

2. AMENDMENT/MODIFICATION NO 0417 3. EFFECTIVE DATE See Block 16C 4. REQUISITION/PURCHASE REQ NO. 5. PROJECT NO. (If applicable)

6 ISSUED BY CODE 00901 7. ADMINISTERED BY (If other than Item 6) CODE  
 Savannah River Operations  
 U.S. Department of Energy  
 Savannah River Operations  
 P.O. Box A  
 Aiken SC 29802

8 NAME AND ADDRESS OF CONTRACTOR (f/a, street, county, State and ZIP Code) 9A. AMENDMENT OF SOLICITATION NO.  
 SAVANNAH RIVER REMEDIATION LLC  
 Attn: Jeffrey J. Bair  
 Savannah River Site  
 Building 766-H  
 Aiken SC 29808  
 9B. DATED (SEE ITEM 11)  
 10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC09-09SR22505  
 10B. DATED (SEE ITEM 13) 12/08/2008  
 CODE 808376193 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)  
 No change in accounting and appropriation data.

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED 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 THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, 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)  
 X Clause I.138 DEAR 970.5204-2 Laws, Regulations, and DOE Directives (DEC 2000)

E. IMPORTANT: Contractor is not. is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible)  
 A. The purpose of this modification is to incorporate a revised Section J, Appendix D - List B.  
 B. Part III List of Documents, Exhibits, and Other Attachments, Section J - List of Attachments, Appendix D - List B, Applicable DOE Directives, Orders, Laws, and Regulations, is hereby deleted in its entirety and is replaced by the attached List B dated October 10, 2016.  
 C. All other terms and conditions remain unchanged.  
 Payment:

Except as provided herein, all terms and conditions of the document referenced in Item 8 A or 10A, as heretofore changed, remains unchanged and in full force and effect

15A. NAME AND TITLE OF SIGNER (Type or print) Thomas A. Foster President and Project Manager 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Charlene Smith

15B. CONTRACTOR/OFFEROR 15C. DATE SIGNED 10/14/2016 16B. UNITED STATES OF AMERICA 16C. DATE SIGNED 10/18/16  
 (Signature of person authorized to sign) (Signature of Contracting Officer)

**PART III – LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS**

**SECTION J - LIST OF ATTACHMENTS**

**APPENDIX D - LIST B, APPLICABLE DOE DIRECTIVES, ORDERS, LAWS, AND REGULATIONS**

Pursuant to the clause in Section I.138 entitled, DEAR 970.5204-2 “LAWS, REGULATIONS, AND DOE DIRECTIVES (DEC 2000),” the Contractor shall adhere to the ES&H requirements compliance process delineated in the Site Standards/ Requirements Identification Document (S/RID). For requirements other than Environment, Safety and Health (ES&H), the contractor shall adhere to the existing DOE directive requirements that are the basis for established procedures and programs until authorized approvals are obtained to deviate from established requirements. The S/RID, and superseding versions thereof, are hereby incorporated by reference.

The Contracting Officer, or designated representative, may, from time to time via issuance of a Contract Administration Notice (CAN) or other means, revise the ES&H requirements and non-ES&H requirements (i.e., List B as referred to in this clause).

The following is the DOE approved List B set of requirements as of October 10, 2016.

**ENVIRONMENTAL, SAFETY AND HEALTH REGULATIONS (ES&H)**

**ES&H Requirements**

<b>Directive</b>	<b>Title</b>
ADN-89-05-FF	Federal Facility Agreement For The Savannah River Site
ANS 8.1	Nuclear Criticality Safety In Operations With Fissionable Materials Outside Reactors
ANS 8.10	Criteria for Nuclear Criticality Safety Controls In Operations with Shielding and Confinement
ANS 8.12	Nuclear Criticality Control and Safety of Plutonium-Uranium Fuel Mixtures Outside Reactors
ANS 8.14	Use of Soluble Neutron Absorbers In Nuclear Facilities Outside Reactors
ANS 8.15	Nuclear Criticality Control of Special Actinide Elements
ANS 8.17	Criticality Safety Criteria for the Handling, Storage, and Transportation of LWR Fuel Outside Reactors
ANS 8.19	Administrative Practices for Nuclear Criticality Safety
ANS 8.20	Nuclear Criticality Safety Training
ANS 8.21	Use of Fixed Neutron Absorbers In Nuclear Facilities Outside Reactors
ANS 8.22	Nuclear Criticality Safety Based on Limiting and Controlling Moderators
ANS 8.23	Nuclear Criticality Accident Emergency Planning and Response

Directive	Title
ANS 8.24	Validation of Neutron Transport Methods for Nuclear Criticality Safety Calculations
ANS 8.28	Criticality Safety Engineer Training and Qualification Program
ANS 8.3	Criticality Accident Alarm System
ANS 8.6	Safety in Conducting Subcritical Neutron-Multiplication Measurements in Situ
ANS 8.7	Nuclear Criticality Safety in The Storage Of Fissile Materials
ANSI N323A - 1997	American National Standard: Radiation Protection Instrumentation Test and Calibration, Portable Survey Instruments
ANSI N42.10 - 1980	American National Standard: Specification and Performance of On-Site Instrumentation for Continuously Monitoring Radioactivity in Effluents
ANSI N43.3 - 1993	American National Standard For General Radiation Safety - Installations Using Non-Medical X-Ray and Sealed Gamma-Ray Sources, Energies Up To 10 MeV
ANSI/ANS-3.2	Administrative Controls And Quality Assurance For The Operational Phase Of Nuclear Power Plants
ANSI/HP- N43.2 - 2001	American National Standard: Radiation Safety for X-Ray Diffraction and Fluorescence Analysis Equipment
ASME NQA-1-2000	QUALITY ASSURANCE REQUIREMENTS FOR NUCLEAR FACILITY APPLICATIONS
ASME NQA-1-2008/2009a	QUALITY ASSURANCE REQUIREMENTS FOR NUCLEAR FACILITY APPLICATIONS
Comm. Vehicle Safety Alliance	North American Uniform Vehicle Out-of-Service Criteria
DOE LETTER OSA-15-0081	Savannah River Remediation LLC (SRR) Site Cancelled Directive Implementation Instructions (DII) Guidance
DOE LETTER OSA-15-0091	Savannah River Remediation LLC Contract DE-AC09-09SR22505; DOE O 420.1C, Facility Safety, Dated December 4, 2012, Delegation of Authority Having Jurisdiction and Facility Assessment Procedures
DOE/RW-0333P, Rev 20	Quality Assurance Requirements and Description for the Civilian Radioactive Waste Management Program
DOE O 153.1 (CRD)	Departmental Radiological Emergency Response Assets
DOE M 435.1-1 Admin Chg 2	Radioactive Waste Management Manual (Contractor Requirements)
DOE O 160.1A (CRD)	Continuity Programs
DOE O 161.1C (CRD)	Comprehensive Emergency Management System
DOE O 210.2A (CRD)	DOE Corporate Operating Experience Program
DOE O 225.1B (CRD)	Accident Investigations
DOE O 226.1B (CRD)	Implementation Of Department Of Energy Oversight Policy
DOE O 231.1B, Admin Chg 1 (CRD)	Environment, Safety and Health Reporting
DOE O 232.2, Admin Chg 1 (CRD)	Occurrences Reporting and Processing of Operations Information
DOE O 243.1B, Admin Chg 1 (CRD)	Records Management Program
DOE O 251.1C	Directives System
DOE O 414.1D Admin Chg 1 (CRD)	Quality Assurance
DOE O 420.1C Chg 1 (CRD)	Facility Safety
DOE O 422.1, Admin Chg 2 (CRD)	Conduct of Operations

Directive	Title
DOE O 425.1D, Admin Chg 1 (CRD)	Startup And Restart Of Nuclear Facilities
DOE O 428.2, Admin Chg 1 (CRD)	Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities
DOE O 433.1B, Admin Chg 1 (CRD)	Maintenance Management Program For DOE Nuclear Facilities.
DOE O 439.1, Chg 1 (CRD)	Radioactive Waste Management
DOE O 438.1 (CRD)	Departmental Sustainability
DOE O 442.1A (CRD)	Department of Energy Employee Concerns Program
DOE O 442.2 (CRD)	Diffing Professional Opinions for Technical Issues Involving Environmental, Safety, and Health Technical Concerns
DOE O 443.1B (CRD)	Protection of Human Research Subjects
DOE O 450.1A (CRD)	Environmental Protection Program
DOE O 458.1, Admin Chg 3 (CRD)	Radiation Protection of the Public and the Environment
DOE O 460.1C (CRD)	Packaging and Transportation Safety
DOE O 460.2A (CRD)	Departmental Materials Transportation and Packaging Management
DOE P 460.4A	Safety Management System Policy
DOE-STD-1088-89	Radical Control
DOE-STD-1188-2004	Specific Administrative Controls
EM QA-001, Rev. 1	EM Quality Assurance Program
EM-WAPS, Rev. 2	Waste Acceptance Product Specifications (WAPS) for Verified High-Level Waste Forms
IBC	International Building Code
DOE-STD-1088-2012, Chapters 4, 5 & 6	Fire Protection Design Criteria
DOE M 140.1-1B (CRD)	Interface with the Defense Nuclear Facilities Safety Board
DOE M 471.3-1, Admin Chg 1 (CRD)	Manual for Identifying and Protecting Official Use Only Information
DOE O 208.1 (CRD)	DOE Privacy Program
DOE N 208.4 (CRD)	Personal Identity Verification
DOE O 130.1 (CRD)	Budget Formulation Process
DOE O 142.3A (CRD)	Unclassified Foreign Visits And Assignments Program
DOE O 144.1A-Chg1 (CRD)	Department of Energy American Indian Tribal Government Interactions and Policy Change 1
DOE O 200.1	Information Management Program
DOE O 205.1A (CRD)	Department of Energy Cyber Security Program
DOE O 205.1B, Admin Chg 3 (CRD)	Department of Energy Cyber Security Program

**Non-ES&H Requirements**

Directive	Title
DOE O 221.1A (CRD)	Reporting Fraud, Waste, And Abuse To The Office Of Inspector General
DOE O 221.2A (CRD)	Cooperation With The Office Of Inspector General
DOE O 227.1A (CRD)	Independent Oversight Program
DOE O 241.1B Admin Chg 1 (CRD)	Scientific and Technical Information Management
DOE O 262.1A, Admin Chg 1 (CRD)	Technical Standards Program
DOE O 350.1 Chg 5 (CRD)	Contractor Human Resource Management Programs
DOE O 413.1B (CRD)	Internal Control Program
DOE O 413.3B Chg 2 (CRD)	Program And Project Management For The Acquisition Of Capital Assets
DOE O 416.1, Admin Chg 1 (CRD)	Information Technology Project Management
DOE O 430.1B, Chg 2 (CRD)	Real Property Asset Management
DOE O 440.2C, Admin Chg 1 (CRD)	Aviation Management And Safety
DOE O 470.3B (CRD)	Graded Security Protection (GSP) Policy
DOE O 470.4B, Admin Chg 1 (CRD)	Safeguards and Security Program
DOE O 470.5 (CRD)	Insider Threat Program
DOE O 471.1B (CRD)	Identification and Protection of Unclassified Controlled Nuclear Information
DOE O 471.3, Admin Chg 1 (CRD)	Identifying And Protecting Official Use Only Information
DOE O 471.6, Admin Chg 2 (CRD)	Information Security
DOE O 472.2, Admin Chg 1 (CRD)	Personnel Security
DOE O 473.3A (CRD)	Protection Program Operations
DOE O 476.1 (CRD)	Counterintelligence Program
DOE O 476.2B (CRD)	Identifying Classified Information
DOE O 622.1 (CRD)	Pricing Of Departmental Materials And Services
DOE O 651.1D Chg 2 (CRD)	Official Foreign Travel
DOE O 650.1A Admin Chg 1 (CRD)	Personal Property Management Program
PCSP, Version 2.0	Program Cyber Security Plan (PCSP), Version 2.0, September 2010
NIST Special Publication 800-53, Revision 3, August 2009	National Institute Of Standards And Technology (NIST) Special Publication 800-53, Recommended Security And Privacy Controls For Federal Information Systems And Organizations, Revision 3, August 2009
SRSFM 260.1.1D	Savannah River Site Policy Manual