BECHTEL JACOBS
Bechtel Jacobs Company LLC

ACTING UNDER US DEPARTMENT OF ENERGY PRIME CONTRACT NO. DE-ACO5-98OR22700

EXHIBIT D

SCOPE OF WORK

SUBCONTRACT

23900-SC-RM268F

PADUCAH SCRAP METAL REMOVAL AND DISPOSAL

EXHIBIT "D"

SCOPE OF WORK

1. General

SUBCONTRACTOR shall provide for the characterization, removal and disposition of at least 39,000 tons of contaminated scrap metal and miscellaneous materials from the Paducah Gaseous Diffusion Plant (PGDP) in Paducah, Kentucky. The scrap material includes material contained in scrap yards C-746-C, C-746-C1, C-746-E, C-746-E1, C-746-H4, C-746-P, C-746-P1, C-747-A, and C-747-B. All work shall be performed in accordance with this scope of work, Exhibit "E" – Technical Specifications, and Exhibit "F" – Design Drawings.

This task or statement of work is subject to change or modification as a result of the public comment and final regulator approval process for the CERCLA activity that this task or statement of work is intended to support. Any change or modification will be addressed in accordance with the provisions of the Subcontract and may include, but not be limited to, a directed change or partial termination of the task or Subcontract Work.

Based on the Bechtel Jacobs Company LLC (BJC) Labor Standards review, portions of the Scope of Work will be subject to different and distinct labor standards determinations (wage determinations). The categories applicable to the Scope, along with the corresponding pay items as described in Exhibit C, Form A-1 and Form A-2, are detailed below. Requirements associated with each of the categories are defined in Exhibit J, Wage Determination, Exhibit H (ALT) Union Employee Benefits Provisions, and other sections of the RFP.

1. Covered Work / PACE Addendum (Incorporated in Section 3.13 or 14 of PACE Addendum

    - Pay Items 1300 through 1340 – Process and Containerize Waste
    - Pay Item 1400 – Transport Waste to Disposal Facility – Low Level Radiological Waste (On-Site Landfill)
    - Pay Item 1500 – Gravel Pads
    - Pay Item 1510 – Hydroseeding
    - Pay Item 2000 – Nickel Ingot Storage

2. Non-Covered Work – Service Contract Act (Non-PACE) and/or Professional Services
    - All other pay items.

2. Work Included

A. Mobilization

Mobilization shall include, but not be limited to, preparation of the removal action work plan, participation in the readiness review process, delivery of all necessary equipment, setup of any temporary facilities, establishment of the total required workforce on the job site, completion of CONTRACTOR furnished site specific training, and delivery of all construction materials required to start work and continue in accordance with the subcontract schedule. It also includes the submittal of all documentation required prior to the start of fieldwork as identified in Exhibit "I" and Exhibit "C", Form A. The readiness review shall be conducted as a CONTRACTOR Readiness Assessment as defined in Exhibit "E", Section 00100, Part 1, 1.02, B with SUBCONTRACTOR execution defined in Part 3.

B. Scrap Removal

SUBCONTRACTOR shall furnish all labor, equipment, materials, supplies, facilities and transportation to remove scrap from the Paducah Site and dispose of all materials. SUBCONTRACTOR shall remove all of the scrap materials down to the level of surface soil (i.e.

material will be removed until soil is reached, not just to ground level). Remove all visible materials (partially embedded in the soil) at the soil level.

SUBCONTRACTOR shall consider waste minimization techniques (i.e. size reduction) for the processing of the waste. SUBCONTRACTOR shall detail plans to maximize waste that can be disposed of in the on-site facility as described in Exhibit "E", Section 00120.

SUBCONTRACTOR shall develop and submit for approval a Removal Action Work Plan (RAWP) that provides a concise description of the activities to be undertaken for scrap removal and disposal. The RAWP will include information as set forth in Exhibit E, Section 4.

As this is a CERCLA Removal Action, SUBCONTRACTOR is advised that the RAWP as identified in Exhibit "E" shall be reviewed and approved by DOE and state and federal regulators. SUBCONTRACTOR shall allow for a 120 day review and approval period.

SUBCONTRACTOR shall provide other plans and information concerning the work to be performed. Exhibit "I" lists the required submittals and references, by exhibit and section, where information concerning these submittals may be found in this document.

SUBCONTRACTOR shall safely characterize, remove, containerize, and transport all above ground and partially embedded materials in accordance with the requirements as set forth in this Subcontract and best commercial practices that meet applicable DOE, EPA, DOT, State of Kentucky, and the receiving licensed disposal site, state environmental, health & safety, transportation, and/or other requirements. Characterization, sampling, chemical and radiological analysis, and data management requirements for this Subcontract are found in Exhibit "E," Section 00030.

In accordance with Exhibit E, Technical Specification 00030, SUBCONTRACTOR shall consider the following options for chemical and radiological analysis:

- Field support laboratory installed, operated, and maintained by SUBCONTRACTOR;
- CONTRACTOR supplied fixed base laboratory support;
- Combination of SUBCONTRACTOR supplied field support laboratory and CONTRACTOR supplied fixed base laboratory support.

SUBCONTRACTOR shall include in the required submittals (e.g. Sampling and Analysis Plan, Removal Action Work Plan, Sample and Data Management Plan, etc.) a full description of the selected option. The description shall include which analyses will be performed by either the field support laboratory and/or fixed base laboratory, the assumed turn-around-time for analyses, and an explanation of the impact to the overall accomplishment of the Scope of Work. CONTRACTOR supplied fixed base laboratory support should be assumed to have a minimum turn-around-time of seven (7) days.

SUBCONTRACTOR shall package the waste in compliance with Department of Transportation (DOT) 49 CFR requirements for shipment to a DOE and CONTRACTOR licensed/approved disposal facility (see Exhibit "E", Section 00080, Transportation and Section 00120, Waste Management).

SUBCONTRACTOR personnel shall be alert for visual or other evidence of contamination with hazardous materials. Hazardous materials include, but are not limited to: asbestos, RCRA contaminants, PCBs, oils or solvents. If suspected hazardous material is found:

- SUBCONTRACTOR shall segregate materials suspected of being contaminated with hazardous chemicals and notify CONTRACTOR.
- SUBCONTRACTOR shall sample the suspect material and submit the samples to CONTRACTOR'S Sample Management Office (SMO) for characterization in accordance with Exhibit "B", SC-28.
- SUBCONTRACTOR shall package the material and provide for its disposition in accordance with Exhibit "E", Section 00120.

SUBCONTRACTOR shall have a Field Inspector on-site throughout the course of work on this subcontract. See Exhibit "E", Section 00020 for Field Inspector's qualifications. SUBCONTRACTOR Field Inspector shall be alert for evidence of any potentially fissile material. Fissile material includes any material suspected of containing equal to or greater than 15 grams Uranium 235 and an assay greater than one weight percent. If found, this material shall not be moved or otherwise disturbed until CONTRACTOR NCS approval is obtained.

- SUBCONTRACTOR Field Inspector shall sample the suspect material and submit the samples to CONTRACTOR'S Sample Management Office (SMO) for characterization in accordance with Exhibit "B", SC-28 and Exhibit "E", Section 00030.
- After characterization if material is found to be non-fissile, SUBCONTRACTOR shall package the material and provide for its disposition in accordance with Exhibit "E", Section 00120.

In the event unknown or otherwise suspect materials or waste, as identified by the Field Inspector, are encountered during the execution of the work, SUBCONTRACTOR shall immediately notify CONTRACTOR STR. Suspect materials shall be left undisturbed until CONTRACTOR provides direction.

SUBCONTRACTOR shall manage any secondary/residual waste generated as a result of work performed under this Subcontract in accordance with Exhibit "E", Section 00120.

SUBCONTRACTOR shall have a Security Liaison on-site throughout the course of work on this subcontract. See Exhibit "B", SC-6, Key Personnel for qualifications. SUBCONTRACTOR shall adhere to Specific Security Requirements as specified in Exhibit "B" SC-40.

Upon completion of the project, SUBCONTRACTOR shall furnish a final report to CONTRACTOR as described in Exhibit "E", "Reporting".

After surface materials of scrap material are removed, and the area is accepted by CONTRACTOR'S STR, SUBCONTRACTOR shall then place a gravel pad over the disturbed surface of each scrap pile and provide additional erosion control in accordance with Exhibit "E" of this SUBCONTRACT.

SUBCONTRACTOR shall perform decontamination of equipment for release. Refer to Exhibit "B" and "E".

SUBCONTRACTOR shall demobilize from the Paducah Site upon completion of fieldwork.

C. Demobilization

Demobilization shall include the removal of all construction equipment on site that was provided by the SUBCONTRACTOR, dismantlement and removal of all temporary structures, and removal of all excess construction materials, as determined by the CONTRACTOR.

D. Field Changes

Notify the CONTRACTOR'S STR of any conditions that are found to prevent the installation in accordance with these specifications.

3. Optional Work

A. Nickel Ingots

SUBCONTRACTOR shall furnish all labor, and equipment to relocate approximately 6,875 Nickel Ingots (9,700 tons) located in the C-746-H Scrap Yard to an area west of C-746-A Warehouse, see Exhibit "F". Each cylindrical ingot is approximately two foot diameter and two foot high. SUBCONTRACTOR is responsible for movement of the Nickel Ingots to the future storage location and stacking them in four quadrants. Each quadrant shall maintain a double stacked, twelve wide and seventy-seven deep ingot array. Allow four feet between quadrants. This will allow for the installation (by others) of a 60' x 320' pole barn type structure to be constructed over the stacked ingots.

B. Non-Destructive Assay (NDA)

Radiation surveys may be used to scan for uranium accumulations within scrap equipment in the scrap yards using NDA. The NDA shall be performed by an individual who has approved, documented experience and training. The Surveys will be performed prior to moving or disturbing any equipment identified to be NCS suspect items. The purpose of the survey is to identify uranium deposits that exceed the subcritical mass limits. The mass calculations will be based on the assay smear results and shall have a 95% confidence level.

Resumes shall be submitted to the CONTRACTOR for review and approval. Five (5) years NDA experience and two (2) years experience at a gaseous diffusion plant is preferred.