2. AMENDMENTMODIFICATION NO. A589 3. SEPECTIVE DATE (ARDV) See Block 16C 7. ADMINISTERED BY (If done than from 6) CODE U.S. Department of Energy Pacific Northwest Site Office Post Office Box 350 Richland, WA 99352 8. NAME AND ADDRESS OF CONTRACTOR (I/No., street, county, State and ZIP code) Battelle Memorial Institute Pacific Northwest Division Richland, Benton County, WA 99352 DUNS # 032987476 106. DATED (SEE TEM 17) Pacific Northwest Division Richland, Benton County, WA 99352 DUNS # 032987476 107. ADMINISTERED BY (If done than from 6) DE-ACID-ATTON NO. Pacific Northwest Division Richland, Benton County, WA 99352 DUNS # 032987476 108. DATED (SEE TEM 17) December 30, 1964 11. THIS ITEM APPLIES TO AMENDMENTS OF SOLICITATIONS 108. DATED (SEE TEM 18) December 30, 1964 11. THIS ITEM APPLIES TO AMENDMENTS OF SOLICITATIONS 109. Separate letter or telegram wish includes a reference to the solicitation or as mendeded, by one of the following methods: (b) the completing lambs 8 and 15, and strong or the confirmation of the same amount of the flow and the separate with includes a reference to the solicitation or as mendeded, by one of the following methods: (b) the separate letter or telegram wish includes a reference to the solicitation are as mendeded, by one of the following methods: (c) by separate letter or telegram wish includes a reference to the solicitation are amended and the separate of the order of the same members of the separate letter or telegram wish includes a reference to the solicitation and amendment and an emended and is received prior to the opening hour and date specified. In the selectation or as mendeded, by degram 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. 12. ACCOUNTING AND APPROPRIATION DATA (if required) 13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/CRDERS, IT MODIFIES THE CONTRACTS/CRDER NO. AS SET FORTH IN ITEM 14. PERCENT RESULTS AND APPROPRIATION	AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			CT ID CODE PAG	GE OF PAGES 1 2	
U.S. Department of Energy Pacific Northwest Site Office Post Office Box 350 Richland, WA 99352 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP code) 9. A AMENDMENT OF SOLICITATION NO. 10. Battelle Memorial Institute Pacific Northwest Division Richland, Benton County, WA 99352 UNS # 032987476 10. A MODIFICATION OF CONTRACT/ ORDER NO. 11. THIS ITEM APPLIES TO AMENDMENTS OF SOLICITATIONS 11. THIS ITEM APPLIES TO AMENDMENTS OF SOLICITATIONS 10. By compelling items 8 and 15, and returning	SCHOOL STANDARD CONTROL					
Pacific Northwest Site Office Post Office Post Office Sox 350 Richland, WA 99352 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP code) 8. Battelle Memorial Institute Pacific Northwest Division Richland, Benton County, WA 99352 DUNS # 032987476 CODE FACILITY CODE 11. THIS ITEM APPLIES TO AMENDMENTS OF SOLICITATIONS 106. BATTED (SEE ITEM 13) December 30, 1964 11. THIS ITEM APPLIES TO AMENDMENTS OF SOLICITATIONS 107. The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers in sedended, in solicitation of the following methods: (a) By completing Items 8 and 15, and returning. copies of the amendment, (b) By advanted processed of the amendment, (b) and the selection of the following methods: (a) By completing Items 8 and 15, and returning. copies of the amendment, (b) By advanted processed of the amendment, (b) and the selection of the following methods: (a) By completing Items 8 and 15, and returning copies of the amendment, (b) by advanted processed profit of the amendment, (b) and the selection of the following methods: (a) By completing Items 8 and 15, and returning copies of the amendment, (b) by advanted processed profit of the offer copies and the amendment, (b) by advanted processed profit of the offer copies and the amendment, (b) by advanted processed profit of the offer offers are advantaged by the amendment, (b) by advanted processed profit of the offer offers are advantaged by the amendment, (b) by advanted to the processed profit of the offer offers are advantaged by the advantaged to the amendment and items to provide a copies of the offer offers are advantaged by the amendment and activation of the offer offers are advantaged by the amendment and activation of the offer offers are advantaged by the offer offers and the offers are advantaged by the offers are advantaged by the offers of	6. ISSUED BY CODE		7. ADMINISTERED BY (If other than Item 6) CODE			
Battelle Memorial Institute Pacific Northwest Division Richland, Benton County, WA 99352 DUNS # 032987476 Total Modification of Contract/Order No. DE-AC05-76RL01830	Pacific Northwest Site Office Post Office Box 350					
Pacific Northwest Division Richland, Benton County, WA 99352 DUNS # 032987476 Total County	8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP code)		9	9A. AMENDMENT OF SOLICITATION NO.		
DECACOS-76RL01830 The December 30, 1964	Pacific Northwest Division					
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11. THIS ITEM APPLIES TO AMENDMENTS OF SOLICITATIONS 11. 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. FallurRE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED ATTHE EPACED SESIONATED 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 for letter makes reference to the solicitation and amendment and is received prior to the opening hour and date specified. 12. ACCOUNTING AND APPROPRIATION DATA (If required) 13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS SET FORTH IN ITEM 14. CHECK ONE A THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specifiv authoritiv) 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 ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO AUTHORITY OF FAR 43, 103(b). C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO THE AUTHORITY OF: D. OTHER (Specify type of modification and authority) In accordance with Section 1, Clause 1-106 DEAR 970,5232-4, "Obligation of Funds" and PL. 111-5 E. IMPORTANT: Contractor is in not, is required to sign this document and return _0_ copies to the Issuing office. 14. DESCRIPTION OF AMENDMENTANODIFICATION (Organized by UCF section headings, inc	CODE	EACILITY CODE	100	December 30, 19	064	
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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.) Obligation Notice 629 Recovery Act: TAS::89 0211::TAS Recovery The purpose of this contract modification is to obligate funds from the American Recovery and Reinvestment Act of 2009 for the Office of Fossil Energy (FE) – ARRA Carbon Capture and Storage Regional Training (Project Code 2003040) and ARRA	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 returningcopies 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. 12. ACCOUNTING AND APPROPRIATION DATA (If required) 13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS SET FORTH IN ITEM 14. CHECK ONE 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 ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO AUTHORITY OF FAR 43.103(b).					
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The purpose of this contract modification is to obligate funds from the American Recovery and Reinvestment Act of 2009 for the Office of Fossil Energy (FE) – ARRA Carbon Capture and Storage Regional Training (Project Code 2003040) and ARRA		Obligation No	otice 629			
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) Ryan M. Kilbury Contracting Officer 15B. CONTRACTOR/OFFEROR 15C. DATE SIGNED 16B. UNITED STATES OF AMERICA 16C. DATE SIGNED						
(Signature of person authorized to sign) BY (Signature of Contracting Officer)	(Signature of person authorized to sign)		7	ntracting Officer)	1-26-10	

Block 14 "DESCRIPTION OF AMENDMENT/MODIFICATION," continued.

A. Office of Fossil Energy (FE). This modification is issued to obligate American Recovery and Reinvestment Act (ARRA) of 2009 funds. These funds are made available for the ARRA Carbon Capture and Storage Regional Training (Project Code 2003040) (\$248,750) to develop a regional sequestration technology training program to facilitate transfer of knowledge and technologies required for site development, operations and monitoring of commercial carbon capture sequestration and ARRA SW Regional Partnership Kansas Carbon Sequestration (Project Code 2003010) (\$99,098) to provide technical assistance to the Southwest Regional Carbon Sequestration Partnership for geochemical transport modeling, support and use of Geologic Carbon Sequestration Software Suite for managing, updating and storing site data and field monitoring of carbon dioxide flux.

The Recovery Act Project titles are ARRA Carbon Capture and Storage Regional Training (Project Code 2003040) (\$248,750) and ARRA SW Regional Partnership Kansas Carbon Sequestration (Project Code 2003010) (\$99,098). The project codes that should be used to track this Recovery Act funding in the Project section of the Accounting Flex Field in STARS/IDW are 2003040 and 2003010 accordingly.

- B. Accordingly, pursuant to Section I, Contract Clause, "Obligations of Funds" and Section B, Contract Clause, B-2, "Obligated Funds", funds in the amount of \$347,848.00 are hereby obligated in support of Recovery Act activities. The total amount of funds obligated under this contract since the inception is increased from \$12,361,147,893.74 to \$12,361,495,741.74.
- C. The specific work funded by this modification is described in Work Authorization Numbers PNNL-10-57961, Rev. 0, titled ARRA Carbon Capture and Storage Regional Training (Project Code 2003040), and PNNL-10-58017, Rev. 0, titled ARRA SW Regional Partnership Kansas Carbon Sequestration (Project Code 2003010).
- D. The work described in this modification shall be performed using funds obligated under this contract, which have been appropriated under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, and as such, is subject to the special statutory conditions and the additional contractual terms and conditions that were incorporated into the contract at Modification No. A508. The funds obligated hereunder shall only be used to accomplish the work as set forth in paragraph C. above and may not be used for any other purpose without the prior written consent of the Contracting Officer.
- E. The contractor shall complete all Recovery Act Work funded by this modification in accordance with Recovery Act requirements, including the required completion dates specified therein, and by the completion date identified in the approved work authorization for the activity.
- F. All other terms and conditions remain unchanged.[A589]

(End of Contract Modification A589)