AMENDMENT OF SOLIC	ITATION/MODIFICA	TION OF CONT	RACT	1. CON	TRACT ID CODI	PAGE C	PAGES 2
2. AMENDMENT/MODIFICATION NO.	REQUISITION/PURCHASE REQ.     S. PROJECT NO. (If applicable)     NO.						
0091	See Block 16C				- (1)	Locone	
6. ISSUED BY CODE	06005	7. ADMINISTERED BY (If other than Item 6) 06005				matri 154   Li	
U.S. Department of Energ Brookhaven Site Office 53 Bell Avenue, Building 4 Upton, NY 11973-5000	*	) 				1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	e projek p
8. NAME AND ADDRESS OF CONTRAC	TOR (No. street, county, State	e and ZIP Code)	<b>(√)</b> 9.	A. AMEN	NDMENT OF SC	DLICITATION	NO.
Brookhaven Science Asso Attn: Brian Boyle Brookhaven National Labo Building 460, PO Box 500 Upton, New York 11973-5		X D	9. B. DATED (SEE ITEM 11)  10. A. MODIFICATION OF Contract/Order NO.  DE-SC0012704  10. B. DATED (SEE ITEM 13)			der NO.	
CODE N/A	FACILITY CODE N/A			12/22/			
11. T	HIS ITEM ONLY APPLI	ES TO AMENDMI	NTS OF	SOLIC	ITATIONS		
A. THIS CHANGE ORDER IS ISS ORDER NO. IN ITEM 10A.  B. THE ABOVE NUMBERED CON appropriation date, etc.) SET F  C. THIS SUPPLEMENTAL AGRE Mutual agreement of	Jicitation and this amendment on DATA (If required)  3. THIS ITEM APPLIES ONLY IT MODIFIES THE CONTRUED PURSUANT TO: (Spector Control of the	, and is received prior to Y TO MODIFICATIONS ACT/ORDER NO. AS hify authority) THE CHA ED TO REFLECT THE NT TO THE AUTHORI	OF CONT DESCRIBE NGES SET ADMINISTR	RACTS/OD IN ITEM	RDERS, 14. NITEM 14 ARE	MADE IN TH	HE CONTRACT
D. OTHER (Specify type of modi	fication and authority						
E. IMPORTANT: Contractor	is not 🛛 is required to s	sign this document	and retu	rn <u>1</u> c	opies to the i	ssuing offic	ce.
This Modification is issued to revise Part II, Section I – Constitution is issued to revise Part II, Section I – Constitution is issued to revise Part II, Section I – Constitution in the section is issued to revise part II, Section I – Constitution in the section is in the section of the section of the section is in the section of the section of the section is in the section of	o revise Part I, Section ontract Clauses, upda ontract Appendix A	on H – Special C ate clause I.106; – Advance Und	ontract I revise P erstandir	Require Part III, S	ements, TO Section J – Iuman Reso	C, delete List of Do ources, re	Clause H.38; ocuments, eplace
15A. NAME AND TITLE OF SIGNER (Ty	pe or print)			OF CONTI	RACTING OFFI	CER (Type o	r print)
George Clark	Evelyn L Contract		or				
Chief Financial Officer  15B. CONTRACTOR/OFFEROR	NED 16B. UNITED	-		CA .	16C. DATE S	SIGNED	
(Signature of person authorized to s	an L 09 22	17 BY Obe	lyn O	Louelle tracting Of	em Em	918	12/17

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CONTINUATION SHEET	DE-SC0012704/0091	2	2

- 14. Description of Amendment/Modification (continued):
  - 1. Part I, Section H Special Contract Requirements, Table of Contents (TOC): Section H TOC is revised to delete H.38.
    - a. Clause H.38, Activities During Contract Transition This clause is hereby deleted from the contract.
       All transition activities under this contract have been completed. Clause H.38 is now titled "RESERVED".
  - 2. Part II, Section I Contract Clauses, Table of Contents (TOC): Section I TOC is revised to reflect an update to clause I.106.
    - a. Clause I.106 DEAR 952.209-72, Organizational Conflicts Of Interest (Aug 2009) (Alternate I) This clause has been updated IAW 48 CFR 909.507-2 to fill in the specific term in section (b)(1), paragraph (i). Replace the current language with the language provided herein.

"The Contractor shall be ineligible to participate in any capacity in Department contracts, subcontracts, or proposals therefore (solicited and unsolicited) which stem directly from the Contractor's performance of work under this contract for a period of one year after the completion of this contract. Furthermore, unless so directed in writing by the Contracting Officer, the Contractor shall not perform any advisory and assistance services work under this contract on any of its products or services or the products or services of another firm if the Contractor is or has been substantially involved in their development or marketing. Nothing in this subparagraph shall preclude the Contractor from competing for follow-on contracts for advisory and assistance services".

- Part III, Section J List of Documents, Exhibits, Attachments, Table of Contents (TOC): Section J TOC is revised to reflect the following: Update Appendix A Advance Understanding on Human Resources; Replace Appendix I DOE Directives/List B.
  - a. **Appendix A Advance Understanding on Human Resources** has been revised to delete paragraph (d) Grievances of Section VI Labor Relations in its entirety. This section is not titled "RESERVED".
  - b. Appendix I DOE Directives/List identified as Modification No. 0084 has been revised; replace the prior version with the attached Appendix I identified as Modification No. 0091. The revisions are as follows:

SUMMARY OF DIRECTIVE CHANGES  Deletions						
ADDITIONS	TITLE	CHANGE	NOTES			
P 470.1B	Safeguards and Security Program	Delete	This policy does not contain a CRD and is duplicative with O DOE O 470.4B Chg. 2 (Min. Chg.) which is currently in the Prime contract.			
O 425.1D Chg. 1 (Admin Chg.)	Verification of Readiness to Start Up or Restart Nuclear Facilities	Delete	BNL does not have any HC-1, HC-2, or HC-3 Nuclear Facilities, and therefore this directive is not applicable. The order is hereby removed from the Prime Contact.			
O 426.2 Chg. 1 (Admin Chg.)	Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities	Delete	BNL does not have any HC-1, HC-2, or HC-3 Nuclear Facilities, and therefore this directive is not applicable. The order is hereby removed from the Prime Contact.			
O 462.1 Admin Chg.1	Import and Export of Category 1 and 2 Radioactive Sources Aggregated Quantities	Delete	BNL does not import or export radioactive sources. Therefore, this order is not applicable. The order is hereby removed from the Prime Contact.			

#### Attachments:

- ▶ Part II, Section I Contract Clauses
  - Clause I.106 DEAR 952.209-72, Organizational Conflicts Of Interest (Aug 2009) (Alternate I), paragraph (i)
- ▶ Part III, Section J List of Documents, Exhibits, Attachments
  - ❖ Appendix I DOE Directives/List B

#### CLAUSE I.106 – DEAR 952.209-72 – ORGANIZATIONAL CONFLICTS OF INTEREST (AUG 2009) (ALTERNATE I)

- (a) Purpose. The purpose of this clause is to ensure that the Contractor (1) is not biased because of its financial, contractual, organizational, or other interests which relate to the work under this contract, and (2) does not obtain any unfair competitive advantage over other parties by virtue of its performance of this contract.
- (b) Scope. The restrictions described herein shall apply to performance or participation by the Contractor and any of its affiliates or their successors in interest (hereinafter collectively referred to as "Contractor") in the activities covered by this clause as a prime Contractor, subcontractor, cosponsor, joint venturer, consultant, or in any similar capacity. For the purpose of this clause, affiliation occurs when a business concern is controlled by or has the power to control another or when a third party has the power to control both.
  - (1) Use of Contractor's Work Product.
    - (i) The Contractor shall be ineligible to participate in any capacity in Department contracts, subcontracts, or proposals therefore (solicited and unsolicited) which stem directly from the Contractor's performance of work under this contract for a period of one year after the completion of this contract. Furthermore, unless so directed in writing by the Contracting Officer, the Contractor shall not perform any advisory and assistance services work under this contract on any of its products or services or the products or services of another firm if the Contractor is or has been substantially involved in their development or marketing. Nothing in this subparagraph shall preclude the Contractor from competing for follow-on contracts for advisory and assistance services.
    - (ii) If, under this contract, the Contractor prepares a complete or essentially complete statement of work or specifications to be used in competitive acquisitions, the Contractor shall be ineligible to perform or participate in any capacity in any contractual effort which is based on such statement of work or specifications. The Contractor shall not incorporate its products or services in such statement of work or specifications unless so directed in writing by the Contracting Officer, in which case the restriction in this subparagraph shall not apply.

- (iii) Nothing in this paragraph shall preclude the Contractor from offering or selling its standard and commercial items to the Government.
- (2) Access to and use of information.
  - (i) If the Contractor, in the performance of this contract, obtains access to information, such as Department plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (5 U.S.C. 552a), or data which has not been released or otherwise made available to the public, the Contractor agrees that without prior written approval of the Contracting Officer it shall not—
    - (A) use such information for any private purpose unless the information has been released or otherwise made available to the public;
    - (B) compete for work for the Department based on such information for a period of six (6) months after either the completion of this contract or until such information is released or otherwise made available to the public, whichever is first;
    - (C) submit an unsolicited proposal to the Government which is based on such information until one year after such information is released or otherwise made available to the public; and
    - (D) release such information unless such information has previously been released or otherwise made available to the public by the Department.
  - (ii) In addition, the Contractor agrees that to the extent it receives or is given access to proprietary data, data protected by the Privacy Act of 1974 (5 U.S.C. 552a), or other confidential or privileged technical, business, or financial information under this contract, it shall treat such information in accordance with any restrictions imposed on such information.
  - (iii) The Contractor may use technical data it first produces under this contract for its private purposes consistent with paragraphs (b)(2)(i)
     (A) and (D) of this clause and the patent, rights in data, and security provisions of this contract.

- (c) Disclosure after award.
  - (1) The Contractor agrees that, if changes, including additions, to the facts disclosed by it prior to award of this contract, occur during the performance of this contract, it shall make an immediate and full disclosure of such changes in writing to the Contracting Officer. Such disclosure may include a description of any action which the Contractor has taken or proposes to take to avoid, neutralize, or mitigate any resulting conflict of interest. The Department may, however, terminate the contract for convenience if it deems such termination to be in the best interest of the Government.
  - (2) In the event that the Contractor was aware of facts required to be disclosed or the existence of an actual or potential organizational conflict of interest and did not disclose such facts or such conflict of interest to the Contracting Officer, DOE may terminate this contract for default.
- (d) Remedies. For breach of any of the above restrictions or for nondisclosure or misrepresentation of any facts required to be disclosed concerning this contract, including the existence of an actual or potential organizational conflict of interest at the time of or after award, the Government may terminate the contract for default, disqualify the Contractor from subsequent related contractual efforts, and pursue such other remedies as may be permitted by law or this contract.
- (e) Waiver. Requests for waiver under this clause shall be directed in writing to the Contracting Officer and shall include a full description of the requested waiver and the reasons in support thereof. If it is determined to be in the best interests of the Government, the Contracting Officer may grant such a waiver in writing.
- (f) Subcontracts.
  - (1) The Contractor shall include a clause, substantially similar to this clause, including this paragraph (f), in subcontracts expected to exceed the simplified acquisition threshold determined in accordance with 48 CFR part 13 and involving the performance of advisory and assistance services as that term is defined at 48 CFR 2.101. The terms "contract," "Contractor," and "Contracting Officer" shall be appropriately modified to preserve the Government's rights.

(2) Prior to the award under this contract of any such subcontracts for advisory and assistance services, the Contractor shall obtain from the proposed subcontractor or consultant the disclosure required by 48 CFR 909.507-1, and shall determine in writing whether the interests disclosed present an actual or significant potential for an organizational conflict of interest. Where an actual or significant potential organizational conflict of interest is identified, the Contractor shall take actions to avoid, neutralize, or mitigate the organizational conflict to the satisfaction of the Contractor. If the conflict cannot be avoided or neutralized, the Contractor must obtain the approval of the DOE Contracting Officer prior to entering into the subcontract.

Contract No. DE-SC0012704 Section J | Appendix I Modification No. 0091

#### **APPENDIX I**

**DOE Directives/List B** 

Applicable to the Operations of Brookhaven National Laboratory

Contract No. DE-SC0012704 Section J | Appendix I Modification No. 0091

There is no List A to this Appendix.

List B to this Appendix contains the following:

Part I: "Directives List"

This section contains a list of Directives that are considered by DOE as applicable to the BNL contract.

		<u> </u>	THROUGH	TITLE
ISSUED	TYPE	NUMBER	CHANGE	Includes Compliance Notes as Necessary
9/29/1995	Order	130.1		Budget Formulation
9/4/2008	Manual	142.2-1	Admin Chg. 1 6/27/13	Manual for Implementation of the Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency
12/15/2006	Order	142.2A	Admin Chg. 1 6/27/13	Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency
10/14/2010	Order	142.3A	Chg.1 (Minor Chg.) 01/18/2017	Unclassified Foreign Visits and Assignments Program
3/31/2014	Order	150.1A		Continuity Programs
8/11/2016	Order	151.1D		Comprehensive Emergency Management System
6/27/2007	Order	153.1		Departmental Radiological Emergency Response Assets
12/23/2008	Order	200.1A	Chg.1 (Minor Chg.) 01/13/2017	Information Technology Management
1/7/2005	Order	203.1		Limited Personal Use of Government Office Equipment Including Information Technology
5/16/2011	Order	205.1B	Admin Chg. 3 4/29/14	Department of Energy Cyber Security Program
1/16/2009	Order	206.1		Department of Energy Privacy Program
2/19/2013	Order	206.2		Identity, Credential and Access Management (ICAM)
4/8/2011	Order	210.2A		DOE Corporate Operating Experience Program
9/27/2016	Order	221.1B		Reporting Fraud, Waste, and Abuse to the Office of Inspector General
2/25/2008	Order	221.2A		Cooperation with the Office of Inspector General
3/4/2011	Order	225.1B		Accident Investigations
8/30/2011	Order	227.1A	12/21/2015	Independent Oversight Program
6/27/2011	Order	231.1B	Admin Chg. 1 11/28/12	Environment, Safety and Health Reporting
1/17/2017	Order	232.2A		Occurrence Reporting and Processing of Operations Information Compliance Note: Implementation will be completed by October 1, 2017 in accordance with ES&H Memo dated 6/27/2017.
12/13/2010	Order	241.1B	Chg.1 4/26/16	Scientific and Technical Information Management
3/11/2013	Order	243.1B	Admin Chg.1 7/8/13	Records Management Program
2/23/2011	Order	252.1A	Admin Chg. 1 3/12/13	Technical Standards Program

ISSUED	TYPE	NUMBER	THROUGH	TITLE
100025		NOMBLIX	CHANGE	Includes Compliance Notes as Necessary
				Management and Funding of the Department's Overseas
11/19/2009	Order	313.1		Presence
10/18/2007	Order	341.1A Parts: 1.(a- b) 2.a(1-3) 2.a(4)(a- h)		Federal Employee Health Services
2/23/2010	Order	350.1	Chg. 5 9/30/14	Contractor Human Resource Management Programs
8/17/2009	Order	410.2	Admin Chg. 1 4/10/14	Management of Nuclear Materials
1/4/2017	Order	411.2		Scientific Integrity
10/28/2008	Order	413.1B		Internal Control Program
4/19/2006	Order	413.2C	10/22/2015	Laboratory Directed Research and Development
11/29/2010	Order	413.3B	Chg. 3 (Pg.Chg.) 12/20/16	Program and Project Management for the Acquisition of Capital Assets
4/25/2011	Order	414.1D	Admin Chg. 1 5/8/13	Quality Assurance
12/3/2012	Order	415.1	Chg.2 (Minor Chg.) 1/17/2017	Information Technology Project Management
12/4/2012	Order	420.1C	Chg.1 2/27/15	Facility Safety  Compliance Note: Chapters 1, 3, and 5 are applicable to BNL facilities categorized as hazardous category 1, 2, or 3 nuclear facility is proposed by BNL and approved by DOE
7/21/2011	Order	420.2C		Safety of Accelerator Facilities
6/29/2010	Order	422.1	Admin Chg. 1 6/25/13	Conduct of Operations  Compliance Note: Applicable to Hazardous Category 1, 2, or 3 nuclear facilities and other facilities as defined by BSA in a Program Plan to be approved by BHSO for incorporating
11/25/2016	Policy	434.1B		Conduct and Approval of Select Agent and Toxin Work at Department of Energy Sites
7/9/1999	Order	435.1	Admin Chg. 1 8/28/01	Radioactive Waste Management
7/9/1999	Manual	435.1-1	Admin Chg. 1 6/19/01	Radioactive Waste Management Manual
5/2/2011	Order	436.1		Departmental Sustainability

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
11/27/2002	Order	440.2C	Admin Chg. 1 6/22/11	Aviation Management and Safety
3/7/2008	Manual	441.1-1	Chg. 1 (Admin Chg.) 02/24/16	Nuclear Material Packaging Manual
6/6/2001	Order	442.1A		Department of Energy Employee Concerns Program
7/29/2011	Order	442.2	Chg.1 (Pg.Chg.) 10/4/2016	Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health
3/7/2011	Order	443.1B	Chg. 1 (Pg.Chg.) 4/21/16	Protection of Human Research Subjects
7/21/2011	Order	452.8		Control of Nuclear Weapon Data
7/15/2016	Order	456.1A		The Safe Handling of Unbound Engineered Nanoparticles
2/11/2011	Order	458.1	Admin Chg. 3 1/15/13	Radiation Protection of the Public and the Environment
12/20/2016	Order	460.1D		Hazardous Materials Packaging and Transportation Safety
12/22/2004	Order	460.2A		Departmental Material Transportation and Packaging Management
6/4/2008	Manual	460.2-1A		Radioactive Material Transportation Practices Manual
11/23/2016	Order	470.3C		Design Basis Threat (DBT) Order
7/21/2011	Order	470.4B	Chg.2 (Minor Chg.) 1/17/2017	Safeguards and Security Program
6/2/2014	Order	470.5		Insider Threat Program
9/2/2015	Order	470.6		Technical Security Program
3/1/2010	Order	471.1B		Identification and Protection of Unclassified Controlled Nuclear Information
4/9/2003	Order	471.3	Admin Chg. 1 1/13/11	Identifying and Protecting Official Use Only Information
4/9/2003	Manual	471.3-1	Admin Chg. 1 1/13/11	Manual for Identifying and Protecting Official Use Only Information
6/20/2011	Order	471.6	Admin Chg. 2 5/15/15	Information Security
7/27/2011	Order	472.2	Admin Chg. 1 10/8/13	Personnel Security
3/23/2016	Order	473.3A		Protection Program Operations
6/27/2011	Order	474.2	Chg. 4 (Pg.Chg.) 9/13/2016	Nuclear Material Control and Accountability

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
12/10/2004	Order	475.1		Counterintelligence Program
10/3/2014	Order	475.2B		Identifying Classified Information
1/3/2001	Manual	481.1-1A	Admin Chg. 1 9/28/01	Reimbursable Work for Non Federal Sponsored Process Manual
12/20/2016	Order	483.1B		DOE Cooperative Research and Development Agreements
8/17/2006	Order	484.1	Admin Chg. 2 6/30/14	Reimbursable Work for the Department of Homeland Security
1/19/2017	Policy	485.1		Foreign Engagements with DOE National Laboratories
11/3/2004	Order	522.1		Pricing of Departmental Materials and Services
1/6/2003	Order	534.1B		Accounting
4/2/2012	Order	551.1D	Chg. 2 (Minor Chg.) 8/11/16	Official Foreign Travel