The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is 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 ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE DATE AND HOUR 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 or letter, provided each telegram or letter makes reference to the solicitation and amendment and is received prior to the opening hour and date specified.

Under Section C, Statement of Work, C.6 Standards, delete the existing Standard 1 and replace with the attached Standard 1. The Contractor shall submit a Certified cost proposal (a Certificate of Current Cost or Pricing Data will be required at time of negotiation completion) for this Change Order by May 14, 2007. Pending definitization of this Change Order, the Contractor is authorized to incur costs not-to-exceed $1,000,000 in performing this Statement of Work change. The Contractor shall comply with Clause I.83 FAR 52.243-6 Change Order Accounting (APR 1984). The contract value remains unchanged at $5,424,200,000.

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)  Michael K. Barrett
Contracting Officer

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)  Michael K. Barrett
Contracting Officer

15B. CONTRACTOR/OFFEROR  Bechtel National, Inc.

15C. DATE SIGNED  March 21, 2007

16B. UNITED STATES OF AMERICA

16C. DATE SIGNED  March 21, 2007

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30-105

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 52.243
Standard 1: Management Products and Controls

This Standard describes the required management products and controls. The Contractor shall provide all necessary management and technical information and support necessary to meet the requirements of the U.S. Department of Energy (DOE), Office of River Protection (ORP) Order 413.3A and DOE Manual 413.3-1 and to enable DOE to meet the data requirements of the Integrated Planning, Accountability, and Budgeting System (IPABS) and to ensure transparency in project performance and efficiency in project execution. The Contractor shall also support ORP in developing and maintaining the integrated River Protection Project (RPP) Baseline. All management and technical information developed under this contract shall be accessible electronically by the Government.

1. Baseline Description and Requirements:

The Contractor shall develop and maintain a contract compliant integrated and traceable technical scope, schedule, and cost baseline for the Waste Treatment and Immobilization Plant (WTP). The baseline and subsequent baseline changes shall be submitted for Government approval (Table C.5-1.1, Deliverable 1.5). The baseline and management thereof shall comply with this standard; ANSI/EIA-748A-1998 Earned Value Management Systems (EVMS); DOE O 413.3A; and, DOE M 413.3-1. The baseline shall include:

- WTP project technical requirements as delineated in 1(a);
- Schedule to implement project work scope as described in 1(b);
- Project Cost to implement project work scope on the projected schedule as described in 1(c))

The technical scope, schedule and cost baseline (WTP baseline) shall be maintained using a baseline change control process as described in 1(d).

a) Technical Baseline: The contract technical baseline is represented by a series of documents which define the basis for current cost or schedule estimates. Changes to these documents shall be evaluated for impact to project cost and/or schedule and captured by a baseline change proposal where necessary. The following documents shall be viewed collectively as the baseline technical scope for the cost/schedule control system:

1. The Contract statement of work;
2. Approved Functional Specification pursuant to Contract Standard 3, paragraph 3(b)(1);
3. Approved Basis of Design pursuant to Contract Standard 3, paragraph 3(b)(2);
4. Approved Authorization Basis pursuant to 10 CFR 835;
5. Approved Operations Requirements Document (bolded text);
6. Approved Interface Control Documents;
7. Permit Requirements, and;
8. Approved Level 2 WBS Dictionary Sheets.

b) Schedule Baseline: The WTP baseline schedule is an integrated schedule hierarchy containing the networked, detailed tasks necessary to ensure successful project execution from Level 1, Project Summary Schedule, Level 2, Executive Level Schedule, Level 3, Project Intermediate Schedule, to the Level 4, Detailed Working Schedule. The scheduled activities shall be vertically traceable to the RPP Integrated Master Plan (IMP), the Work Breakdown Structure (WBS), and EVMS control accounts. The WTP schedule shall be used to verify attainability of contract level milestones defined in contract section F.1(b), to evaluate progress toward meeting program objectives through tracking interim gatepost milestones, and to integrate the program schedule activities with all related work
activities and milestones.

Gatepost milestones are interim milestones at the project and subproject level which shall serve as leading indicators to overall contract schedule compliance. These gatepost milestones shall be mutually agreed to between DOE and the contractor; be used as the basis for monthly performance reporting; have milestone dictionary descriptions; and, not be changed without DOE approval. Gatepost milestones shall focus on near term (24 months) including RCRA permitting requirements; major procurement actions; significant construction events; critical equipment installs/deliveries, major design deliverables, etc., and preferably be “completion” type milestones. DOE may elect to designate one or more gatepost milestones for fee incentive purposes, if so; they will be controlled by the Contracting Officer.

The Government will use the Level 3, Intermediate Schedule, for oversight and monitoring progress but reserves the right to request lower level schedule data when necessary. The following requirements shall be addressed at the appropriate level within the schedule hierarchy:

1) **Scheduling Requirements:** The WTP schedule shall be developed using a 24 month rolling schedule concept which is statused monthly and extended semi-annually. The near term schedule shall be more detailed than activities past the 24 month cutoff.

   i) The schedule shall include all significant external interfaces and critical items from suppliers, teammates, or other detailed schedules that depict significant and/or critical elements and Government furnished equipment or information dependencies. The determination of significant and critical Government interface requirements shall be mutually defined and documented.

   ii) The schedule shall be updated according to the contractor’s management control system and shall be submitted no less frequently than monthly. The schedule may reflect data either as of the end of the calendar month or as of the contractor’s accounting period cutoff date, provided it is consistent and traceable to the Monthly Performance Report.

   iii) The schedule shall contain the contract milestones, gatepost milestones, and discrete tasks/activities through contract completion.

   iv) Monthly schedule analysis shall be performed to assess schedule progress to date and included as part of the monthly performance report. The analysis shall include changes to schedule assumptions, variances above agreed thresholds to the baseline schedule, causes for the variances, potential impacts, and recommended corrective actions to minimize schedule delays. The analysis shall also identify potential problems and an assessment of the critical path and near-critical paths for the five subprojects and the overall contract.

   v) The schedule shall be created using a Critical Path Method (CPM) network capable Commercially Off-The-Shelf (COTS) scheduling software application. The schedule shall be delivered electronically in the native digital format (i.e., an electronic file produced within the contractor’s scheduling tool) as part of the monthly report.
(vi) The level of detail in the schedule (including number and duration of tasks/activities) shall follow the contractor’s Project Controls System Description, program directives, etc. A sequence of discrete tasks/activities in the network that has the longest total duration through each subproject and the overall WTP contract shall be identified as the subproject and project critical paths, respectively.

(2) In addition, the contractor shall develop the necessary modeling capability at a ROM level of accuracy to support “what-if” evaluations within 5 working days of request. This modeling system shall be a joint P3 and Cobra system to show resources loaded on the model by dollars and reasonably represent planned expenditures by month for the first FY and fiscal year thereafter. Level of effort activities shall be added to the model as well as undistributed budget in planning packages so that each fiscal year can balance against known funding.

c) Cost Baseline: The WTP cost baseline is the latest DOE approved Project Management Baseline (PMB) including any negotiated or directed changes, approved baseline change proposals, together with the following PMB supporting documentation:

1. Total contract cost and subproject costs including a summary description of facility design, process design, operational concept, and schedule.

2. Status of facility design, construction and related procurements.

3. Description of the methodology of how the estimate was developed.

4. A WBS dictionary which includes: a detailed technical description of the scope to be performed at each WBS level; the work activities required; identification of any work specifically excluded; any constraints, special conditions or other criteria.

5. Backup materials necessary to understand the estimate shall be agreed to prior to submittal of the estimate. Examples include quantity takeoffs, equipment lists, detailed specifications, plans and drawings, calculations, databases used, historical data, cost estimating relationships, and actual quotes.

6. Details of distributable costs, methods of allocation, and a description of the work covered by distributable costs and how they were estimated and developed.

7. Explanation and description of DCAA validated overhead and general and administrative rates used.

8. Examples of how standard base rates are burdened to arrive at estimated hourly rates.

9. Definitions and delineation for and categorization of costs into labor, material, equipment, travel, taxes, contingency, and other.

10. Full delineation of any use of productivity or related factors that clearly identifies when and where used and basis for the utilization.

11. Written analysis of how cost and schedule contingency was determined. This includes all pertinent information necessary to understand and perform the calculations.
(12) Estimate history; if the current estimate is a revision to an earlier estimate provide reconciliation between estimates.

(13) Basis of escalation.

(14) Subcontractor cost estimates, traceable to the WTP cost estimate and WBS, if available, shall be provided upon request.

(15) Risk mitigation plans and activities.

d) Baseline change process: The baseline change process will be rigorous and disciplined to ensure that the baseline is accurate, up to date and capable of providing meaningful data and information. The contractor change control process shall align and support the DOE change control process. The contractor change control process, including routinely scheduled meetings, shall be open to Government oversight. The WTP baseline change process will be managed in a timely manner. Baseline changes may be triggered when:

1. Controlled documents as outlined in paragraph 1 (a) require changing;
2. Contract or Gatepost milestones need revision;
3. Cost thresholds are in jeopardy;
4. Changes within BNI approval authority occur.

[Note: changes to contract terms and conditions, contract level milestones, and fee require both a baseline change proposal and a contract modification pursuant to the contract terms and conditions.]

e) Baseline Change Approval Thresholds: In addition to DOE O 413.3A requirements, baseline change control approval thresholds for technical, schedule, and cost changes have been established as follows:

<table>
<thead>
<tr>
<th>Threshold</th>
<th>DOE Approval Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule</td>
<td>Contract Milestone Changes</td>
</tr>
<tr>
<td>Gatepost Milestone</td>
<td>Changes exceeding the $30M cumulative fiscal year management reserve. Any individual change to a WBS Level 2 budget at completion exceeding $5M [absolute sum] including schedule impact cost</td>
</tr>
<tr>
<td>Technical</td>
<td>Changes to baselined documents in paragraph 1(a)</td>
</tr>
</tbody>
</table>

f) Spending at Variance: In some circumstances the Contractor may exceed DOE authorized funding levels for a specific control account when a baseline change is not warranted, such as for cost overruns. The Contractor’s change control system shall track, manage and provide for approval of changes in funding levels as a separate but integrated part of the overall change control process. Change control records shall maintain clear distinction between approved changes in funding and baseline changes.

g) Estimate at Completion (EAC):
The Project and Subproject EACs shall be maintained and reported monthly. The EAC shall be kept current and any necessary changes exceeding thresholds shall be documented in a baseline change proposal for DOE review and approval.

2. **Project Funding:**

The Contractor shall use the DOE-approved WTP project cost baseline as the basis for the subproject and total project funding profile that is required to complete the Contract Scope. The WTP baseline funding profile shall comply with Congressional appropriations for subproject and total project cost. The funding profile includes engineering, procurement and construction baseline costs (including management reserve and contingency); and estimated fees that will be paid to the Contractor. The Contractor shall provide on a monthly basis, Form DD 1586, Aug 96, DID-MGMT-81268, Contract Funds Status Report (CFSR) or approved equal for each control point.

Contractor utilization of management reserve shall be reported monthly and shall include the impact on the life cycle of the contract.

3. **Controlled Management Documents:** The following documents shall be submitted for approval by DOE in accordance with the schedule in table C.5-1-1, Deliverables:

   a) **Interface Management Plan:** DOE (as lead), the Tank Farm Contractor; and, the Contractor shall develop and implement an Interface Management Plan (Table C.5-1.1, Deliverable 1.4). The interface management plan shall:

      (1) Recognize the DOE role as the owner of the WTP and as the final decision authority for any interface issues that are not resolved between the other parties.

      (2) Define the scope of each interface and provide a brief description of the required deliverables (products, documents, procedures, services, etc.) through Interface Control Documents (ICDs)

      (3) Define organizational points of contact for participants.

      (4) Define interface requirements, controls, and applicable source documents for each interface.

      (5) Involve appropriate RPP organizations and Hanford contractors in the integration, review and approval of ICDs and implement changes to ICDs through the appropriate change control process and, if necessary, contract changes.

      (6) Involve individuals with the appropriate level of organizational responsibility and authority to assure the interface is implemented and functioning. DOE/ORP will identify points of contact for each interface document.

      (7) Identify, track, and elevate issues for management review in the Monthly Status Report.

   b) **Project Execution Plan:** The Contractor shall prepare a Project Execution Plan that describes the approach for managing and controlling the project at the Contractor level. The Project Execution Plan (PEP), shall be approved by DOE (Table C.5-1.1, Deliverable 1.2), and shall focus on Contractor policies, methods, and approaches for the integration
of project scope, schedule and cost information in assuring compliance with Contract and regulatory requirements. The Contractor PEP shall address the approach the Contractor will use to implement the requirements pertaining to project control processes including:

1. Management Structure, responsibilities, and authorities;
2. Integrated Safety Management;
3. Quality Assurance;
4. Safeguards and Security;
5. Permitting;
6. Construction Acceptance, Test and Evaluation;
7. Acquisition Planning;
8. Contract management;
9. Systems engineering;
10. Configuration management;
11. Waste treatment process change control;
12. Information management and reporting;
13. External interface management;
14. Work management;
15. Risk management;
16. Construction project management; and
17. Communications and stakeholder involvement.

Project Control System Description: The Contractor shall provide for DOE approval (Table C.5-1.1, Deliverable 1.3) a Project Control System Description meeting the requirements of DOE Order 413.3A Program and Project Management for the Acquisition of Capital Assets, DOE Manual 413.3-1 Project Management for the Acquisition of Capital Assets and, ANSI/EIA-748-A-1998 Earned Value Management Systems (EVMS).

The System Description shall describe the management processes and controls that will be utilized to manage and control work and complete Contract requirements. Upon approval by the Contracting Officer, the Contractor shall fully implement the project control system. The Contractor shall obtain Contracting Officer approval prior to implementing materially significant changes to the system description. The Contracting Officer may direct compliance reviews to determine whether the Contractor is operating in accordance with the approved system description and producing accurate planning, budgeting, reporting, and change control data. The Contractor shall provide the Contracting Officer or designated representatives with access to all pertinent records, data, and plans for purposes of initial approval, approval of proposed changes, and the ongoing operation of the project control system.

The Project Control System Description shall, at a minimum, include:

1. A work breakdown structure (WBS) including companion "dictionary" descriptions of work for each level 2 WBS element. The Work Breakdown Structure (WBS) shall provide the basis for all project control system components, including estimating, scheduling, budgeting, performing, managing, and reporting, as required under this contract. Control accounts below level 2 shall be identified.

2. The authorized contract level 2 WBS for this project is as follows:
(3) The organizational breakdown structure, including roles and responsibilities of each major organization and identification of key management positions. A control account shall be assigned to a manager with responsibility and authority to plan and budget the work, and control the resources and work activities within the approved technical, schedule, and cost baselines. The Control Account Manager is also responsible to report status to allow complete project rollup of technical, schedule and cost performance for current reporting periods, cumulative to-date, and at-completion. The Contractor shall maintain and provide a current list of Control Account Managers.

(4) A description of the technical scope, cost, and schedule baseline development process and the hierarchy of documents that will be used to describe and maintain that baseline.

(5) Documentation of the process the Contractor intends to use for document control, configuration control, and change control.

(6) A brief summary of any supporting project control procedures that will be used.

4. Risk Management:

a) The contractor shall implement the risk management process defined in the Contractor’s Project Execution Plan, DOE O 413.3A and DOE M 413.3-1. The Contractor shall provide a Risk Management Plan documenting Contractor budget base risks (scope, schedule, and cost) and associated management reserve for DOE approval. The WTP Risk Management Plan shall identify the major risks to completing the project within the approved contract baseline; the Contractor’s risk management strategies, and mitigation action plans. The Contractor shall submit quarterly the status of the WTP Risk Management Plan and Management Reserve utilization (Table C.5-1.1, Deliverable 1.6). The WTP Risk Assessment shall meet the following requirements:

1) Project risks shall be identified and their probabilities and consequences;

2) Risks identified as Critical (Critical Risk List) shall be evaluated with each submittal
and changes in confidence level by facility as a minimum.

3) Management reserve utilization shall be documented by facility.

b) The Contractor shall provide a monthly status of work scope actions directly attributed to DOE owned risks (Technology, Programmatic, and Operational) as identified in the River Protection Project (RPP) Risk Management Plan. The contractor shall also support the identification, categorization, and development of risk handling strategies for newly identified DOE owned risks and support the annual update to the RPP Risk Management Plan.

c) Risk and decision management activities shall be coordinated on a continuing basis with DOE (as lead), Tank Farm Contractor, and Hanford Site Contractors. Contractor risk analysis information pertaining to “cross-cutting” decisions shall be communicated to DOE, the Tank Farm Contractor, and Hanford Site Contractors, including agreement as to who should have the lead for managing each risk. The Contractor shall document risks associated with ICDs and prepare issue resolution plans for DOE approval.

d) The Contractor shall include forecasts of expected changes to risk assessment status in the Monthly Status Report (Table C.5-1.1, Deliverable 1.7).

5. **Project Reporting**

   The Contractor shall develop a reporting system that reports project performance on the technical scope, schedule, and cost profile. The requirements and procedures for this system shall be defined in the Project Control Systems Description. The following routine reports are required:

   a) **Monthly Performance Report**: The Contractor shall prepare a monthly performance report representing the prior month’s performance and transmit it to DOE by the first Tuesday of the second month following data cutoff (Table C.5-1.1, Deliverable 1.7). The Monthly Performance Report shall be a written report that includes, but is not limited to, the following:

   **Management Overview**:

   (1) Project manager narrative assessment;

   (2) Safety statistics;

   (3) Quality issues;

   (4) Significant accomplishments and progress towards completion of project gatepost milestones and objectives;

   (5) Potential problems, impacts, and alternative courses of action, including staffing issues, assessment of the effectiveness of actions taken previously for significant issues, or the monitoring results of recovery plan implementation;

   (6) Status of decisions, including DOE decisions, and information requirements for those decisions;

   **Project Control Information**

   (7) EVMS information by WTP project and subproject in the following OMB Contract Performance Report formats (DID-MGMT-81466):
(a) Format 1, DD Form 2734/1, Mar 05, Work Breakdown Structure
(b) Format 2, DD Form 2734/2, Mar 05, Organizational Categories
(c) Format 3, DD Form 2734/3, Mar 05, Baseline
(d) Format 4, DD Form 2734/4, Mar 05, Staffing
(e) Format 5, DD Form 2734/5, Mar 05, Explanations and Problem Analysis or an approved equivalent format.

(8) The contractor shall provide monthly EVMS analysis.

(9) Variance reports;

(10) A change control section that summarizes the scope, technical, cost, and/or schedule impacts resulting from any implemented actions for approved baseline changes; and that discusses any known baseline changes and utilization of management reserve;

(11) Updated Trend register;

(12) Project and subproject Cost avoidance actions taken;

(13) Performance, using schedule, earned value, and critical path methods, to identify potential schedule deviations and needed corrective actions before they impact the baseline;

(14) Forecasted changes to last risk assessment;

Schedule Data:

(15) Ninety day forecast for major activities and milestones (Gatepost and Contract Level milestones);

(16) Report of proposed changes that impact DOE, site interfaces, or Gatepost and/or Contract Level milestones;

(17) Statused Level 3 schedule shall be submitted (together with the performance report or under separate cover) for each sub facility that reflects progress against the baseline. The schedule shall incorporate all approved changes to date and include a critical path analysis derived from Level 4 for each sub facility and the total project;

Electronic Data:

(18) Provide via compact disc the following earned value data (within 4 weeks of data cutoff) to the Contracting Officer and the Contracting Officer’s Representative: (i) Engineering Performance and Progress Report data files; (ii) Quantity Unit Rate Report data files; (iii) COBRA data files and reports; (iv) baseline P3 schedule; (v) Current P3 schedules; (vi) and Cost and Commitment Log; Earned Purchase Order Value (EPOV) data; BETK; commodity curves; Trends and Trend reports.
b) **Occurrence Reporting**: The Contractor shall adhere to DOE Order 231.1A, *Environment, Safety, and Health Reporting* (or current revision) with Hanford Site specific requirements and methods for notification (Table C.5-1.1, Deliverable 1.8).

c) **Environment, Safety, and Health Reporting**: In addition to *Occupational Safety and Health Act of 1970*, and the *Price Anderson Amendments Act of 1988* (10 CFR 820) reporting requirements, the Contractor shall report all events and information specified in DOE Order 231.1, *Environment, Safety and Health Reporting*. The process and form of reporting will meet the requirements of this Order and DOE Manual 231.1-1, *Environment, Safety and Health Reporting Manual*. The Contractor process will specify this requirement in Contracts down to the lowest tier subcontractor. The Contractor process will accumulate and provide a single report responding to required information for both the Contractor and all subcontractors (Table C.5-1.1, Deliverable 1.9).

d) **Accident Investigation**: The Contractor and, as necessary, all subcontractors shall support Type A and Type B accident investigations for accidents that may occur during the Contractors activities. The Contractor and all its subcontractors shall establish and maintain readiness to respond to accidents, mitigate potential consequences, assist in collecting and processing evidence, and assist with the accident investigation. This shall include preserving the accident scene and providing support to the accident investigation board.