

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CO	ACT ID CODE	PAGE 1	OF 6	PAGES 6
2. AMENDMENT/MODIFICATION NO. M005		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO. N/A		5. PROJECT NO (if applicable)	
6. ISSUED BY US Department of Energy Savannah River Operations Office Contracts Management Division PO Box A, Aiken, SC 29802		CODE		7. ADMINISTERED BY (if other than Item 6)		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Parsons Infrastructure & Technology Group, Inc. 100 Walnut Street Pasadena, CA 91124				(4)		9A. AMENDMENT OF SOLICITATION NO.	
						9B. DATED (SEE ITEM 11)	
						10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC09-02SR22210	
CODE				FACILITY CODE		10B. DATED (SEE ITEM 13) 9/17/2002	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of offers extended, is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified

12. ACCOUNTING AND APPROPRIATION DATA (Required)
N/A

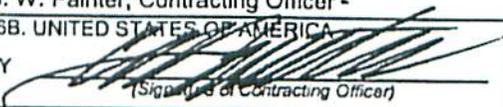
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(4)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. Clause I.85 Changes - Cost Reimbursement (Aug 1987)
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
a. The purpose of this modification is to effect minor clarifications/changes to the DESCRIPTION/SPECIFICATIONS/WORK STATEMENT (SECTION C of PART I THE SCHEDULE) and to delete the requirement for sensitivity review/analysis for a 1% scale facility and add the requirement for a 50% scale facility

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
		G. W. Painter, Contracting Officer -	
15B. CONTRACTOR /OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		BY 	3/11/03
		(Signature of Contracting Officer)	

14. Description of Amendment/Modification (Continued)

b. Section B.1 ITEMS BEING ACQUIRED – TYPE OF CONTRACT, Line Item 0001A & B – Phase I, is hereby deleted in its entirety and the following is substituted in lieu thereof:

“Line Item 0001A & B – Phase I – This Phase of the contract will be on a cost-plus-fixed-fee basis.

Phase IA – Includes project familiarization and preparation of Conceptual Design of a 15% scale, expandable, Salt Waste Processing Facility as defined in Section C. Although all research and development (R&D) work performed to date by DOE will be provided to the contractor, any additional R&D work needed by the contractor to execute the contract requirements will be included in the cost estimate for this Line Item. **Concurrent with submission of the conceptual design the contractor shall submit sensitivity reviews/analysis to provide project construction cost ranges and schedules for 5%, 10%, 20%, and 50% scale facilities.** The contractor shall also submit a cost and fee proposal for the 15% scale facility as provided for in the clause in Section H entitled, Phase II Cost and Fee Proposal. The Government will consider the information submitted and make a decision on the optimum scale facility.”

c. Section C.2 CONTRACT APPROACH, second paragraph, is hereby deleted in its entirety and the following is substituted in lieu thereof:

“The objective of the Salt Processing Project (SPP) is to design, construct, and perform pilot testing and commissioning of a SWPF to process salt waste. (NOTE: The SPP has been renamed the “SWPF Project”. Any reference in this contract to SPP is a reference to the SWPF project.) The SPP Contractor/Contractors (hereinafter referred to as the Contractor(s)”) has full responsibility for the SPP from the transfer of technology development and Design Information through the completion of transition to long term operation of the demonstration facility. A phased contract approach, as outlined in Section B, will be employed. Following facility completion and commissioning per this contract, long term operation of the SWPF will be performed under a separate contract. The SPP Contract will focus on Contract award for design, construction, and startup/pilot testing/commissioning, and turnover of the SWPF.”

d. Section C.2 CONTRACT APPROACH, fifth paragraph (page C-2), is hereby deleted in its entirety and the following is substituted in lieu thereof:

“Each design shall provide operations equipment and facility footprint for a front-end actinide, strontium, and suspended solids removal process unit operation. DOE is exploring alternatives that may perform this operation prior to feeding the salt waste to the SWPF. This equipment should therefore be designed to **minimize the impact of deleting** this unit operation from this facility at any time prior to start of final design. The impact to costs and schedule activities associated with the design, construction, start-up, pilot testing, and commissioning of the alpha removal option shall be identified in the cost and schedule range estimates.”

e. Section C.5 DESCRIPTION OF CONTRACT REQUIREMENTS AND DELIVERABLES, subparagraph (f), Deliverable Item 2.2 deliverable title (page C-9), is hereby deleted in its entirety and the following is substituted in lieu thereof:

“Operations Assessment Model”

f. Section C.5 DESCRIPTION OF CONTRACT REQUIREMENTS AND DELIVERABLES, subparagraph (f), Deliverable Item 7.2 Action Required (page C-11), is hereby deleted in its entirety and the following is substituted in lieu thereof:

“A”

g. Section C.6 STANDARDS, Standard 3: Design, Subparagraph (b)(2)(viii) (page C-22), is hereby deleted in its entirety and the following is substituted in lieu thereof:

“(viii) RESERVED”

h. Section C.6 STANDARDS, Standard 3: Design, Subparagraph (c)(9) (page C-24), is hereby deleted in its entirety and the following is substituted in lieu thereof:

“Piping and Instrumentation Diagrams: The Contractor(s) shall prepare the piping and instrument diagram for the SWPF. The piping and instrument diagrams shall identify all process and support equipment, preliminary instrument and electrical requirements, and piping sizes and line numbers.”

i. Section C.6 STANDARDS, Standard 3: Design, Subparagraph (c)(17) (page C-25), is hereby deleted in its entirety and the following is substituted in lieu thereof:

“Analytical Laboratory Facility Design: The contractor(s) shall further develop and provide the sampling and analysis requirements to support process control, environmental compliance and Saltstone and DWPF Feed product verification for DOE review and approval (Table C.5-1.1, Deliverable 3.7). The information shall include sample locations, sample purpose, analysis requirements and frequency turnaround times. Results of the assessment of process tank capacities and process operations will be used to verify and establish the specification and design of the Analytical Laboratory area of the SWPF and outside laboratory support requirements.

The Analytical Laboratory Area design shall incorporate features and capability necessary to ensure efficient SPP operations and meet all permitting, process control, authorization basis and product verification requirements. **The design shall provide analysis capability to support SWPF operations and also have the capability to receive and analyze a sample container from the Tank Farm.** The design should be validated with information from tank utilization modeling of the process tankage, and operational research modeling of the treatment process, as appropriate. Use of available outside laboratory facilities (SRS or Commercial) shall be considered to optimize cost of operation.”

j. Section C.6 STANDARDS, Standard 5: Commissioning, Subparagraph (f)(1) (page C-32), is hereby deleted in its entirety and the following is substituted in lieu thereof:

"Certification of Readiness for Hot Operations: In order to conduct a formal DOE Operational Readiness Review (ORR), resolve all open issues, and obtain necessary DOE approvals, the Contractor shall certify to DOE that the facility is ready to receive waste feed 3 months prior to the requested date for waste transfer (Table C.5-1.1, Deliverable 5.9, Certification of Readiness for Hot Operations, Final Safety Analysis Report and Critical Decision 4 Package). At a minimum, the certification shall include demonstrations in that:

- (i) The contractor has all the necessary permits, licenses, and other such approvals, and can meet all related compliance conditions;
- (ii) The interfaces are ready to start hot operations. A manageable list of exceptions (e.g., hot tie-ins), as allowed by DOE Order 425.1, is acceptable;
- (iii) The facility can meet contractual requirements for all inputs and outputs;
- (iv) The SWPF products will meet requirements and that the mass and material balance tracking is sufficiently understood for safe and efficient operations; and
- (v) The Contractor has conducted a contractor operational readiness review of the SWPF in accordance with DOE Order 425.1B, Startup and Restart of Nuclear Facilities, and certifies that the SWPF is ready for a DOE ORR

k. Section C.7 FACILITY SPECIFICATION, The following Introductory Statement is hereby added:

"The facility specifications provided in this section are provided to guide the planning and design of the SWPF. These specifications are not mandatory, however, any exceptions to their use must be authorized by written approval of the Contracting Officer's Representative (COR). Contractor shall submit written justification to COR to obtain COR approval."

l. Section C.7 FACILITY SPECIFICATION, The following Paragraphs are hereby deleted in their entirety and the following language is substituted in lieu thereof:

"3.1.1 Provisions in the facility design shall be provided to prevent inadvertent transfer of incoming waste streams to SWPF."

"3.2.2 Containment areas and or dikes capable of containing the largest tank volume, plus a margin shall be provided around bulk chemical storage tanks, containing compatible liquids."

"3.3.7 Remote handling equipment shall be considered where it is anticipated that exposure would approach dose limits or where there is a potential for dose from puncture wounds."

"3.3.12 This facility shall comply with the requirements of 10 CFR 835."

"Table 3.3-1 – Radiation Zoning Criteria is hereby deleted and 'RESERVED' "

"3.4.1 Tanks that contain or have the potential for developing flammable or explosive mixtures shall be provided with suitable safety systems to mitigate the potential for fire or explosion."

"3.4.2 All tanks that contain organic waste shall be assessed for flammability and be provided with suitable safety controls to mitigate any hazards."

"3.4.6 Two separate level indications per tank shall be provided to support inter-area transfers."

"3.7.7 RESERVED"

"3.7.8 A dedicated source of compressed air shall be provided for use as Breathing Air in the facility, either by a piped or portable system."

"3.7.9 RESERVED"

"3.7.10 Sources of compressed air shall be provided for Instrument Air and Plant Air in SWPF. A minimum of 25% excess capacity shall be built into these systems to accommodate future users."

"3.8.1 Structures, systems and components shall be designed for Natural Phenomenal Hazards commensurate with their performance category. Performance categories shall be developed and applied in accordance with DOE Guide 420.1-2, DOE-STD-1021 and DOE-STD-1020."

"3.8.3 Penetration configurations in concrete shield walls shall be shown to provide adequate attenuation of radiation."

"3.9.2 The facility shall contain or make necessary arrangements for:" (The subsequent parts of 3.9.2 remain unchanged)

"3.9.3 RESERVED"

"3.10.10 The outdoor relief valve discharge vent piping shall have design features to prevent the accumulation of water."

"3.10.11 Systems that must remain in operation to support day to day operation shall be designed to accommodate periodic testing."

"3.10.13 Test capability shall be provided for all removable process piping including process jumpers."

"3.10.14 Where jumpers are required, connectors should be standardized. Hanford type or similar proven connectors at comparable US facilities should be used."

"3.10.19 Process cell valves shall be capable of being operated remotely."

"3.10.26 Remote operation of overhead crane should be used, where practical."

"3.10.27 Where cell cover blocks are utilized, an overhead crane shall be provided to support cell cover/removal and equipment installation and removal. The overhead crane should consider remote control by a radio frequency control system and shall have a remote retrieval system."

"3.10.28 A color television camera shall be provided for process cell inspection. The camera shall be controlled remotely and will have pan, tilt and zoom capabilities."

"3.12 The Fire Protection program will be developed commensurate with the development of the facility design. The **Preliminary Hazard Analysis (PHA)** will identify major fire protection features that must be included in the project to satisfy the various code requirements."

"3.13.2 The design and installation of in-cell tanks $\leq 30,000$ gallons and equipment shall allow for remote removal and replacement, except in instances where equipment is designed to operate continuously without the need for major repair or replacement over the design life of the plant."

"3.17.14 Design should consider a dedicated, redundant fiber optic network for the Control system."

"3.21.10 Where practical, repaired equipment should be tested in the workshop areas before returning the equipment into service."

"3.21.18 The facility design shall provide for inspections of safety-related equipment."

"3.23.2 For all equipment not designed for the life of the facility, stacking of process vessels shall be avoided and overhead access shall be provided."

"3.23.4 RESERVED"

"3.23.6 Acme studs should be considered to assemble and disassemble equipment remotely. When using Acme studs on equipment that will not permit the shank of the impact wrench to clear in the vertical direction, a dutchman should be installed. When rotation of the impact wrench must be limited to prevent damage to nearby equipment, lugs should be welded to the flange to restrict the movement of the wrench or a dutchman used."

"3.23.7 Standard SRS style nozzles and jumpers shall be considered where jumpers are required."

"3.23.9 The construction and installation tolerances for remotable equipment shall support full remotability and be demonstrated."

"3.23.10 Lifting beams should be standardized, where practical for equipment requiring remote removal for maintenance."

"3.23.12 Remotable equipment shall be provided with standard guides and lifting features (e.g., trunnions, bails) to enable remote removal and replacement."

m. All other terms and conditions of the contract remain unchanged.