

2. AMENDMENT/MODIFICATION NO. M450	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
--	---	----------------------------------	--------------------------------

6. ISSUED BY U.S. Department of Energy National Nuclear Security Administration Sandia Site Office (MS 0184) P.O. Box 5400 Albuquerque, NM 87185-5400	CODE	7. ADMINISTERED BY (If other than Item 6)	CODE
---	------	---	------

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, state, ZIP Code) Sandia Corporation P. O. Box 5800 Albuquerque, NM 87185	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED (SEE ITEM 11)
CODE	FACILITY CODE
	10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC04-94AL85000
	10B. DATED (SEE ITEM 13) October 1, 1993

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)

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS 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 date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Clause H-40 Operating Requirements; Clause I-72, DEAR 970.5204-2 Laws, Regulations and DOE Directives (Dec 2000)(Deviation); and Clause I-62, DEAR 952.215-70 Key Personnel (Dec 2000).
	D. OTHER (Specify type of modification and authority):

E. IMPORTANT: Contractor is not, is required to sign this document and return 3 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION

The purpose of this modification is to replace Appendix D, *Key Personnel* (Attachment 1) and Appendix G, *List of Applicable Directives and NNSA Policy Letters* (Attachment 2) hereto. The effective date of Appendix G is thirty (30) days after the date in Block 16C below. There are no changes to Appendix G-1 *Operating Requirements*.

15A. NAME AND TITLE OF SIGNER (Type or print) Steven Bauck, Manager Corporate Contract Management, Sandia Corporation	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) JoAnn Wright, Contracting Officer Sandia Site Office, NNSA	
15B. CONTRACTOR/OFFEROR BY <u>Steven Bauck</u> (Signature of person authorized to sign)	15C. DATE SIGNED <u>11/24/12</u>	16B. UNITED STATES OF AMERICA BY <u>JoAnn Wright</u> (Signature of Contracting Officer)
		16C. DATE SIGNED <u>1/25/2012</u>

1. Section J - Appendix D, *Key Personnel*, dated September 16, 2011, is hereby revised and superseded in its entirety by Attachment 1 to this modification dated December 31, 2011. This change reflects the replacement ofCarolyn M. Hart as the Vice President of Weapons Engineering and Product Realization with Bruce C. Walker as the Vice President of Weapons Engineering and Product Realization and Chief Engineer for Nuclear Weapons (effective December 23, 2011) and removes Matthew J. O'Brien as the Vice President, CFO and Business Operations (effective December 31, 2011).
2. Appendix G, *List of Applicable Directives and NNSA Policy Letters*, is hereby revised and superseded in its entirety by Attachment 2 to this modification.
3. All other terms and conditions remain unchanged.

----- End of Modification -----

Part III - Section J
Appendix D
Key Personnel

December 31, 2011

The Contractor's employees identified below are determined to be necessary for the successful performance of this Contract. The purpose of this listing is to identify those employees whose initial assignment, reassignment, or replacement shall be subject to the approval of the Contracting Officer, pursuant to the Contract Clause entitled "Key Personnel." Position title designations do not signify officers of the Sandia Corporation.

Paul J. Hommert	President, Laboratories Director
Jerry L. McDowell	Deputy Laboratories Director and Executive Vice President for National Security Programs
Kimberly C. Sawyer	Deputy Laboratories Director and Executive Vice President for Mission Support
Pamela Hansen Hargan	Vice President, Human Resources and Communications
Michael W. Hazen	Vice President, Infrastructure Operations
Jill M. Hruby	Vice President, Energy, Securities and Defense Technologies
Jeffrey A. Isaacson	Vice President, Defense Systems and Assessments (DSA)
Elizabeth D. Krauss	Vice President, General Counsel, and Corporate Secretary
J. Stephen Rottler	Vice President, Science and Technology and Research Foundations
Richard H. Stulen	Vice President, California Laboratory
Michael O. Vahle	Vice President, Information Technology Services and Chief Information Officer (CIO)
Bruce C. Walker	Vice President, Weapons Engineering and Product Realization and Chief Engineer for Nuclear Weapons

Part III - Section J
Appendix G
List of Applicable Directives and NNSA Policy Letters

In addition to the list of applicable directives referenced below, the contractor shall also comply with supplementary directives (e.g., manuals), which are invoked by a Contractor Requirements Document (CRD) attached to a directive referenced below. This List excludes directives that have been granted an exemption from the CRD in whole or in part. For those Directives whereby the Contractor has been granted an exemption from the CRD, the Contractor shall comply only with the Operating Requirements identified in Appendix G-1. Directives identified in Appendix G-1 are for reference purposes only.

Bolded directives have been reviewed by the Joint Operating Requirements Review Board (JORRB).

DIRECTIVE NUMBER	DATE	DOE DIRECTIVE TITLE
APPH Chapter X Revision 10	9/08/98	Accounting Practices & Procedures Handbook Chapter X - Product Cost Accounting
DOE O 130.1	9/29/95	Budget Formulations Process
DOE M 140.1-1B	3/30/01	Interface with the Defense Nuclear Facilities Safety Board
DOE O 142.1	1/13/04	Classified Visits Involving Foreign Nationals
DOE O 142.2A	12/15/06	Safeguards Agreement and Protocol with the International Atomic Energy Agency
DOE M 142.2-1	9/04/08	Manual for the Implementation of the Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency
DOE O 142.3A	10/14/10	Unclassified Foreign Visits and Assignments Program
DOE O 144.1, Chg 1 dated 11/16/09	1/16/09	Department of Energy American Indian Tribal Government Interactions and Policy
DOE O 150.1	5/8/08	Continuity Programs
DOE O 151.1C	11/02/05	Comprehensive Emergency Management System
DOE O 153.1	6/27/07	Departmental Radiological Emergency Response Assets
DOE N 153.2	8/11/03	Connectivity to National Atmospheric Release Advisory Center (NARAC)
DOE M 200.1-1	2/15/00	Chapter 9 Public Key Cryptography and Key Management
DOE O 205.1A	12/4/06	Department of Energy Cyber Security Management¹
DOE M 205.1-3	4/17/06	Telecommunications Security Manual
DOE O 206.1	1/16/09	Department of Energy Privacy Program
DOE N 206.4	6/29/07 (DOE N 251.74 extends this order until 6/29/09)	Personal Identity Verification
DOE O 210.2A	4/08/11	DOE Corporate Operating Experience Program
DOE O 221.1A	4/19/08	Reporting Fraud, Waste, and Abuse to the Office of Inspector General
DOE O 221.2A	2/25/08	Cooperation With The Office of Inspector General
DOE O 225.1B	3/04/11	Accident Investigations
DOE O 226.1B	4/25/11	Implementation of Department of Energy Oversight Policy

¹ Refer to the following memorandums from Wayne Jones: Subject: *Path Forward Pertaining to DOE Order 205.1B*, dated 10/26/11, and Subject: *Deviation Approval to Use Federal Cyber Security Standards and Guidance in lieu of NNSA Policy Letter 14.1-C & 14.2-C*, dated 5/24/10.

DIRECTIVE NUMBER	DATE	DOE DIRECTIVE TITLE
DOE O 227.1	8/30/11	Independent Oversight Program
DOE O 231.1B	6/27/11	Environment, Safety and Health Reporting
DOE O 232.2	8/30/11	Occurrence Reporting and Processing of Operations Information²
DOE O 241.1B	12/13/10	Scientific and Technical Information Management³
DOE O 252.1A	2/23/11	Technical Standards Program
DOE O 313.1	11/19/09	Management and Funding of the Department's Overseas Presence
DOE O 350.1, Chg 3 dated 2/23/10	9/30/96	Contractor Human Resource Management Programs (excludes Chapters VIII Contractor Workplace Substance Abuse Programs and IX Employee Assistance Programs due to exemption granted on December 9, 2010, by the NNSA Administrator)
DOE O 350.2B	05/31/11	Use of Management and Operating or Other Facility Management Contractor Employees for Services to DOE in the Washington, D.C., Area
DOE O 410.2	8/17/09	Management of Nuclear Materials
DOE O 412.1A	4/21/05	Work Authorization System
DOE O 413.1B	10/28/08	Internal Control Program
DOE O 413.2B	4/19/06	Laboratory Directed Research & Development
DOE O 413.3B	11/29/10	Program and Project Management for the Acquisition of Capital Assets⁴
DOE O 414.1D	4/25/11	Quality Assurance
DOE O 420.1B, Chg 1 dated 4/19/10	12/22/05	Facility Safety
DOE O 420.2C	7/21/11	Safety of Accelerator Facilities⁵
DOE O 422.1	6/29/10	Conduct of Operations
DOE O 425.1D	4/16/10	Verification of Readiness to Start Up or Restart Nuclear Facilities
DOE O 426.2	4/21/10	Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities
DOE O 430.1B, Chg. 2 dated 04/25/11	9/24/03	Real Property and Asset Management
DOE O 433.1B	4/21/10	Maintenance Management Program for DOE Nuclear Facilities
DOE N 435.1	8/09/11	Contact-Handled and Remote-Handled Transuranic Waste Packaging
DOE O 435.1, Chg. 1 dated 8/28/01	7/09/99	Radioactive Waste Management
DOE M 440.1-1A	1/09/06	DOE Explosives Safety Manual
DOE O 440.2C, Chg. 1 dated 6/15/11	11/27/02	Aviation Management and Safety
DOE M 441.1-1	3/07/08	Nuclear Material Packaging Manual ⁶

² Full implementation will occur in accordance with an approved Implementation Plan, due to SSO by 01/31/2012 per the December JORRB minutes.

³ Sandia will implement the following requirement in paragraph 3. of the Contractor Requirements Document in accordance with an approved implementation plan: [name of subprogram].

⁴ The annual Value Engineering accomplishment progress report required by paragraph c.9. of the Contractor Requirements Document shall be submitted to OECM through the Sandia Site Office.

⁵ Full implementation will be achieved by 8/10/2012 in accordance with the approved Implementation Plan.

⁶ a. Sandia shall repackage all nuclear materials that fall under the requirements of DOE M 441.1-1 remaining on-site after FY 2015 that do not have an identified disposition path. These materials will need to be packaged before the end of FY 2014 or as soon as appropriate packaging is identified and approval is obtained through the Sandia Site Office (SSO). Sandia will determine the appropriate packaging and SSO will concur/approve.

DIRECTIVE NUMBER	DATE	DOE DIRECTIVE TITLE
DOE O 442.2	7/29/11	Differing Professional Opinions for Technical Issues Involving Environmental, Safety, and Health Technical Concerns
DOE O 443.1B	3/17/11	Protection of Human Research Subjects
DOE O 452.1D	4/14/09	Nuclear Explosive and Weapon Surety Program
DOE M 452.2-1A	4/14/09	Nuclear Explosive Safety Manual
DOE M 452.2-2	4/14/09	Nuclear Explosive Safety Evaluation Processes
DOE O 452.2D	4/14/09	Nuclear Explosive Safety
DOE O 452.3	6/08/05	Management of the Department of Energy Nuclear Weapons Complex
DOE O 452.4B	1/22/10	Security and Use Control of Nuclear Explosives and Nuclear Weapons
DOE O 452.6A	4/14/09	Nuclear Weapon Surety Interface with the Department of Defense
DOE O 452.7	5/14/10	Protection of Use Control Vulnerabilities and Designs
DOE O 456.1	5/31/11	The Safe Handling of Unbound Engineered Nanoparticles⁷
DOE O 457.1	2/07/06	Nuclear Counter-terrorism
DOE M 457.1-1	8/10/06	Control of Improvised Nuclear Device Information
DOE O 458.1, Chg 2	6/06/11	Radiation Protection of the Public and the Environment
DOE O 452.8	7/21/11	Control of Nuclear Weapons Data⁸
DOE O 460.1C	5/14/10	Packaging and Transportation Safety
DOE O 460.2A	12/22/04	Departmental Materials Transportation & Packaging Management
DOE M 460.2-1A	6/04/08	Radioactive Material Transportation Practices
DOE O 461.1B	12/20/10	Packaging and Transportation for Offsite Shipment of Materials of National Security Interest⁹
DOE O 461.2	10/31/10	Onsite Packaging and Transfer of Materials of National Security Interest¹⁰
DOE O 462.1	11/10/08	Import and Export of Category 1 and 2 Radioactive Sources and Aggregated Quantities
DOE O 470.3B	8/12/08	Graded Security Protection (GSP) Policy
DOE M 470.4-1, Chg. 2 dated 10/20/10	8/26/05	Safeguards and Security Program Planning and Management
DOE M 470.4-3A	11/05/08	Contractor Protective Force
DOE M 470.4-6, Chg. 1 dated 8/14/06	8/26/05	Nuclear Material Control and Accountability
DOE O 471.1B	3/01/10	Identification and Protection of Unclassified Controlled Nuclear Information
DOE O 471.3, Admin Chg. 1 dated 1/13/11	4/09/03	Identifying and Protecting Official Use Only Information
DOE M 471.3-1, Admin Chg. 1 dated 1/13/11	4/09/03	Manual for Identifying and Protecting Official Use Only Information
DOE O 471.5	3/29/11	Special Access Program

Packaging designs will be approved by a Site Office and reviewed by the NNSA/Albuquerque Complex Packaging Certification Division prior to use.

- b. New Material that Sandia acquires from various programs and projects that is subject to DOE M 441.1-1, must have an approved container for storage, or Sandia must have a plan (approved by SSO) in place to develop a container to comply with the packaging and storage requirements, when it comes on site.

⁷ Full implementation will be achieved by 1/31/2012 in accordance with the approved Implementation Plan.

⁸ Full implementation will occur in accordance with an approved Implementation Plan, which will also address conflicts with other directives. The plan is due to SSO within 30 days of the execution of contract mod. M450.

⁹ Full implementation will be achieved by 2/06/2012 in accordance with the approved Implementation Plan.

¹⁰ Full implementation will be achieved by 2/06/2012 in accordance with the approved Implementation Plan.

DIRECTIVE NUMBER	DATE	DOE DIRECTIVE TITLE
DOE O 472.2	7/21/11	Personnel Security¹¹
DOE O 475.1	12/10/04	Counterintelligence Program
DOE O 475.2A	2/01/11	Identifying Classified Information
DOE O 534.1B	1/06/03	Accounting
DOE O 551.1C	6/24/08	Official Foreign Travel
DOE O 580.1, Chg 1 dated 5/08/08	12/07/05	Department of Energy Personal Property Management Program
DOE 5400.5 Chg. 2 dated 1/7/93	2/8/90	Radiation Protection of the Public & the Environment ¹²
DOE 5480.30, Chg. 1 dated 3/14/01	1/19/93	Nuclear Reactor Safety Design Criteria
56XB Rev. 2	5/10/04 (Release Date)	Nuclear Weapon Development and Production ¹³
SEN-35-91	9/09/91	Nuclear Safety Policy
NAP 14.1-C	5/02/08	NNSA Baseline Cyber Security Program
NAP 14.2-C	5/02/08	NNSA Certification and Accreditation (C&A) Process for Information Systems
NAP 14.3-B	5/02/08	Transmission of Restricted Data Over Secret Internet Protocol Router Network (SIPRNet)
NAP 70.2, Chg 1	7/20/11	Physical Protection
NAP 70.4, Chg 1	7/20/11	Information Security¹⁴
NNSA SD M 452.3-1	12/10/09	Defense Programs Business Requirements and Processes Manual ¹⁵

¹¹ Full implementation will occur in accordance with an approved Implementation Plan, due to SSO within 30 days of the execution of contract modification M450.

¹² DOE O 458.1, dated 2/11/11, cancels DOE O 5400.5 Chg 2, dated 1-7-93, except for Chapter III, *Derived Concentration Guidelines*, and Figure IV-1, *Surface Contamination Guidelines*.

¹³ Chapters within 56XB, *Nuclear Weapon Development and Production (D&P) Manual*, will stay in effect until specific *Nuclear Weapon D&P Manual* chapters and associated Technical Business Practices are incrementally and formally replaced using the Requirements Modernization and Integration (RMI) process, within the RMI Explorer, as described in contract clause H-33(e) and NA SD M 452.3-1.

¹⁴ NAP 70.4, Chg 1, dated 07/2/2011, replaced DOE M 470.4-4A, except for the classified Technical Surveillance Countermeasures Annex in DOE M 470.4-4A.

¹⁵ Changes to the NNSA Supplemental Directive NA SD M 452.3-1, *Defense Programs Business Requirements and Processes Manual*, and the RMI derived requirements, are processed as described in contract clause H-33(e).