

**AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT**

1. CONTRACT ID CODE  
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2. AMENDMENT/MODIFICATION NO. 134  
3. EFFECTIVE DATE See Block 16C  
4. REQUISITION/PURCHASE REQ. NO. 11EM004187  
5. PROJECT NO. (If applicable)

6. ISSUED BY CODE 00603  
Office of River Protection  
U.S. Department of Energy  
Office of River Protection  
P.O. Box 450  
Richland WA 99352  
7. ADMINISTERED BY (If other than Item 6) CODE 00603  
Office of River Protection  
U.S. Department of Energy  
Office of River Protection  
P.O. Box 450  
MS: H6-60  
Richland WA 99352

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  
WASHINGTON RIVER PROTECTION SOLUTIONS LLC  
Attn: DUANE SCHMOKER  
PO BOX 73  
720 PARK BLVD  
BOISE ID 837290001  
9A. AMENDMENT OF SOLICITATION NO.  
9B. DATED (SEE ITEM 11)  
10A. MODIFICATION OF CONTRACT/ORDER NO.  
DE-AC27-08RV14800  
10B. DATED (SEE ITEM 13)  
05/29/2008  
CODE 806500521 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 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 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)  
See Schedule

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

CHECK ONE X	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. FAR 52.243-2-Changes-Cost Reimbursement (Aug 1987)
	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).
	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 0 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)  
Period of Performance: 06/20/2008 to 09/30/2013

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) Susan E. Bechtol
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	16B. UNITED STATES OF AMERICA <b>ORIGINAL SIGNED BY</b>  (Signature of Contracting Officer)
15C. DATE SIGNED	16C. DATE SIGNED 9/28/2011

**Purpose of Modification:**

1. In accordance with FAR 52-243-2, Changes-Cost Reimbursement, the Contractor is hereby authorized to begin work on Natural Phenomena Hazard (NPH) Phase II. The Contractor is authorized to incur costs with a Not to Exceed (NTE) value of \$220,000. The Contractor shall prepare and submit a cost and technical proposal within 30 days of receipt of this Change Order. This authorization is limited to the NPH Phase II work and shall be completed in accordance with the technical approach listed below:

**Technical Approach: Natural Phenomena Hazard (NPH) Phase II:**

Compliance with 11-ESD-009 is being performed in two phases. Phase I was definitized in modification 118.

Phase I was a review of the new information (ashfall, seismic, and wind) as it related to the 200 Area Plateau and the rest of the Hanford Site. An ORP sponsored "seismic summit" was held July 15, 2011 to determine the seismic criteria to be applied to the entire Hanford Site and was attended by designated WRPS personnel.

A new site-wide NPH assessment document has been prepared by PNNL (PNNL-20684) and based on their review; WRPS makes the following recommendations for Phase II:

1. As a result of the seismic summit it was determined that although the existing Probabilistic Seismic Hazard Analysis (PSHA) is considered to have approximately followed the 1997 Senior Seismic Hazard Advisory Committee (SSHAC) Level 2 process and may satisfy current requirements for certain limited applications, it is not sufficient for the broad range of applications necessary for establishing site-wide design criteria. A Level 3 PSHA is recommended, but until this is completed a description of the evolution and current state of WTP seismic design criteria is recommended to be incorporated in the WHC-SD-GN-ER-501 document with the recognition that this information is not applicable to other facilities at the Hanford Site nor should it be presented in the context of satisfying generic seismic design criteria.
2. Changes to wind hazard assessment and wind design methodology have recently been published in the 2010 edition of ASCE/SEI 7, *Minimum Design Loads for Buildings and Other Structures*, (American Society of Civil Engineers & Structural Engineering Institute). In anticipation of its adoption into the 2012 edition of the International Building Code (IBC) it is recommended that the new methodology be incorporated in the WHC-SD-GN-ER-501 revision. It is also recommended that HNF-3329 *Hanford Site Peak Gust Wind Speeds* be updated with the most recent meteorological data.

3. The new volcanic ashfall data transmitted by 11-ESD-009 must be incorporated in a revision to WHC-SD-ER-30038 and WHC-SD-GN-ER-501.

4. Lightning hazard assessment methodology has undergone substantial changes since 1992. It is recommended that lightning design criteria in WHC-SD-GN-ER-501 be updated with NFPA 780-2011, *Standard for the Installation of Lightning Protection Systems*.

5. It is recommended that the WHC-SD-GN-ER-501 document be revised to address all the NPH listed in DOE G 420.1-2, Appendix C and include the applicable information noted above.

Phase II will be an effort to revise HNF-SD-GN-ER-501 to include all new information noted above and provide assessments of all primary and secondary NPH listed in DOE G 420.1-2, Appendix C. The WHC-SD-ER-30038 document will also be revised to incorporate the USGS ashfall data provided with the ORP letter and the HNF-3329 document will be revised to include updated wind gust information. These three documents will be released for site use by WRPS. Since these documents will impact design criteria currently being used by WRPS for the design of support facilities for the Waste Treatment Plant, a follow-on effort will be implemented to revise WRPS Engineering Standards TFC-ENG-STD-06 *Design Loads for Tank Farm Facilities* and TFC-ENG-STD-02, *Environmental/Seasonal Requirements for TOC Systems, Structures, and Components*, after ORP has accepted the criteria document. A second follow-on activity will be to determine the impact of the standard changes on any completed designs using a graded approach.

**2. All other Terms and Conditions remain unchanged.**