

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE <b>DE-AC07-99ID13727</b>	PAGE 1 OF 7 PAGES
2. AMENDMENT/MODIFICATION NO. <b>M165</b>	3. EFFECTIVE DATE <b>See Block 16C</b>	4. REQUISITION/PURCHASE REQ. NO. <b>NOPR</b>		5. PROJECT NO. (If applicable)
6. ISSUED BY <b>U.S. Department of Energy Idaho Operations Office Contract Management Division 1955 Fremont Avenue Idaho Falls, ID 83415-1240</b>		7. ADMINISTERED BY (If other than Item 6) <b>Jennifer K. Cate, Contract Specialist (208) 526-0631</b>		
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and Zip Code) <b>Advanced Mixed Waste Treatment Project Bechtel BWXT Idaho, LLC 850 Energy Drive, Suite 200 Idaho Falls, ID 83401-2700</b>			9A. AMENDMENT OF SOLICITATION NO.	
			9B. DATED (SEE ITEM 11)	
			10A. MODIFICATION OF CONTRACT/ORDER NO. <b>DE-AC07-99ID13727</b>	
			10B. DATED (SEE ITEM 13) <b>June 1, 1999</b>	
CODE	FACILITY CODE			
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  is extended,  is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation 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 or letter, 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 (If required)  
**N/A**

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

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.	
B. THE ABOVE-NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (Such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).	
<b>X</b>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: <b>F.5 Option to Extend the Term of the Contract and Mutual Agreement</b>
D. OTHER (Specify type of modification and authority):	

E. IMPORTANT: Contractor \_\_\_\_ is not, **X** is required to sign this document and return **[3]** copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible)

**The purpose of this modification is to extend the contract for one year, pursuant to clause F.5, Option to Extend the Term of the Contract, beginning May 1, 2008, through April 30, 2009, to perform work necessary to continue meeting the requirements under the Settlement Agreement between DOE and the State of Idaho.**

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

15A. NAME AND TITLE OF SIGNER (Type or print) <b>P. James Simonds Acquisition Services Manager</b>		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) <b>Wendy L. Bauer Contracting Officer</b>	
15B. CONTRACTOR/OFFEROR <b>Jim Simonds</b> (Signature of person authorized to sign)	15C. DATE SIGNED <b>4/10/08</b>	16B. UNITED STATES OF AMERICA <b>Wendy L. Bauer</b> (Signature of Contracting Officer)	16C. DATE SIGNED <b>4/10/08</b>

The contract is modified to incorporate AMWTP provisions for the one-year performance period, May 1, 2008, through April 30, 2009, as indicated below. Except as modified by the terms of this modification, all other provisions and/or clauses in the contract remain unchanged.

**1. Section B, provisions B.3 and B.4, are modified for the AMWTP work as follows:**

**B.3 ESTIMATED COST AND AVAILABLE FEE for AMWTP Work**

For the period May 1, 2008, through April 30, 2009, the total estimated cost is increased \$116,400,000 from \$408,504,097 to \$524,904,097; and the total available fee is increased \$9,600,000, from \$49,022,500 to \$58,622,500. If a five-month option is exercised to extend the contract through September 30, 2009, the total estimated cost will increase by \$52.5M, including \$4.17M of available fee.

BBWI shall continue to segregate the cost for the AMWTP work separate from the Idaho Completion Project costs. In addition, BBWI shall segregate the costs for CCP and off-site CH-TRU waste processing.

**B.4 PERFORMANCE BASED INCENTIVES for AMWTP**

**PERFORMANCE BASED INCENTIVES for AMWTP for the period May 1, 2008, through April 30, 2009.**

**TOTAL MAXIMUM AVAILABLE FEE POOL - \$9.6M; if the five-month option is exercised to extend the contract through September 30, 2009, the fee pool will increase to \$13.77M.**

**AMWTP FEE INCENTIVE – MEASURE 1 – SHIPPED<sup>(i)</sup> AND/OR CERTIFIED<sup>(h)</sup> WASTE (MAXIMUM AVAILABLE FEE = \$7.6M); if the five-month option is exercised to extend the contract through September 30, 2009, the fee incentive will increase to \$10.77M.**

- Fee for waste shipped<sup>(i)</sup> and/or certified<sup>(h)</sup> will be earned at a rate of \$850 per cubic meter (m<sup>3</sup>) for up to 7,320m<sup>3</sup>. Upon exceeding 7,320m<sup>3</sup>, the rate will increase to an average of \$950 per m<sup>3</sup> over the entire volume up to 8,000m<sup>3</sup>. See examples of Request for Payment of Fee calculation below.

**EXAMPLE 1: Billing @ 7,000m<sup>3</sup>**

Item	Measure	Earned Fee
Measure 1	Ship TRU/MLLW Offsite	
Cumulative Fee Earned	Cumulative Waste Shipped = 7,000m <sup>3</sup> (7,000m <sup>3</sup> @ \$850 per m <sup>3</sup> )	\$ 5,950,000
Cumulative Prior Billed	Less: AMWTP Billings (___ through ___) [For example purposes, use 6,500m <sup>3</sup> @ \$850 per m <sup>3</sup> ]	\$ 5,525,000
Net Billing	Net Billing this Invoice #	\$ 425,000

EXAMPLE 2: Billing @ 7,500m<sup>3</sup>

Item	Measure	Earned Fee
Measure 1	Ship TRU/MLLW Offsite	
Cumulative Fee Earned	Cumulative Waste Shipped = 7,500m <sup>3</sup> (7,500m <sup>3</sup> @ \$950 per m <sup>3</sup> )	\$ 7,125,000
Cumulative Prior Billed	Less: AMWTP Billings ( ___ through ___ ) [For example purposes, use 7,000m <sup>3</sup> @ \$850 per m <sup>3</sup> ]	\$ 5,950,000
Net Billing	Net Billing this Invoice #	\$ 1,175,000

- If the five-month option through September 30, 2009, is exercised, fee will be earned at the average rate being earned on April 30, 2009, for up to 3,333m<sup>3</sup>.
- BBWI shall safely and compliantly store, characterize, certify, package, and ship off-site waste historically managed as stored TRU for subsequent disposal. BBWI shall disposition TRU waste at the Waste Isolation Pilot Plant (WIPP) and at least 1,120m<sup>3</sup> of MLLW<sup>(i)</sup> at an appropriate treatment and/or disposal facility. Fee for Measure 1 is provisionally earned until BBWI has shipped and/or certified 3,000m<sup>3</sup>. Provisional fee will become earned fee upon completion of 3,000m<sup>3</sup> waste shipped and/or certified. Accelerated Retrieval Project (ARP) waste is handled on a cost-reimbursement basis and is not part of this incentive.

**AMWTP FEE INCENTIVE – MEASURE 2 – RETRIEVED<sup>(i)</sup>/ TRANSFER OF REMOTE-HANDLED (RH) TRU (MAXIMUM AVAILABLE FEE = \$2.0M); if the five-month option is exercised to extend the contract through September 30, 2009, the maximum available fee incentive will increase to \$3M.**

- Fee for waste retrieved will be earned at an average rate of \$100 per m<sup>3</sup> for up to 13,200m<sup>3</sup>. Upon exceeding 13,200m<sup>3</sup>, the rate will increase to an average of \$125 per m<sup>3</sup> over the entire volume up to 16,000m<sup>3</sup>. See previous examples of Request for Payment of Fee calculation for Measure 1. This fee will be earned in accordance with the provisional fee earning requirements of Measure 2, below.
- If the option is exercised to extend the contract through September 30, 2009, fee will be earned at the average rate being earned on April 30, 2009, for up to 6,000m<sup>3</sup>, and in accordance with the provisional fee earning requirements of Measure 2, below.
- By September 30, 2009, if all remaining stored waste is retrieved from the Transuranic Storage Area-Retrieval Enclosure (TSA-RE) and storage modules (estimated to be 6,000m<sup>3</sup>), and items (2) and (3) below are completed, an additional \$250,000 in fee may be earned.
- BBWI shall safely and compliantly:
  1. retrieve<sup>(i)</sup> stored waste from the TSA-RE and storage modules;

2. perform screening level characterization<sup>(m)</sup> of all waste retrieved 30 days prior to the end of the contract period as needed to clearly identify which waste: (a) could be a candidate for disposition at the Nevada Test Site (NTS) or other appropriate off-site disposal facility; and (b) would be considered a candidate for RH-TRU waste; and
3. transfer all identified candidate RH-TRU waste that meets ICP contractor waste acceptance criteria to the Idaho Cleanup Project (ICP) contractor.

Characterization required for (2) above and waste container transfers required for (3) above shall be documented and tracked by individual container identification numbers.

- Fee for Measure 2 is provisionally earned until the following are completed, at which time provisional fee will become earned fee:
  - (i) Screening level characterization is completed for all waste retrieved prior to May 1, 2008;
  - (ii) 5,500m<sup>3</sup> of waste has been retrieved after May 1, 2008, and screening level characterization has been completed for this 5,500m<sup>3</sup> of waste; and
  - (iii) Candidate RH-TRU identified in (i) and (ii) above, and meeting ICP contractor waste acceptance criteria, has been transferred to the ICP contractor.

THE FOLLOWING APPLY TO BOTH MEASURES 1 AND 2:

- (a) For purposes of fee determination, BBWI assumes all risks of performance and facility maintenance/repairs required under normal operations and must perform work within the specified estimated cost and fee.
- (b) Subject to the availability of funds, it is anticipated that funding will be provided as follows: from May 1, 2008, through April 30, 2009 - \$126M; and \$52.5M for the five-month option through September 30, 2009. If this funding profile is changed, the Government and the contractor will conduct negotiations to appropriately adjust the estimated cost and total available fee pool.
- (c) BBWI must comply with the DOE-approved WIPP shipping schedule based on the weekly shipping rate (for AMWTP and ARP shipments) averaged over a rolling month.
- (d) BBWI may submit requests for payment of fee for TRU waste and/or MLLW Shipped<sup>(i)</sup> and/or TRU waste Certified<sup>(h)</sup> in 500m<sup>3</sup> increments. BBWI may also submit requests for payment of fee for Waste Retrieved<sup>(k)</sup> in 500m<sup>3</sup> increments. At the end of the contract period, BBWI may submit a request for payment of fee for the difference in volume between the ending volume for each Measure and the volume previously billed for each Measure.

DOE may adjust requests for payment of fee for earned value, safety performance, performance against the WIPP shipping schedule, failure to package and ship adequate quantities of ARP waste, failure to meet facility maintenance obligations and to invest in reliability improvements, and lack of sustained progress on disposition of waste that cannot be shipped to WIPP. Only the volume of the original waste container (prior to overpacking or treatment) will be considered for the volume of waste disposed.

If the total allowable cost exceeds the estimated cost in B.3 ESTIMATED COST AND AVAILABLE FEE for AMWTP, at the end of the performance period, whether or not the incentives are completed, fee may be decreased as determined by the Contracting Officer.

- (e) At the end of the contract period, BBWI must leave a minimum TRU waste backlog of 700m<sup>3</sup> Waste Characterized<sup>(k)</sup> and 360m<sup>3</sup> Waste Certified<sup>(h)</sup>. The backlog quantities do not include ICP buried waste (Accelerated Retrieval Project). BBWI must have in backlog one week's worth of assembled payloads (for example: assume 15 shipments per week, which will require 45 payloads) for shipments to WIPP; an additional week's worth of identified payloads (identified on paper or physically assembled) in WIPP Waste Identification System (WWIS); and a total of four week's worth of shipping consumables. Shipping consumables include those used for the assembled payloads. These backlog payloads can be comprised of TRU certified waste counted against either the 360m<sup>3</sup> of AMWTP waste or non-AMWTP waste (such as ICP "buried waste") intended for WIPP. Consumables may also include quantities planned for shipment of AMWTP and non-AMWTP waste. Failure to leave the minimum TRU waste backlog will result in a fee adjustment (reduction) up to \$460,000, as determined by the Contracting Officer.
- (f) In accordance with Section C, paragraph J, offsite TRU waste processed through AMWTP can be counted for fee at a value of 2.5m<sup>3</sup> per 1m<sup>3</sup> shipped offsite. BBWI must process the offsite TRU waste within three (3) months of receipt and ship offsite for disposal within six (6) months of treatment. BBWI must segregate, track, and give priority to the processing of offsite TRU waste received.
- (g) Other INL waste, excluding ARP waste, identified in Section C, paragraph J, processed through AMWTP can be counted for fee at a value of 1m<sup>3</sup> per 1m<sup>3</sup> shipped offsite. BBWI must process this waste within six (6) months of receipt and ship offsite for disposal within six (6) months of treatment. BBWI must segregate and separately track this waste.
- (h) Waste Certified is TRU waste certified for WIPP disposal but not shipped to WIPP. This waste can be counted towards fee at a value of 1m<sup>3</sup> per 1m<sup>3</sup> Certified-but-not-Shipped. A maximum of 1,500m<sup>3</sup> of TRU waste Certified-but-not-Shipped may be counted against this measure at the end of the contract

period. This 1,500m<sup>3</sup> excludes the 360m<sup>3</sup> of certified backlog waste identified in paragraph (e) above.

TRU Waste is Certified when it has been characterized, its relevant data validated and verified, and its information entered into and approved in the WWIS Certification Module, as specified in the WIPP Hazardous Waste Permit.

At the end of the contract period, any containers that have not been certified in WWIS, but have been entered into Pre-Submittal in WWIS and met all of the following conditions can be counted for fee purposes.

1. Container has not been through FGAS sampling and/or the associated data has not been entered into the WIPP WWIS, even though CCP has had the container for at least two weeks - after BBWI delivered the container and the DAC had been met;
  2. BBWI has attempted to manage the CCP process by monitoring CCP's progress, documenting such progress on a container-by-container basis and working with CCP to anticipate/avoid potential issues that could affect the FGAS process; and
  3. BBWI has attempted to minimize the impacts of any issues that could affect the FGAS process (i.e., arrange to use spares if equipment breaks, arrange for alternative personnel in the case of an extended illness, etc.).
- (i) MLLW is waste that was stored in a retrievable above ground configuration and identified by DOE as part of the original 65,000m<sup>3</sup> of Historically Managed Stored TRU Waste.
- (j) Waste Shipped is defined as TRU waste certified in WWIS for disposal at WIPP, certified in WWIS for transportation to WIPP, loaded on approved carriers, and transported out of the State of Idaho, or MLLW that has been characterized, packaged, and certified to meet the waste acceptance criteria of the appropriate treatment and/or disposal facility and transported to, and accepted by, the appropriate treatment and/or disposal facility.
- (k) Waste Characterized is defined as TRU waste that has been successfully processed through Real-Time Radiography/Visual Examination, Assay, and Head Space Gas (as necessary), its relevant data validated and verified, and it is compliantly staged and ready for certification in WWIS or introduction into the treatment facility.
- (l) Waste retrieved is defined as all waste, regardless of its eventual disposal route, that is retrieved by BBWI from its storage location (at the TSA-RE, the RCRA Type II storage modules, or the RCRA Type I storage module); assigned an initial AMWTP container identification number that is unique; undergone initial radiation survey; weighed (actual measured weight or historical information); and all associated data entered into the AMWTP waste tracking system.

- (m) Screening level characterization includes, but is not limited to, radiological screening, non-destructive assay and/or Acceptable Knowledge documentation. DOE must approve the use of Acceptable Knowledge on a case-by-case basis for purposes of declaring screening level characterization to have been completed.

**3. Section C – Section C is modified to add the Statement of Work for the AMWTP for the performance period May 1, 2008, through April 30, 2009, as attached.**

**4. Section F – provisions F.2 and F.5 are modified to read as follows:**

**F.2 TERM OF CONTRACT, paragraph 1, is modified as follows:**

The term of this contract is from October 1, 1999, through April 30, 2009. The parties may extend the contract term through September 30, 2009, in accordance with the provisions of clause F.5, Option to Extend the Term of the Contract.

**F.5 FAR 52.217-9 Option to Extend the Term of the Contract (Mar 2000)**

- (a) The Government may extend the term of this contract by written notice to the Contractor within 30 days before the contract expires; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 180 days before the contract expires. The preliminary notice does not commit the Government to an extension.
- (b) If the Government exercises this option, the extended contract shall be considered to include this option clause.
- (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed September 30, 2009.

**SECTION C – STATEMENT OF WORK  
FOR THE  
ADVANCED MIXED WASTE TREATMENT PROJECT (AMWTP)**

**A. Introduction**

BBWI shall continue to retrieve, characterize, treat and dispose of primary wastes involved in this effort, which are the Department of Energy (DOE) laboratory and processing wastes from Rocky Flats and various DOE facilities. These wastes are currently stored in drums, boxes, and bins at the Idaho National Laboratory (INL) Transuranic Storage Area (TSA). The wastes may consist of, but not limited to, heterogeneous mixtures of various solid materials including paper, cloth, plastic, rubber, glass, graphite, bricks, concrete, metals, nitrate salts, process sludge, miscellaneous components, and some absorbed liquids.

The waste is believed to contain both Resource Conservation Recovery Act (RCRA) hazardous waste constituents and radioactivity, hence classifying it as a “mixed waste.” Some wastes may also contain Toxic Substances Control Act (TSCA) regulated materials such as polychlorinated biphenyls (PCBs) and asbestos. In addition, the waste is broken down into three categories, based upon the level of radioactivity. The first is classified as low-level waste which contains alpha-emitting radionuclides with an atomic number greater than 92 and half-lives greater than 20 years, at concentrations between 10 - 100 nCi/g, referred to as alpha mixed low-level waste (AMLLW). Second, low-level waste that may or may not contain alpha-emitting radionuclides with an atomic number greater than 92 and half-lives greater than 20 years, at concentrations lower than 10 nCi/g, referred to low-level waste (LLW). Lastly, the other category is referred to as Transuranic (TRU) waste. Waste in this classification contains alpha-emitting radionuclides with an atomic number greater than 92 and half-lives greater than 20 years, at concentrations greater than or equal to 100 nCi/g. Currently the INL has the majority of DOE’s stored AMLLW and TRU waste.

The estimated volume (m<sup>3</sup>) of wastes remaining on February 21, 2005:

TRU: 42,880 m<sup>3</sup>

AMLLW with activity levels 10-100Ci/gm: 1,470 m<sup>3</sup>

MLLW with activity levels <10nCi/gm: 10,679 m<sup>3</sup>

**B. Project Support:**

Project Report - BBWI shall submit monthly status reports on or before the 15<sup>th</sup> of each month. The status shall include cost and schedule variance at a suitable work breakdown structure (WBS) level; critical technical, programmatic, and safety performance issues; and estimate-at-completion and variance-to-complete analyses.

BBWI shall implement, using a graded approach, all List B requirements.

BBWI shall update the DOE Idaho Operations Office (DOE-ID) approved Project Execution Plan (PEP) for the period May 1, 2008, through September 30, 2009. The PEP shall be consistent with and support the future implementation of an Earned Value Management System using a graded approach that is compliant with the American National Standards Institute/Electronic Industries Alliance (ANSI/EIA)-748A Standard. BBWI shall update the contract baseline for the period May 1, 2008, through April 30, 2009. BBWI shall update the DOE-ID approved Project Management Plan (PMP), including the lifecycle baseline, to show completion in FY 2015. The PMP shall describe expected and necessary facility upgrades, refurbishments, and maintenance activities in sufficient detail, including a summary schedule, to support the DOE budget process. The updated documents shall not change baseline or contract schedules for periods prior to May 1, 2008. These documents shall be submitted to DOE-ID for approval by June 1, 2008.

### **C. Waste Processing Activities**

BBWI shall retrieve waste from the Radioactive Waste Management Complex (RWMC); transport the waste between the RWMC and the AMWTP facility; perform pre-treatment characterization of the waste necessary for storage and/or treatment; storage; treatment; post-treatment characterization as necessary to certify the final waste form; preparation of the waste for shipment; loading of TRUPACT II containers or other approved transport carriers loading of containers on approved transport carriers; coordinating the shipment of TRU waste to the Waste Isolation Pilot Plant (WIPP); and as necessary, support audits/surveillances for Carlsbad Field Office (CBFO) certification. Consistent with these activities, BBWI shall continue to achieve optimum volume reduction of waste through sorting, supercompaction, or other means to minimize space demands at disposal facilities. Transportation of DOE waste to WIPP is the responsibility of DOE. Waste shall be treated to meet the requirements of the then current version of the WIPP Waste Acceptance Criteria (WIPP WAC), and other current versions of WIPP-related documents. BBWI is responsible for transporting MLLW and LLW to offsite disposal locations and disposal of the process-generated waste from its AMWTP operations.

BBWI shall maintain certification authority granted to AMWTP by DOE-CBFO in order to dispose of transuranic waste at the WIPP. As part of this effort, BBWI shall maintain good communications with both CBFO and WIPP management and operations contractor to minimize misunderstanding between the parties.

BBWI shall follow the DOE policy for efficient use of TRU waste transportation resources. This policy requires shipping sites to ship the maximum number of loaded packages (i.e., three TRUPACT-II or two TRUPACT-II and one HalfPACT) per shipment with minimal dunnage containers and the maximum amount of waste. All over-packed shipping configurations require specific approval from CBFO. Exceptions to this policy are payloads restricted by the WIPP WAC due to weight or Fissile Gram Equivalent (FGE) limitations, as identified in a memo issued by EM-3 dated June 21, 2005. Other exceptions may be obtained from the CBFO, Director of the Office of Characterization and Transportation.

**AMWTP Activity Approximate Distribution**

<b>Waste Form</b>	<b>TRU &gt;100 nCi/g</b>	<b>10 -100 nCi/g</b>	<b>&lt;10 nCi/g</b>
<b>Debris Boxes (33,330 m3)</b>	<b>75%</b> <b>25,005</b>	<b>6%</b> <b>1,998</b>	<b>19%</b> <b>6,327</b>
<b>Inorganic Homogeneous Solids (7,637 m3)</b>	<b>90%</b> <b>6,873</b>	<b>5%</b> <b>382</b>	<b>5%</b> <b>382</b>
<b>Organic Homogeneous Solids (3,180 m3)</b>	<b>60%</b> <b>1,908</b>	<b>17%</b> <b>541</b>	<b>23%</b> <b>731</b>
<b>Debris Drums (10,882 m3)</b>	<b>50%</b> <b>5,442</b>	<b>10%</b> <b>1,088</b>	<b>40%</b> <b>4,352</b>
<b>Total</b>	<b>71%</b> <b>39,228 m3</b>	<b>7%</b> <b>4009 m3</b>	<b>22%</b> <b>11,792 m3</b>

**Planned Approach for Treatment and Disposal**

Waste Form	TRU >100 nCi/g	10 -100 nCi/g	<10 nCi/g
Boxes (33,330 m3)	81% 27,003	-	19% 6,327
Inorganic Homogeneous Solids (7,637 m3)	95% 7,255	5% 382	-
Organic Homogeneous Solids (3,180 m3)	100% 3,180	-	-
Debris Drums (10,882 m3)	50% 5,442	10% 1,088	40% 4,352
<b>Total</b>	78% 42,880 m3	3% 1,470 m3	19% 10,679 m3

BBWI shall make every effort to ship payload configurations that maximize the utilization of the WIPP disposal capability, as determined by CBFO. BBWI shall, to the best of their ability, assemble shipments that contain a mixture of payloads that can be disposed in an efficient arrangement in WIPP. The mixture of payloads can either be 10-drum overpacks (TDOPs), direct-shipped 55-gallon drums, direct-shipped 85-gallon drums, direct shipped 100-gallon drums or standard waste boxes (SWBs).

The documents listed below contain information relating to the wastes to be treated under this contract. These documents are reference material only.

- a. Waste Description Information for Transuranic Contaminated Wastes Stored at the INEEL (Dec. 1995).
- b. Appendix A Detailed Information for Mixed and Non-mixed Alpha Low Level Waste (Dec. 1995).
- c. Appendix B, Detailed Information for Mixed and Non-mixed Transuranic Waste (Dec. 1995).
- d. Characterization Information on Additional INEEL and Offsite Transuranic Contaminated and Mixed Low-Level Waste Potentially Available for Treatment by the Advanced Mixed Waste Treatment Project (Sept. 1995).
- e. Current Version of the INEEL Site Treatment Plan.
- f. 216 and 218 Acceptable Knowledge summaries and other Acceptable Knowledge Reports approved prior to May 1, 2005.

In addition to the waste identified in the above documents, other potential waste to be treated may include contaminated soil, contaminated plywood and plastic, DOE environmental restoration and decontamination and decommissioning (D&D) wastes.

At any point, DOE-ID may opt to add waste volume for treatment and disposal whether from on or off-site locations.

Specific activities supporting waste processing include:

### **1. Retrieval**

BBWI shall retrieve stored waste from the Transuranic Storage Area-Retrieval Enclosure (TSA-RE) and storage modules. The baseline amount shall be 13,200m<sup>3</sup> for the period ending April 30, 2009. If the five-month option is exercised, the baseline amount will increase to 18,700m<sup>3</sup> through September 30, 2009.

Retrieval refers to the recovery of INL stored waste from the earthen covered berms located within the Transuranic Storage Area/Retrieval Enclosure, and the RCRA Type I and II storage modules.

Soil cover removed from the bermed waste must be dispositioned in accordance with the Soil Sampling and Disposition Plan for the Transuranic Storage Area - Retrieval Enclosure (Revision 2), April 26, 2004.

### **2. Characterization**

BBWI shall complete screening level characterization of all waste retrieved 30-days prior to the end of the contract period, as needed to clearly identify which waste: (a) could be a candidate for disposition at the Nevada Test Site (NTS) or other appropriate off-site disposal facility; and (b) would be considered a candidate for remote-handled (RH) TRU waste. Screening level characterization includes, but is not limited to, radiological screening, non-destructive assay and/or Acceptable Knowledge documentation. DOE must approve the use of Acceptable Knowledge on a case-by-case basis for purposes of declaring screening level characterization to have been completed. Characterization shall be documented and tracked by individual container identification numbers. This characterization is to support segregation of waste as needed by September 30, 2009.

BBWI must perform all pre-treatment characterization for INL waste to be transported and for all wastes to be treated or stored. BBWI must also perform all post-treatment characterization and certify the waste meets all requirements. Any waste that the Parties mutually agree cannot be treated must be characterized as required by the INEEL RWMC RCRA Part B permit for storage and/or to meet the WIPP WAC, Revision 1 and other WIPP-related documents, requirements, or other mutually agreed upon disposal requirements.

BBWI shall be responsible for the management and payment for equipment and labor associated with operation and maintenance of Central Characterization Project (CCP) mobile units necessary to perform the AMWTP and Idaho Completion Project (ICP) work at a throughput of 200 drums/week. BBWI is to deliver a minimum of 40 drums/week to CCP. CCP support costs are to be distributed 80% to the ICP contractor and 20% to BBWI for the remainder of the contract period.

### **3. Processing**

BBWI shall be responsible for the requirements associated with processing TRU, mixed low level waste (MLLW), and LLW. Treated waste greater than or equal to 100 nCi/g must meet minimum requirements of the latest version of the WIPP WAC, other WIPP-related documents, and TSCA requirements. Treated waste greater than 10 nCi/g and less than 100 nCi/g that cannot be shipped to WIPP shall be disposed of off site, preferably the NTS. LLW meeting the acceptance criteria of the RWMC LLW pit may be disposed in the LLW pit through the ICP contract until the pit ceases to accept waste, planned to be September 30, 2008. BBWI shall certify that the waste has been treated to these requirements. BBWI is responsible for process-generated wastes and all RCRA hazardous waste newly generated by BBWI in performing its waste treatment operation. Process Generated Hazardous Waste is defined as wastes which are newly generated as a result of waste processing, maintenance operations, or equipment change out. Process generated hazardous wastes are those wastes that are generated from the operation and maintenance of the treatment and other facilities. Examples of process generated hazardous waste may include, but are not limited to, cleaning solvents used during maintenance, rags, contaminated clothing, and failed equipment parts. Process generated hazardous wastes are the responsibility of the Contractor. These wastes must be disposed of in accordance with regulatory requirements.

As waste is retrieved and characterized, BBWI shall maximize classification of suspect RH waste as CH waste to the extent possible. BBWI shall transfer all identified candidate RH-TRU waste to the Idaho Cleanup Project (ICP) contractor by the end of the contract period.

BBWI shall reach an agreement with the ICP contractor concerning the characterization required by BBWI to allow transfer of candidate RH-TRU waste to the ICP contractor. BBWI shall also reach an agreement with the ICP contractor regarding the method, timing, and cost for transferring/processing candidate RH-TRU waste. If the ICP contractor determines that some of the waste received from the AMWTP can be reclassified as CH-TRU, it will be returned to BBWI, and BBWI shall complete the required actions to prepare it for shipment and disposal. Waste container transfers shall be documented and tracked by individual container identification numbers.

BBWI shall sustain progress on dispositioning waste that could possibly be declared MLLW. BBWI shall also sustain progress on dispositioning waste that is identified for disposal at NTS in order to provide sufficient time to complete treatment and subsequent disposal at NTS prior to November 30, 2010.

BBWI must establish management controls for verification of volume input and output to the AMWTP facility. These controls must track material flows sufficiently to provide the supporting information necessary to establish that contract performance meets all requirements.

#### **4. Storage**

BBWI is responsible for the safe and compliant storage of all wastes, both pre- and post-treatment, until transported offsite (returned to generator or disposed of) within the following areas:

AMWTP areas:

- TSA-RE
- Storage Modules
- CCP waste originated at AMWTP
- In-process generated waste
- Waste transferred to AMWTP from other areas of the INL
- Waste transferred from AMWTP to the INL.

#### **5. Packaging and Transportation**

BBWI is responsible for transfer of the pre-treated waste containers and the waste product containers within the RWMC, and for the packaging and loading of the treated waste form for transport off-site. BBWI shall provide all transportation coordination related to the scheduling, inspection, notification, tracking, and reporting of waste shipments. If BBWI elects to treat, recycle, or dispose of a category of waste at a commercial facility, BBWI is responsible for the packaging, transportation, and disposal costs for that waste.

Packaging and transportation must meet all Federal and state regulatory requirements and be consistent with BBWI's approach to on-site or off-site treatment. Waste can be transported from the TSA and other structures at the RWMC to the AMWTP Facility without further treatment to meet DOT requirements.

BBWI must time any planned facility maintenance outages with planned WIPP maintenance outages and other planned shipping curtailments to avoid any complex-wide impacts to the TRU shipping program.

The TRU final waste form must be packaged in containers that can be shipped in the TRUPACT II shipping container (NRC certificate of compliance #USA/9218/B(U)F) or other Department of Transportation (DOT) approved transport containers. These specifications are identified in the latest version of the WIPP WAC. Non-TRU final waste forms must be packaged in DOT approved containers.

DOE must agree to the final WIPP shipping schedule and number of monthly shipments. The BBWI PEP shipping schedule shall form the basis for the 4-month WIPP shipping schedule, however BBWI shall comply with the DOE approved WIPP shipping schedule.

DOE will provide transportation to WIPP or any other TRU storage/disposal facility to support the final waste form certification schedule contained in the PMP. The baseline amount for waste shipped/certified shall be 7,320m<sup>3</sup>, including 6,200m<sup>3</sup> of TRU waste and 1,120m<sup>3</sup> of MLLW, for the period ending April 30, 2009. If the five-month option is exercised, the baseline amount will increase to 10,370m<sup>3</sup> (TRU and/or MLLW) through September 30, 2009.

BBWI shall package and ship waste from the ICP contractor destined for disposal at WIPP and will be reimbursed by the ICP contractor as negotiated between BBWI and the ICP contractor.

Any secondary waste generated by BBWI during the contract period shall be disposed of within one year of generation.

BBWI shall establish a baseline shipping schedule subject to DOE approval with weeks starting on Sunday and ending on Saturday. The schedule shall account for all of the holiday restrictions identified in the latest version of the Western Governor's Association's *WIPP Transportation Safety Program Implementation Guide*; the following native Indian tribal holidays [Treaty Days (July 3), Independence Day (July 4), Shoshone – Bannock Indian Festival (second weekend in August, Thursday through Sunday) and Indian Days (last Friday of September)]; and three weeks for annual WIPP maintenance shutdowns that are typically scheduled for the week of Thanksgiving in November and the last two weeks of December. CBFO will establish what constitutes the last shipment prior to a holiday or shutdown and when shipments can resume. For planning purposes, BBWI shall assume 15 shipments per week unless the holidays and other shipping restrictions listed above reduce this weekly allotment. These 15 shipments per week include approximately three shipments per week for the ICP generated CH TRU waste. If ICP cannot support all three shipments, then BBWI can use those shipments for AMWTP waste. Should the number of shipments per week be less than 15, the ratio between AMWTP waste and ICP waste shall be adjusted on a pro rata basis.

BBWI shall implement the WIPP Shipping Baseline schedule approved by DOE. The WIPP Shipping Baseline schedule is approved on an annual basis and is

subject to changes based upon CBFO funding and DOE priorities. Shipment departure times are subject to CBFO approval in order to minimize transit times between the INL and WIPP and to comply with CBFO agreements with participating states en route (such as the number of shipments at a Port of Entry at any one time or when shipments can arrive at a Port of Entry).

BBWI shall provide transportation coordination related to the scheduling, inspection, notification, tracking, and reporting of waste shipments. BBWI may treat, recycle, or dispose of wastes at non-AMWTP facilities as appropriate.

**D. Integrated Safety Management System (ISMS) and Environmental Safety and Health Program (ES&H)**

BBWI shall maintain a single ISMS to accomplish all work as required by DEAR 970.5223-1, *Integration of Environment, Safety and Health into Work Planning and Execution*. BBWI's ISMS shall ensure safety and environmental protection considerations are integrated throughout the entire work planning and execution process and shall extend through the execution of individual work packages where job-site safety is ensured for each worker. BBWI shall ensure that the principles of ISMS serve as the foundation of the implementing mechanisms for work at the site. BBWI shall ensure that the structure of requirements to achieve nuclear safety is based on sound principles such as defense in depth, redundancy of protective measures, robust technical competence in operations and management oversight, and compliance with DOE Directives embodying nuclear safety requirements.

BBWI shall maintain an ES&H program to ensure the protection of the workers, the public and the environment. BBWI's ES&H program shall be operated as an integral, but visible, part of how the contractor conducts business. This includes prioritizing work planning and execution, establishing clear ES&H priorities, allocating resources to address programmatic and operational considerations, collecting and analyzing samples, correcting non-compliances and addressing all hazards for all environmental management (EM) facilities, operations and work. BBWI shall ensure that cost reduction efforts and efficiency efforts are fully compatible with ES&H performance.

BBWI shall ensure that all required life safety, occupational medicine, fire protection, operational and emergency response, and other institutional safety programs are provided throughout the life of the contract.

BBWI shall conduct all activities in compliance with environmental protection requirements including, but not limited to, those listed on the List of Applicable DOE Directives. BBWI shall take all actions necessary to preclude accidents and injuries, keep worker exposures as low as reasonably achievable, and prevent environmental releases. BBWI shall promptly respond to operational events and environmental releases.

BBWI shall maintain safety analysis documents in accordance with 10 CFR Part 835 Radiation Protection Plan (RPP); 10 CFR Part 830 Quality Assurance Implementation Plan; 10 CFR Part 830 Subpart B, Safety Analysis; and Unreviewed Safety Question Process and associated List B requirements using a graded approach.

**E. Quality**

BBWI shall maintain a robust and compliant Quality Assurance Program that meets all applicable Federal, state, and local requirements, including 10 CFR 830.120, the WIPP Hazardous Waste Facility Permit, and the current version of the CBFO Quality Assurance Program Document.

BBWI is expected to continue to improve the conduct of operations and software quality assurance controls necessary to improve productivity, safety, predictability and reliability. Necessary improvements should be identified and executed early within the contract to affect the most optimum return.

**F. Permit Compliance**

BBWI shall ensure that it remains compliant with the current versions of Permits. This includes maintenance of all personnel, training, equipment, facilities, and procedures in a compliant state. RCRA issues relating to the integrity of floors in storage structures shall be remedied during the term of the contract.

**G. Laboratory Sampling and Analysis**

BBWI shall reimburse costs related to analyses of samples associated with operation of the AMWTP facility. In addition, BBWI shall reimburse other DOE on-site contractors (BEA/CWI) for BBWI's prorated share for maintaining laboratory service continuity at the INL to include the relevant laboratory work at Central Facilities Area (CFA) and the Idaho Nuclear Technology and Engineering Center (INTEC).

**H. Support to Permanent AMWTP Contractor**

As further directed by the Contracting Officer, BBWI shall support activities that transition the work from BBWI to a successor AMWTP contractor.

**I. AMWTP Government Furnished Equipment/Services/Items**

All facilities and equipment currently used for safe and efficient operation of the AMWTP will continue to be provided to BBWI as Government Furnished Equipment (GFE).

DOE will supply TRUPACTs, trucks, trailers, and drivers, for shipment of TRU waste to WIPP throughout the contract period per the agreed upon WIPP shipping schedule. Costs for these Government Furnished Services/Items (GFSI) will continue to be borne by DOE/CBFO.

DOE will review and approve Authorization Basis documents within 30 days of receipt of an acceptable document, such as an Annual Update Document Safety Analysis (DSA).

**J. Waste Not Included in the Estimated Cost**

The following work is not included in the estimated cost of the contract. Separate funding for incremental costs will be identified. As directed by DOE-ID, BBWI is to assume responsibility for other INL waste or other waste from off site sources as allowed by applicable permits. The waste may include ICP, INL, Naval Reactors (NR) generated or managed waste and other TRU waste identified by DOE-ID. In accordance with the Site Treatment Plan, waste must be treated within six months and disposed offsite within six months of treatment. Waste received from off-site generators must be treated within three (3) months of receipt and disposed off-site within six (6) months of treatment. BBWI shall account for all treated and disposed waste volumes and update the Site Treatment Plan accordingly. BBWI will be expected to support this work in addition to the obligations of their scope of work with no impact.

**K. Facility Maintenance and Improvement**

BBWI shall maintain, and improve as necessary, all AMWTP equipment, facilities, and utilities to maximize performance such that they are kept in a condition to allow operation at or above the baseline scheduled levels identified in the approved PEP. The equipment, facilities, and utilities shall be fully operational at the end of the contract period. BBWI shall not employ a run-to-failure approach on any systems or equipment at the AMWTP during the term of the contract without Contracting Officer approval. BBWI shall, to the extent possible, time any planned facility maintenance outages with planned WIPP maintenance outages and other planned shipping curtailments to avoid any complex-wide impacts to the TRU shipping program.

By June 1, 2008, BBWI shall submit for DOE approval a plan for maintaining and improving the AMWTP facilities and for ensuring the AMWTP facilities are fully operational or enhanced, including the capability to process oversized boxes, throughout the contract period. This plan shall address maintenance actions planned to be completed within the estimated cost and proposed actions that may require supplemental funding.