

2. AMENDMENT/MODIFICATION NO. M045 3. EFFECTIVE DATE See Block 16C 4. REQUISITION/PURCHASE REQ. NO. 5. PROJECT NO. (If applicable)

6. ISSUED BY CODE U.S. Department of Energy
 TJNAF Site Office
 12000 Jefferson Avenue
 Newport News, Virginia 23606 7. ADMINISTERED BY (If other than Item 6) CODE

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Jefferson Science Associates, LLC
 12000 Jefferson Avenue
 Newport News, Virginia 23606 (X) 9A. AMENDMENT OF SOLICITATION NO.
 9B. DATED (SEE ITEM 11)
 10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC05-06OR23177
 10B. DATED (SEE ITEM 11) X
 April 14, 2006
 CODE 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 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 your 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)
 N/A

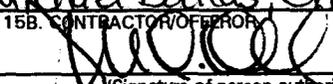
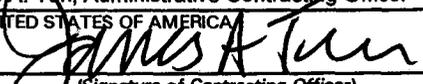
13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

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 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: In accordance with contract clause H.15 entitled "Application of DOE Contractor Requirements Documents"
	D. OTHER (Specify type of modification and authority)

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.)
 1. The purpose of this modification is to revise Appendix E of the contract in its entirety (copy attached).
 2. All other terms and conditions remain the same.

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) Michael Dallas, Chief Operating Officer	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) James A. Turi, Administrative Contracting Officer
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)
15C. DATE SIGNED 3/11/08	16C. DATE SIGNED 3/12/08

PART III

**SECTION J
LIST OF ATTACHMENTS**

**APPENDIX E
LAWS, STATUTES, REGULATIONS, AND DOE DIRECTIVES
PREFACE**

Appendix E specifies requirements and Department of Energy Directives (e.g. Notices, Policies, Orders, Manuals, Guides, and Standards) that are applicable to this contract. In this context, the term "applicable" means that:

1. The purpose and policy of the Directive/requirement includes elements that are intended and appropriate for an unclassified non-nuclear user research facility such as TJNAF;
2. Facilities and operations such as TJNAF are not explicitly excluded by the Directive/requirement;
3. The scope and policy of the Directive/requirement are relevant to a product or service being provided through the contract; and
4. The Directives and/or requirements are not limited to government organizations and employees.

DOE recognizes that each listed Directive/requirement contains numerous requirements and provisions which are most useful and beneficial when applied using a graded and/or tailored approach; based on the risk, cost, and benefit at the specific facility. Appropriate implementation will be determined through good faith discussion between the Contractor and the DOE TJNAF Site Office. The guiding principle for such discussion will be that any systems and procedures implemented to serve the policy and purpose of the Directive/requirement be cost effective and add value to TJNAF's management and operations, without compromising the safety and health of the workers, public, environment, or facilities. The DOE TJNAF Site Office reserves the right to require compliance with any part of each Directive/requirement. The applicability of prospective DOE Directives is determined according to the procedures in Section I clause, "DEAR 970.5204-2, Laws, Regulations and DOE Directives."

The Contractor shall be aware of DOE policies, responsibilities, formats, guidance, and procedures and is responsible for effective interface with DOE. The Contractor shall use appropriate DOE-generated standards, manuals, and guides as references, even though they may not be explicitly included in Appendix E, as well as standards, references and guides developed and published by professional organizations (e.g., Institute of Electrical and Electronics Engineers, National Fire Protection Association), to help ensure that plans and actions are based on accepted "best practice." Applicable standards and manuals specifically identified as mandatory in a Directive/requirement listed in this contract appendix will be addressed using the same graded and/or tailored approach as the cited Directive. The Contractor should recognize that some DOE Directives/requirements establish policy and include provisions which the Department has determined are necessary to discharge specific regulatory and fiduciary responsibility in selected areas.

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**APPENDIX E
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List A – List of Applicable Laws, Statutes and Regulations

LIST A

LAWS, STATUTES & REGULATIONS

The Contractor shall perform work in accordance with applicable Federal, state and local laws, statutes, regulations and national consensus standards as appropriate. Compliance with laws, Executive Orders, statutes, and regulations are mandatory, thus they are not listed here. The following internet website addresses are provided as a resource and may not necessarily be all inclusive.

<http://thomas.loc.gov/bss/d108/d108laws.html>

<http://www4.law.cornell.edu/uscode>

<http://www.gpoaccess.gov/cfr/index.html>

<http://www.archives.gov>

<http://www.firstgov.gov/>

Appendix E
DOE Directives
List B – List of Applicable Directives

- DOE M 200.1-1 Chapter 9, Public Key Cryptography and Key Management (02/15/2000)
- DOE M 231.1-1A, Change 1, Environment, Safety and Health Reporting Manual (09/09/2004)
- DOE M 231.1-2, Occurrence Reporting and Processing of Operations Information (08/19/2003)
- DOE M 435.1-1, Change 1, Radioactive Waste Management Manual (06/19/2001)
- DOE M 450.3-1, DOE Closure Process for Necessary and Sufficient Sets of Standards (01/25/1996)
- DOE M 450.4-1, ISM Manual (11/01/2006)
- DOE M 460.2-1, Radioactive Material Transportation Practices (09/23/2002)
- DOE M 470.4-1, Change 1, Safeguards and Security Program Planning and Management (08/26/2005)
- DOE M 470.4-2, Change 1, Physical Protection (08/26/2005)
- DOE M 470.4-6, Change 1, Nuclear Material Control and Accountability (08/26/2005)
- DOE M 471.3-1, Manual for Identifying and Protecting Official Use Only Information (04/09/2003)
- DOE M 481.1-1A, Change 1, Reimbursable Work for Non-Federal Sponsors Process Manual (09/28/2001)
- DOE M 483.1-1, DOE Cooperative Research and Development Agreements Manual (01/12/2001)
- DOE O 110.3A, Conference Management (01/25/2007)
- DOE O 130.1, Budget Formulation (09/29/1995)

- DOE O 142.3, Unclassified Foreign Visits and Assignments (06/18/2004)
- DOE O 151.1C, Comprehensive Emergency Management System (11/02/2005)
- DOE O 205.1A, Department of Energy Cyber Security Management (12/04/2006)
- DOE O 210.2, DOE Corporate Operating Experience Program (06/12/2006)
- DOE O 221.1, Reporting Fraud, Waste and Abuse to the Office of Inspector General (03/22/2001)
- DOE O 221.2, Cooperation with the Office of Inspector General (03/22/2001)
- DOE O 225.1A, Accident Investigations (11/26/1997)
- DOE O 226.1A, Implementation of DOE Oversight Policy (07/31/2007)
- DOE O 241.1A, Change 1, Scientific and Technical Information Management (10/14/2003)
- DOE O 341.1, Federal Employee Health Services (12/01/2003)
- DOE O 350.1, Change 1, Contractor Human Resources Management (05/08/1998)
- DOE O 350.2A, Use of Management and Operating or Other Facility Management Contractor Employees for Services to DOE in the Washington D C Area (10/29/2003)
- DOE O 413.1A, Management Control Program (04/18/2002)
- DOE O 413.3A, Project Management for the Acquisition of Capital Assets (07/28/2006)
- DOE O 414.1C, Quality Assurance (06/17/2005)
- DOE O 420.1B, Facility Safety (12/22/2005)
- DOE O 420.2B, Safety of Accelerator Facilities (07/23/2004)
- DOE O 430.1B, Real Property Asset Management (09/24/2003)
- DOE O 430.2A, Departmental Energy and Utilities Management (04/15/2002)

- DOE O 435.1, Change 1, Radioactive Waste Management (08/28/2001)
- DOE O 442.1A, DOE Employee Concerns Program (06/06/2001)
- DOE O 450.1, Change 2, Environmental Protection Program (12/07/2005)
- DOE O 460.1B, Transportation and Packing Safety (04/04/2003)
- DOE O 460.2A, Departmental Materials Transportation and Packaging Management (12/22/2004)
- DOE O 470.2B, Independent Oversight and Assurance Program (10/31/2002)
- DOE O 470.3A, Design Basis Threat Policy (11/29/2005)
- DOE O 471.3, Identifying and Protecting Official Use Only Information (04/09/2003)
- DOE O 475.1, Counterintelligence Program (12/10/2004)
- DOE O 482.1, DOE Facilities Technology Partnering Programs (01/12/2001)
- DOE O 483.1, DOE Cooperative Research and Development Agreements (01/12/2001)
- DOE O 534.1B, Accounting (01/06/2003)
- DOE O 551.1B, Official Foreign Travel (08/19/2003)
- DOE O 580.1, DOE Personal Property Management Program (12/07/2005)
- DOE O 5400.5, Change 2, Radiation Protection of the Public and the Environment (01/07/1993)
- DOE P 450.7, Environment, Safety and Health (ESH) Goals (08/02/2004)
- DOE P 456.1, Secretarial Policy Statement on Nanoscale Safety (09/15/2005)