

|                                       |                                    |                                  |                                |
|---------------------------------------|------------------------------------|----------------------------------|--------------------------------|
| 2. AMENDMENT/MODIFICATION NO.<br>0149 | 3. EFFECTIVE DATE<br>See Block 16C | 4. REQUISITION/PURCHASE REQ. NO. | 5. PROJECT NO. (If applicable) |
|---------------------------------------|------------------------------------|----------------------------------|--------------------------------|

|  |               |   |      |
|--|---------------|---|------|
| 6. ISSUED BY<br>EMCBC - Carlsbad<br>U.S. Department of Energy<br>Carlsbad Project Office<br>P.O. Box 3090<br>Carlsbad NM 88221 | CODE<br>03003 | 7. ADMINISTERED BY (If other than Item 6) | CODE |
|--|---------------|---|------|

|   |               |   |
|---|---------------|---|
| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)<br>NUCLEAR WASTE PARTNERSHIP LLC<br>Attn: Marty Gonzales<br>Nuclear Waste Partnership<br>106 Newberry Street SW<br>Aiken SC 29801 | (x)           | 9A. AMENDMENT OF SOLICITATION NO.                       |
|   |               | 9B. DATED (SEE ITEM 11)                                 |
|   | x             | 10A. MODIFICATION OF CONTRACT/ORDER NO.<br>DE-EM0001971 |
|   |               | 10B. DATED (SEE ITEM 13)<br>04/20/2012                  |
| CODE 968993910  | 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)**

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

|                  |   |
|------------------|---|
| <b>CHECK ONE</b> | 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). |
|                  | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF.  |
| X                | D. OTHER (Specify type of modification and authority)<br>DEAR 970.5243-1 Changes (DEC 2000)   |

**E. IMPORTANT:** Contractor  is not.  is required to sign this document and return 2 copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**  
The purposes of this modification are to revise Section B.2.2.(b) - Transition Cost, Anticipated Funding, and Total Available Award Fee Funding by: incorporating anticipated line-item funding for capital asset projects (CAP) for ventilation and exhaust for fiscal years 2017 - 2021; incorporating Other Project Costs (OPC) for both Capital Asset Projects for FY17 through FY21; separating out CAP OPC funding that was authorized for PBS 80 for FY14 and FY15; revising the Option Periods per Modification 142, and aligning actual and anticipated funding that had already been obligated to CLIN 2 of the contract prior to incorporating the Performance Measurement Baseline per Modification 94.

These changes increase the anticipated funding/contract value by \$302,782,499.00, from \$1,676,072,913.40 to \$1,978,855,412.40. Of these changes \$7,898,428.00 are changes to the Continued ...

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

|   |   |
|---|---|
| 15A. NAME AND TITLE OF SIGNER (Type or print)<br>Kevin S. Donovan, Business Manager | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)<br>Vicki D. Snow |
|---|---|

|  |                             |  |                             |
|--|-----------------------------|--|-----------------------------|
| 15B. CONTRACTOR/OFFEROR<br><b>Exemption 6</b><br><small>(Signature of person authorized to sign)</small> | 15C. DATE SIGNED<br>6/20/16 | 16B. UNITED STATES OF AMERICA<br><b>Exemption 6</b><br><small>(Signature of Contracting Officer)</small> | 16C. DATE SIGNED<br>6/20/16 |
|--|-----------------------------|--|-----------------------------|

**CONTINUATION SHEET**

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
DE-EM0001971/0149

PAGE 2 OF 6

NAME OF OFFEROR OR CONTRACTOR  
NUCLEAR WASTE PARTNERSHIP LLC

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)  | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|---|-----------------|-------------|-------------------|---------------|
|                 | <p>base period of the contract and \$294,884,071.00 are changes to the option periods of the contract.</p> <p>Revised Section B.2.2.(b) is attached to Modification 149.</p> <p>See continuation pages 3-4.<br/>Delivery Location Code: 03003<br/>EMCBC - Carlsbad<br/>US Department of Energy<br/>Carlsbad Project Office<br/>P.O. Box 3090<br/>Carlsbad NM 88221</p> <p>Mark For:<br/>EMCBC - Carlsbad<br/>U.S. Department of Energy<br/>Carlsbad Project Office<br/>P.O. Box 3090<br/>Carlsbad NM 88221</p> <p>Payment:<br/>OR for EMCBC<br/>U.S. Department of Energy<br/>Oak Ridge Financial Service Center<br/>P.O. Box 5777<br/>Oak Ridge TN 37831</p> <p>Fund: 00000 Appr Year: 0000 Allottee: 00 Report<br/>Entity: 000000 Object Class: 00000 Program:<br/>0000000 Project: 0000000 WFO: 0000000 Local Use:<br/>0000000</p> <p>FOB: Destination<br/>Period of Performance: 10/01/2012 to 09/30/2017</p> |                 |             |                   |               |

The following changes are made to anticipated funding (budget) in Section B.2.2.(b) and contract line items.

1. **For Contract Line (CLIN) 2 – Site Operations**, reduce the amount currently shown for actual funding and anticipated funding from CBFO for FY15 from \$126,513,115.82, by \$5,020,310.96, to \$121,492,804.86. This reduction is the amount of funding that was approved (per CBFO PCR 16-004/NWP 16-001A/CBFO approved 1/14/15, Approval of Integrated Performance Measurement Baseline - Letter Dated 1/19/16) for other project costs (OPC) for the permanent ventilation system (PVS). Add a new sub-line within CLIN 2 titled Funding for OPC: Permanent Ventilation System Ref: CLIN 5 for \$5,020,310.96.  
**Change to contract value - \$0.**

2. **For CLIN 2 Base Period – Site Operations** – Funding for FY14 of \$31,148,035.00 and for FY15 of \$122,713,847.00 shown in Section B.2.2(b) under CLIN 4 - WBS 1.7 Performance Measurement Baseline for Recovery Activities was actually obligated to CLIN 2 rather than CLIN 4 prior to issuing Modification 94 to incorporate the PMB. In this modification those sub-lines are moved from CLIN 4 to CLIN 2 in Section B.2.2.(b) where the funding was actually obligated. Then for the FY15 sub-line, reduce the amount of anticipated funding from \$122,713,847.00, by \$1,979,689.04, to \$120,734,157.96. This reduction is the amount of funding that was approved (per PCR CBFO 15-020/ NWP RP15-015 approved 3/27/15) for OPC for the PVS. Add a new sub-line within CLIN 2 titled Recovery funding for OPC – Permanent Ventilation System (CLIN 5) for \$1,979,689.04.  
**Change to contract value - \$0.**

3. **For CLIN 4: WBS 1.7 Performance Measurement Baseline for Recovery Activities**, delete the sub-line titled “FY18 WIPP Recovery Project WBS 1.7, Fee, MR with anticipated funding of \$358,466” and move it to a new CLIN titled **CLIN 6 - Option Period - WBS 1.7 Performance Measurement Baseline for Recovery Activities** to align with CLIN 6 in the contract writing system.  
**Change to contract value - \$0**

4. **For CLIN 5 WBS 1.8 CAP ventilation and exhaust** add the following sub-lines for anticipated line-item funding in accordance with the FY17 Execution Year Guidance, Drivers, and Planning Assumptions (Tab E).

|   |                |
|---|----------------|
| FY17 Funding – CAP 15-D-411 Ventilation | \$2,532,000.00 |
| FY17 Funding – CAP 15-D-412 Exhaust     | \$2,533,000.00 |

Add the following sub-lines for the CAP OPC in accordance with Section 5 WIPP Project Data Sheets for 15-D-411/15-D-412 dated 4/7/16 – Less DOE Contingency.

|                                      |                |
|--------------------------------------|----------------|
| FY17 OPC Funding (PBS80) ventilation | \$1,569,189.00 |
| FY17 OPC Funding (PBS80) exhaust     | \$1,264,239.00 |

**Change to base value of the contract - \$7,898,428.00.**

5. In accordance with Contract Modification 142, signed May 10, 2016, CLIN 3 – Option Period – Site Operations is revised as follows:  
The CLIN’s title is revised to **CLIN 3 Option Period 1 – Site Operations** for the period October 1, 2017 – September 30, 2018. The value is reduced from \$666,089,050.00, by \$532,871,240.00, to \$133,217,810.00, the anticipated funding for FY18 only.

A new CLIN is added for Option Period 2 titled **CLIN 7: Option Period 2 – Site Operations**. The four fiscal years from October 1, 2018 through September 30, 2022 are

added as sub-lines in Option Period 2 with an anticipated funding value of \$133,217,810.00 per line. The total value for Option Period 2 is now \$532,871,240.00.

**Change to option period value of the contract - \$0.**

6. Add **CLIN 8 titled Option Period 1 – WBS 1.8 CAP 15-D-411 Ventilation** with the following sub-lines for Option Period 1 in accordance with the Section 5 WIPP Project Data Sheets for 15-D-411/15-D-412 dated 4/7/16 – Less DOE Contingency.

|                               |                 |
|-------------------------------|-----------------|
| FY18 CAP 15-D-411 ventilation | \$66,994,475.00 |
| FY18 OPC (PBS80) ventilation  | \$ 3,060,741.00 |

**Increase to option period value of the contract - \$70,055,216.00**

7. Add **CLIN 9 titled Option Period 1 – WBS 1.8 CAP 15-D-412 Exhaust** with the following sub-lines for Option Period 1 in accordance with Section 5 WIPP Project Data Sheets for 15-D-411/15-D-412 dated 4/7/16 – Less DOE Contingency.

|                           |                 |
|---------------------------|-----------------|
| FY18 CAP 15-D-412 exhaust | \$17,145,976.00 |
| FY18 OPC (PBS80) exhaust  | \$ 1,664,239.00 |

**Increase to option period value of the contract - \$18,810,215.00.**

8. Add **CLIN 10 titled Option Period 2 – WBS 1.8 CAP 15-D-411 Ventilation** with the following sub-lines during Option Period 2 by fiscal year for FY19 – FY21 in accordance with Section 5 WIPP Project Data Sheets for 15-D-411/15-D-412 dated 4/7/16 – Less DOE Contingency.

|                               |                 |
|-------------------------------|-----------------|
| FY19 CAP 15-D-411 ventilation | \$88,483,623.00 |
| FY19 OPC (PBS80) ventilation  | \$ 3,059,052.00 |
| FY20 CAP 15-D-411 ventilation | \$38,462,902.00 |
| FY20 OPC (PBS80) ventilation  | \$ 4,222,363.00 |
| FY21 OPC (PBS80) ventilation  | \$ 4,627,955.00 |

**Increase to option period value of the contract - \$138,855,895.00**

9. Add **CLIN 11 titled Option Period 2 – WBS 1.8 CAP 15-D-412 Exhaust** with the following sub-lines during Option Period 2 by fiscal year for FY19 – FY20 in accordance with Section 5 WIPP Project Data Sheets for 15-D-411/15-D-412 dated 4/7/16 – Less DOE Contingency.

|                           |                 |
|---------------------------|-----------------|
| FY19 CAP 15-D-412 exhaust | \$53,519,012.00 |
| FY19 OPC (PBS80) exhaust  | \$ 837,722.00   |
| FY20 CAP 15-D-412 exhaust | \$12,806,011.00 |

**Increase to option period value of the contract \$67,162,745.00**

## Changes to Section B.2-2(b) Transition Cost, Anticipated Funding, and Total Available Award Fee

|  | Actual Funding          | Anticipated Funding     | Annual Fee Base***  |
|--|-------------------------|-------------------------|---------------------|
| <b>CLIN 1: Transition</b>  |                         |                         |                     |
| July 1, 2012 - September 30, 2012  | \$1,553,670.00          | \$1,553,670.00          |                     |
| <b>CLIN 2: Base Period – Site Operations</b>   |                         |                         |                     |
| October 1, 2012 through September 30, 2013   | \$141,902,556.74        | \$141,902,556.74        | \$109,238,604       |
| Funding transferred from WTS contract  | \$7,995,864.65          | \$7,995,864.65          |                     |
| Funding from other DOE entities per H.55   | \$11,373,074.35         | \$11,373,074.35         |                     |
| October 1, 2013 through September 30, 2014   | \$139,265,040.00        | \$139,265,040           | \$109,238,604       |
| <b>WBS 1.7 PMB for Recovery Activities (CLIN 4)</b>  | <b>\$31,148,035.00</b>  | <b>\$31,148,035.00</b>  |                     |
| Funding from other DOE entities per H.55   | \$1,232,980.92          | \$1,232,980.92          |                     |
| October 1, 2014 through September 30, 2015   | <b>\$121,492,804.86</b> | <b>\$121,492,804.86</b> | \$100,097,068       |
| <b>Funding for OPC: PVS (OPC) (CLIN 5)</b>   | <b>\$5,020,310.96</b>   | <b>\$5,020,310.96</b>   |                     |
| <b>WBS 1.7 PMB for Recovery Activities (CLIN 4)</b>  | <b>\$120,734,157.96</b> | <b>\$120,734,157.96</b> | <b>\$82,115,542</b> |
| <b>WBS 1.7 Recovery Funding for OPC PVS (CLIN 5)</b>   | <b>\$1,979,689.04</b>   | <b>\$1,979,689.04</b>   |                     |
| Funding from other DOE entities per H.55   | \$5,551,193.66          | \$5,551,193.66          |                     |
| October 1, 2015 through September 30, 2016   | \$117,287,629.00        | \$143,633,488           | \$109,238,604       |
| Funding from other DOE entities per H.55   | \$5,025,085.26          | \$5,025,085.26          |                     |
| October 1, 2016 through September 30, 2017   | \$0.00                  | \$133,217,810           | \$109,238,604       |
| Funding from other DOE entities per H.55   | \$0.00                  | \$0.00                  |                     |
| TOTALS   | \$710,008,422.40        | \$869,572,091.40        | \$537,051,484       |
| <b>CLIN 3: Option Period 1 – Site Operations</b>   |                         |                         |                     |
| October 1, 2017 through September 30, 2018   | \$0.00                  | \$133,217,810           | \$109,238,604       |
| <b>CLIN 4: WBS. 1.7 Performance Measurement Baseline for Recovery Activities</b>                                       |                         |                         |                     |
| FY14 WIPP Recovery Project WBS 1.7, Fee, MR:<br>(Note: FY14 funding was obligated to CLIN 2 in STRIPES before Mod 94)  | \$0.00                  | \$0.00                  |                     |
| FY15 WIPP Recovery Project WBS 1.7, Fee, MR -<br>(Note: FY15 funding was obligated to CLIN 2 in STRIPES before Mod 94) | \$0.00                  | \$0.00                  |                     |
| <b>FY16 WIPP Recovery Project WBS 1.7, Fee, MR</b>   | <b>\$79,459,008.00</b>  | <b>\$79,459,008</b>     |                     |
| <b>FY17 WIPP Recovery Project WBS 1.7, Fee, MR</b>   | <b>\$0.00</b>           | <b>\$12,322,628</b>     |                     |
| <b>Option period - FY18 WIPP WBS 1.7, Fee, PMB (to CLIN 6)</b>   | <b>\$0.00</b>           | <b>\$0.00</b>           |                     |
| TOTALS   | \$79,459,008.00         | \$91,781,636            | \$82,115,542        |
| <b>CLIN 5: WBS 1.8 Capital Asset Project(s) for Permanent Ventilation System and Exhaust Shaft</b>                     |                         |                         |                     |
| <b>FY15 CAP 15-D-411 Ventilation</b>   | <b>\$12,000,000.00</b>  | <b>\$12,000,000.00</b>  |                     |
| <b>FY16 CAP 15-D-411 Ventilation</b>   | <b>\$23,218,000.00</b>  | <b>\$23,218,000.00</b>  |                     |
| <b>FY17 CAP 15-D-411 Ventilation</b>   | <b>\$0.00</b>           | <b>\$2,532,000.00</b>   |                     |
| <b>FY15 CAP 15-D-412 Exhaust</b>   | <b>\$4,000,000.00</b>   | <b>\$4,000,000.00</b>   |                     |
| <b>FY16 CAP 15-D-412 Exhaust</b>   | <b>\$7,500,000.00</b>   | <b>\$7,500,000.00</b>   |                     |
| <b>FY17 CAP 15-D-412 Exhaust</b>   | <b>\$0.00</b>           | <b>\$2,533,000.00</b>   |                     |
| <b>FY17 OPC (PBS 80) ventilation</b>   | <b>\$0.00</b>           | <b>\$1,569,189.00</b>   |                     |
| <b>FY17 OPC (PBS 80) exhaust</b>   | <b>\$0.00</b>           | <b>\$1,264,239.00</b>   |                     |
| TOTALS   | \$46,718,000.00         | \$54,616,428.00         |                     |

|  |                         |                           |                      |
|--|-------------------------|---------------------------|----------------------|
| <b>CLIN 6: - Option Period - WBS. 1.7 Performance Measurement Baseline for Recovery Activities - FY18 WIPP Recovery Project WBS 1.7, Fee, MR</b> |                         |                           |                      |
|  | <b>\$0.00</b>           | <b>\$358,466</b>          |                      |
| <b>CLIN 7: Option Period 2 – Site Operations</b>   |                         |                           |                      |
| October 1, 2018 through September 30, 2019   | \$0.00                  | \$133,217,810             | \$109,238,604        |
| October 1, 2019 through September 30, 2020   | \$0.00                  | \$133,217,810             | \$109,238,604        |
| October 1, 2020 through September 30, 2021   | \$0.00                  | \$133,217,810             | \$109,238,604        |
| October 1, 2021 through September 30, 2022   | \$0.00                  | \$133,217,810             | \$109,238,604        |
|  | <b>\$0.00</b>           | <b>\$532,871,240</b>      | <b>\$436,954,416</b> |
| <b>CLIN 8: Option Period 1 - WBS. 1.8 CAP 15-D-411 Ventilation</b>   |                         |                           |                      |
| <b>FY18 CAP 15-D-411 ventilation</b>   | <b>\$0.00</b>           | <b>\$66,994,475.00</b>    | <b>TBD</b>           |
| <b>FY18 OPC (PBS80) ventilation</b>  | <b>\$0.00</b>           | <b>\$3,060,741.00</b>     | <b>TBD</b>           |
| <b>Totals</b>  | <b>\$0.00</b>           | <b>\$70,055,216.00</b>    |                      |
| <b>CLIN 9: Option Period 1 - WBS. 1.8 CAP 15-D-412 Exhaust</b>   |                         |                           |                      |
| <b>FY18 CAP 15-D-412 exhaust</b>   | <b>\$0.00</b>           | <b>\$17,145,976.00</b>    | <b>TBD</b>           |
| <b>FY18 OPC (PBS80) exhaust</b>  | <b>\$0.00</b>           | <b>\$1,664,239.00</b>     | <b>TBD</b>           |
| <b>Totals</b>  | <b>\$0.00</b>           | <b>\$18,810,215.00</b>    |                      |
| <b>CLIN 10: Option Period 2 - WBS. 1.8 CAP 15-D-411 Ventilation</b>  |                         |                           |                      |
| <b>FY19 CAP 15-D-411 ventilation</b>   | <b>\$0.00</b>           | <b>\$88,483,623.00</b>    | <b>TBD</b>           |
| <b>FY19 OPC (PBS80) ventilation</b>  | <b>\$0.00</b>           | <b>\$3,059,052.00</b>     | <b>TBD</b>           |
| <b>FY20 CAP 15-D-411 ventilation</b>   | <b>\$0.00</b>           | <b>\$38,462,902.00</b>    | <b>TBD</b>           |
| <b>FY20 OPC (PBS80) ventilation</b>  | <b>\$0.00</b>           | <b>\$4,222,363.00</b>     | <b>TBD</b>           |
| <b>FY21 CAP 15-D-411 ventilation</b>   | <b>\$0.00</b>           | <b>\$0.00</b>             |                      |
| <b>FY21 OPC (PBS80) ventilation</b>  | <b>\$0.00</b>           | <b>\$4,627,955.00</b>     | <b>TBD</b>           |
| <b>TOTALS</b>  | <b>\$0.00</b>           | <b>\$138,855,895.00</b>   |                      |
| <b>CLIN 11: Option Period 2 - WBS. 1.8 CAP 15-D-412 Exhaust</b>  |                         |                           |                      |
| <b>FY19 CAP 15-D-412 exhaust</b>   | <b>\$0.00</b>           | <b>\$53,519,012.00</b>    | <b>TBD</b>           |
| <b>FY19 OPC (PBS80) exhaust</b>  | <b>\$0.00</b>           | <b>\$837,722.00</b>       | <b>TBD</b>           |
| <b>FY20 CAP 15-D-412 exhaust</b>   | <b>\$0.00</b>           | <b>\$12,806,011.00</b>    | <b>TBD</b>           |
| <b>Totals</b>  | <b>\$0.00</b>           | <b>\$67,162,745.00</b>    | <b>TBD</b>           |
| <b>Totals</b>  | <b>\$837,739,100.40</b> | <b>\$1,978,855,412.40</b> |                      |

## Legend:

Site Operations - black

Recovery – Green

CAP - Ventilation – Red

CAP – Exhaust - Blue