due to health and safety concerns.
ORP-0014	SST Closure	* Provides for the closure of the 149 SSTs, nearby ancillary equipment, and associated tank farms. (After retrieval of waste from the SSTs, individual tanks will be interim closed. Interim closure will occur after retrieval is completed, and once all the tanks in a farm are interim closed, the tank farm will be closed) * Interim closure includes characterization, engineering evaluation and reporting, deactivation and isolation of transfer lines, pits and penetrations to the tank, and placement of a grout layer in the bottom of the tank to stabilize the residual waste * Farm closure includes Tank Stabilization, Ancillary Equipment Stabilization, and Enhanced RCRA Subtitle C Barrier placement.
ORP-0014	Supplemental LAW Treatment	* Encompasses facilities and systems to provide Supplement LAW Pretreatment. These new facilities and processes provide the capability to accelerate waste processing to achieve earliest practical completion of tank waste treatment * Specifically, this scope includes project management, project support, technology evaluation and down-selection, system definition, regulatory documents, safety analysis documents, design, long-lead procurement, construction, startup & turnover, operations * D&D of Supplemental LAW Treatment facilities.

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ORP-0014	T/TX/TY - Farm Retrieval	Design, procurement, construction, readiness assessments, start-up, and operations of waste retrieval systems for 241-T, 241-TX, and 241-TY Tank Farms New systems will: 1) retrieve waste from 241-T, 241-TX and 241-TY SSTs, 2) convey the waste to a transfer system or receiving facility (WRF) for transfer to DSTs, or convey the waste to a TRU packaging facility Includes new and upgraded infrastructure systems to retrieve the waste and deliver it to a WRF or the TRU packaging system Scope excludes the intermediate WRF, the TRU packaging facility or the transfer lines between WRF and the DST Tank Farm
ORP-0014	Tank Farm D&D	* Includes activities to close tank farm facilities and wastes sites that are outside the tank farm boundaries or that are not included in the tank farm closure scope. These include large complex facilities such as the IHLW shipping facility, Canister Storage Building, evaporators, the 222-S Laboratory; numerous small buildings, support facilities, structures, and mobile facilities; waste sites such as formerly used liquid disposal cribs and ponds, diversion boxes, and retention basins; the cross-site transfer lines; and vaults, pits, and diversion boxes associated with the tank farms
ORP-0014	Tank Farm Spares	
ORP-0014	Tank Operations	* Store the tank wastes until retrieved for processing (currently 53M gal in 177 SST/DSTs and approximately 60 miscellaneous underground storage tanks (MUSTS) * Includes support activities such as project management, business services, and administrative functions as well as site infrastructure provided by DOE-RL and its contractors. * TSR surveillance and maintenance activities of Tank Farm facilities; performing preventive and corrective maintenance on systems and components, providing facility engineering, maintenance of the tank technical specifications, and maintenance of the Tank Farms technical compliance programs including the configuration management program, systems engineering program, and System Design Descriptions. * Implementation of TSR administrative controls, the criticality safety program; event reporting and investigation; emergency preparedness; waste characterization for TSR compliance and waste compatibility; radiation control and As Low As Reasonably Achievable (ALARA) program compliance; industrial safety and health program; and DST corrosion mitigation. * Maintenance of the Tank Farms Authorization Basis (AB), Unreviewed Safety Question (USQ), Training and Procedures programs. * Environmental, Safety, Health and Quality activities including the Price Anderson Amendment Act (PAAA) program administration, management assessments, and independent performance evaluations. * Activities necessary to manage the DST and SST farms including housekeeping and other essential services (e.g., fire protection services, Heating Ventilation and Air Conditioning (HVAC) system maintenance, ground scans). * Provides for the Base Operations executive management function, Project controls management, ESH&Q and Performance Assurance programs field implementation and management of assigned personnel. Major elements contained in this activity include: - Provide Executive Management and strategic direction for all of Base Operation - Base Operations Manager - Base Operations Deputy - Provide Operations customer interface - Establish organizational standards, policies, expectations, and values - Define program scope and priorities - Project scope baseline, verification, and change control - Project schedule of detail activities and control - Project cost estimating, budgeting, and control - Project communication for information distribution, activity closure/change, performance reporting, and change control - Project risk response control - Project procurement and contract execution interface - Managing field implementation of assigned ESH&Q programs and personnel in support of Base Operations activities and facilities (i.e., DSTs, SSTs, 242-A, and 222-S) which include Radiological Control, Industrial Safety and Industrial Hygiene as well as staff matrixed to Base Operations from Environmental, Quality, and Safeguards and Security. - Managing field implementation of assigned performance assurance programs and personnel in support of Base Operations activities and facilities (i.e., DSTs, SSTs, 242-A, and 222-S) which include the Assessment Program and Problem Evaluation Request System.
ORP-0014	Tank Operations Reliability Projects	* Project management, field support, design, installation, and testing for tank operations reliability including 242-A Evaporator, AY/AZ Farm, AP Farm, AN Farm, AV Farm, SY Farm, DST Infrastructure, and Farm Program upgrade support.
ORP-0014	Tank Waste Characterization and Staging Facility (TWSCF) (OPC)	Include activities to support, final design, procurement, construction, commissioning, permitting, operations, and decommissioning. * TWSCF provides staging, mixing, characterization and in an enhanced role, preconditioning of the waste.
ORP-0014	Tank Waste Retrieval Support	* Design, construction, startup and turnover of Waste Receiver Facilities (WRF) for the B Complex located in the Northeast tank farm in the 200 East Area, the T Complex located in the Northwest tank farm in the 200 West Area * WRF will provide piping; heating, ventilation, and air conditioning (HVAC); electrical; and instrumentation. The WRF will provide local holding capacity until a large enough waste volume has been generated to warrant a cost-effective transfer of waste * Supports retrieval and interim closure of SSTs and the transfer of waste to DSTs * Retrieval and closure of the 241-C301 Catch Tank, and the 244 CR Vault * SST retrieval operations training and qualifications and technology developments
ORP-0014	U - Farm Retrieval	* Design, procurement, construction, readiness assessments, start-up, and operations of waste retrieval systems for 241-U Tank Farm * New systems will: 1) retrieve waste from 241-U SSTs, 2) convey the waste through a transfer system to DSTs * Includes new and upgraded infrastructure systems to retrieve the waste and deliver it to the DST system.
ORP-0014	Waste Feed Delivery	* Waste Feed Delivery (WFD) program provides the minimum required technical analysis, waste characterization, and project definition activities necessary to provide waste to the WTP * WFD program work activities include a variety of cross-cutting programmatic activities supporting WFD to the waste treatment facilities, including characterization, WFD engineering and modeling support including management and maintenance of the retrieval and transfer technical baseline, WFD program/project management support, and DST retrieval/transfer management * Provides feed delivery evaluations using the HTWOS model * Includes activities required to modify DSTs and associated infrastructure (e.g., pits and buildings) to enable retrieval and delivery of tank wastes to the WTP. Typical modifications to the DSTs and associated infrastructure include the following: - Addition of mixer pumps, as necessary; - New transfer pump(s), pit jumpers, and instrumentation; - Replacement of in-tank components as required to facilitate retrieval system operation; - A new dilution/flush system; - Control building modifications and new monitoring/control systems
ORP-0014	WTP Operations	
ORP-0014	WTP Precommissioning, Commissioning Oversight, Treatment, Operations and D&D	* Includes the management, maintenance, and operation of the WTP LAW, HLW, BOF, and LAB facilities to produce containers of ILAW * Transportation shall also be arranged for the ILAW containers to appropriate disposal locations. * Includes all operations, management, maintenance and support functions for the WTP and all consumables, materials and equipment through execution of the WTP mission until completion at the commencement of facility post operational clean out and decommissioning. * Includes the various facilities which comprise the Waste Treatment Complex, specifically Pre-Treatment (PT), Low Active Waste (LAW), High Level Waste (HLW) Balance of Facilities (BOF) and the Laboratory (LAB), in addition plant wide services and facility Improvements/refurbishments are included. * Includes D&D of all systems and structures associated with the WTP The Proposed Plan for the 221-U Facility (U-plant), represents the basic concept of the Canyon Disposition Initiative (CDI) and is the basis for the WTP D&D work scope, which is to reduce the canyon facility structure to as small as is reasonable - considering regulatory and worker safety issues - and then place an environmental barrier over the remaining structure. For the WTP Project, this concept was used for the three main processing facilities - PT, LAW, and HLW. The remaining support facilities should be able to be demolished eventually (with except of parts of the Laboratory (Lab), as they should be radiologically clean.
ORP-TD-0100	Early LAW Glass	Workscope related to Earll Low Activity Waste glass technology development.
ORP-0070	WTP OPX	
ORP-0060	Direct Feed HLW	Workscope related to direct feed of High Level Waste Facility;
ORP-0060	Direct Feed LAW	Workscope related to direct feed of LAW Facility; modifications to the LAW Facility
ORP-0060	Technical Issue Resolution	Workscope related to the Technical Issue Resolutions associated with Waste Treatment Plant Project
ORP-0060	WTP - Analytical Laboratory (LAB) (part of 01-D-416) (01-D-16-B)	Specific work scope related to the planning, design, procurement, construction and commissioning activities of the Analytical Laboratory include: 1. Establishing and maintaining the system level flow sheet; 2. Preparing of necessary permits to support DOE-ORP licensing of the Lab facility; 3. Developing and performing research and process technology tasks required to support design through the use of small and pilot scale melter testing and characterization of actual waste materials for resolution of technical issues for the Lab facility operations; 4. Developing design engineering activities for the Lab facility to verify that operating requirements are satisfied through design reviews as follows: - Civil, structural and architectural, - Plant design, - Process engineering, - Electrical engineering, - Controls and instrumentation, - Mechanical systems, & mechanical handling - HVAC/ Fire Protection - Procuring construction facility materials, equipment and services from qualified, evaluated vendors and suppliers and required acceptance testing of the Lab facility. This includes receipt, storage, control, and issuance of all project materials, and ultimate disposal of any excess. Required activities to startup and commission a facility to support vtrifying the initial quantity of Hanford tank waste, as follows: - Establishing training programs in the specialized skills required for operation and maintenance of the Lab facility; - Establishing procedures and commissioning programs for operation and maintenance of the Lab facility - Startup and commissioning activities are performed to support organization and project schedules, and support Certification of Readiness for hot commissioning; - Constructing, installing, testing, and turning over to start-up; - Completion of work scope

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ORP-0060	WTP Construction (A, B, C) (LBL + Shared Services)	<p>* Specific work scope related to the planning, design, procurement, construction and commissioning activities of the LAW Facility, Analytical Laboratory, Balance of Facilities (BOF), and HLW Facility include: - Establishing and maintaining the system level flow sheet; - Preparing of necessary permits to support DOE-ORP licensing of the Low Activity Waste facility, Lab Facility, BOF area and HLW Facility; - Developing and performing research and process technology tasks required to support design through the use of small and pilot scale melter testing and characterization of actual waste materials for resolution of technical issues for the Low Activity Waste facility operations, Lab Facility operations and High-Level Waste facility operations; - Developing and performing research and process technology tasks required to support facility functions and operations; - Developing design engineering activities for the LAW facility, Lab Facility and HLW facility to verify that operating requirements are satisfied - Procuring construction facility materials, equipment and services from qualified, evaluated vendors and suppliers and required acceptance testing of the LAW facility, Lab Facility, BOF and HLW facility. This includes receipt, storage, control, and issuance of all project materials, and ultimate disposal of any excess. - Required activities to startup testing and commissioning the facilities include the following: - Establishing training programs in the specialized skills required for operation and maintenance of the LAW facility, Lab Facility, BOF and HLW facility; - Establishing procedures and commissioning programs for operation and maintenance of the LAW facility, Lab facility, BOF and HLW facility - Start up and commissioning of facilities using simulants to demonstrate functionality of the LAW facility prior to introduction of Hanford tank wastes; functionality of BOF and HLW Facility prior to introduction of pretreated Hanford tank wastes; - Startup and commissioning activities of Analytical Laboratory are performed to support organization and project schedules, and support Certification of Readiness for hot commissioning; - Start up and commissioning of the LAW facility and HLW Facility by introducing Hanford tank wastes that have undergone pretreatment processing and demonstrating design throughput. - Constructing, installing, testing, and turning over to Start-up</p>
ORP-0060	WTP-Balance of Facilities (BOF) (part of 01-D-416) (01-D-16-C)	<p>* The work scope for the BOF area includes all activities to design, construct, and commission of the BOF, yard systems and plant site including: - Establishing and maintaining the system level flow sheet; - Preparing of necessary permits to support DOE-ORP licensing of the BOF area; - Developing and performing research and process technology tasks required to support facility functions and operations; - BOF WBS design elements include work scope that is not specific to BOF, but that supports the engineering effort across all facilities. - Procuring construction facility materials, equipment and services from qualified, evaluated vendors and suppliers and required acceptance testing of the BOF. This includes receipt, storage, control, and issuance of all project materials, and ultimate disposal of any excess. Facilities included in this WBS include: sitework (5A), administration building, (5B), cooling tower (5C), firewater pump house (5D), fuel oil (5E), diesel generator (5F), glass former storage (5G), access control (5H), melter assembly (5I), chiller compressor (5J), steam plant (5K), wet chemical storage (5L), water treatment (5M), non-dangerous, non-radioactive effluent (5N), switchgear building (5P), central waste stores (5R), erected tanks (5S), failed melter storage (5T), spent melter staging (5W), encapsulation facility (5X), simulator (5Y). The BOF includes support systems and utilities required to support the waste treatment processes in the four main process areas (pretreatment, LAW vitrification, HLW vitrification, and Lab). This effort includes startup testing and commissioning, and is performed for BOF to support the treatment plants. This includes: - Establishing training programs in the specialized skills required for operation and maintenance of the BOF facility; - Establishing procedures and commissioning programs for operation and maintenance of the BOF facility - Start up and commissioning of BOF facility using simulants to demonstrate functionality prior to introduction of pretreated Hanford tank wastes; - Constructing, installing, testing, and turning over to start-up; - Completion of work scope</p>
ORP-0060	WTP-High Level Waste (HLW) Facility (part of 01-D-416) (01-D-16-D)	<p>Specific work scope related to the planning, design, procurement, construction and commission of the HLW Facility include: - Establishing and maintaining the system level flow sheet; - Preparing of necessary permits to support DOE-ORP licensing of the High-Level Waste facility; - Developing and performing research and process technology tasks required to support and/or validate design through the use of small and pilot scale melter testing and characterization of actual waste materials for resolution of technical issues for the High-Level Waste facility operations; - Developing design engineering activities for the HLW facility to verify that operating requirements are satisfied through design reviews - Procuring construction facility materials, equipment and services from qualified vendors and suppliers and required acceptance testing of the HLW facility. This includes receipt, storage, control, and issuance of all project materials, and ultimate disposal of any excess. - Required activities to startup and commission a facility to treat (vitrify) the initial quantity of Hanford tank waste, as follows: - Establishing training programs in the specialized skills required for operation and maintenance of the HLW facility; - Establishing procedures and commissioning programs for operation and maintenance of the HLW facility - Start up and commissioning of HLW facility using simulants to demonstrate functionality prior to introduction of pretreated Hanford tank wastes; - Start up and commissioning of HLW facility by introducing Hanford tank wastes that have undergone pretreatment processing and demonstrating design throughput; - Constructing, installing, testing, and turning over to commissioning;</p>
ORP-0060	WTP-Low Activity Waste (LAW) Facility (part of 01-D-416) (01-D-16-A)	<p>* Specific work scope related to the planning, design, procurement, construction and commissioning activities of the LAW Facility include: - Establishing and maintaining the system level flow sheet; - Preparing of necessary permits to support DOE-ORP licensing of the Low Activity Waste facility; - Developing and performing research and process technology tasks required to support design through the use of small and pilot scale melter testing and characterization of actual waste materials for resolution of technical issues for the Low Activity Waste facility operations; - Developing design engineering activities for the LAW facility to verify that operating requirements are satisfied - Procuring construction facility materials, equipment and services from qualified, evaluated vendors and suppliers and required acceptance testing of the LAW facility. This includes receipt, storage, control, and issuance of all project materials, and ultimate disposal of any excess. - Required activities to startup testing and commissioning the facility include the following: - Establishing training programs in the specialized skills required for operation and maintenance of the LAW facility; - Establishing procedures and programs for operation and maintenance of the LAW facility - Start up and commissioning of facility using simulants to demonstrate functionality of the LAW facility prior to introduction of Hanford tank wastes; - Start up and commissioning of the LAW facility by introducing Hanford tank wastes that have undergone pretreatment processing and demonstrating design throughput. - Constructing, installing, testing, and turning over to Start-up</p>
ORP-0060	WTP-Pretreatment (PT) Facility (part of 01-D-416) 01-D-16-E)	<p>* Specific work scope related to the planning, design, procurement, construction and commissioning activities of the Pretreatment Facility include: 1. Establishing and maintaining the system level flow sheet; 2. Developing and performing research and process technology tasks required to support and or validate design through resolution of technical issues for pretreatment unit operations; 3. Developing design-engineering activities for the Pretreatment facility to verify that operating requirements are satisfied through design reviews as follows: - Civil, structural and architectural, - Plant design, - Process engineering, - Electrical engineering, - Controls and instrumentation, - Mechanical systems, and mechanical handling - HVAC/ Fire Protection 4. Procuring construction facility materials, equipment and services from qualified, evaluated vendors and suppliers and required acceptance testing of the PT facility. This includes receipt, storage, control, and issuance of all project materials, and ultimate disposal of any excess. 5. Required activities to startup and commission a facility to pretreat the initial quantity of Hanford tank waste, as follows: - Establishing training programs in the specialized skills required for operation and maintenance of the PT facility; - Establishing procedures and programs for operation and maintenance of the PT facility - Start up and commissioning of facility using simulants to demonstrate functionality prior to introduction of Hanford tank wastes; - Start up and commissioning of facility by introducing Hanford tank wastes and demonstrating design throughput; - Constructing, installing, testing, and turning over to commissioning</p>