AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

2. AMENDMENT/MODIFICATION NO. 0114

3. EFFECTIVE DATE See Block 16C

4. REQUISITION/PURCHASE REQ. NO. 

5. PROJECT NO. (If applicable) 

6. ISSUED BY U.S. Department of Energy
   Code 06005

   Brookhaven Site Office
   53 Bell Avenue, Building 464
   Upton, NY 11973-5000

7. ADMINISTERED BY (If other than Item 6) Code 06005

8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code)
   Brookhaven Science Associates, LLC
   Attn: Brian Boyle
   Brookhaven National Laboratory
   Building 460, PO Box 5000
   Upton, New York 11973-5000

9. A. AMENDMENT OF SOLICITATION NO.

   9. B. DATED (SEE ITEM 11)
      12/22/2014

   9. C. MODIFICATION OF Contract/Order NO.
      DE-SC0012704

   10. A. DATED (SEE ITEM 13)

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)
   N/A

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

   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:
       Mutual agreement of the parties

   D. OTHER (Specify type of modification and authority)

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section heading, including solicitation/contract subject matter where feasible.)

This Modification is issued to revise Part II, Section I – Contract Clauses, TOC; update clauses I.18, I.130, I.139, I.140, and I.141; delete clauses I.92, I.115, I.121, and I.133; revise Part III, Section J – List of Documents, Exhibits, Attachments, TOC; replace Appendix I – DOE Directives/List B.

15A. NAME AND TITLE OF SIGNER (Type or print)
    George Clark
    Chief Financial Officer

15B. CONTRACTOR/OFFEROR 15C. DATE SIGNED

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
    David R. Mitchell
    Contracting Officer

16B. UNITED STATES OF AMERICA 16C. DATE SIGNED

Signature of person authorized to sign 4/26/18

(Signature of Contracting Officer)
14. Description of Amendment/Modification (continued):

1. Part II, Section I – Contract Clauses, Table of Contents (TOC): Section I TOC is revised to update clauses I.18, I.130, I.139, I.140, and I.141 and delete clauses I.92, I.115, I.121, and I.133.

The following clauses have been revised; replace the prior version with the updated attachment provided herein:

a. Clause I.18 – FAR 52.208-8, Required Sources for Helium and Helium Usage Data (Apr 2014) (SC ALTERNATE): This clause is revised IAW Head of the Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018.

b. Clause I.130 – DEAR 970.5222-2, Overtime Management (Dec 2000) (SC ALTERNATE): This clause is revised IAW Head of the Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018.


The following clauses have been deleted:

a. Clause I.92 – FAR 52.247-67, Submission of Transportation Documents for Audit (Feb 2006): This clause is hereby deleted from the Contract IAW Head of the Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018. Clause I.92 is now titled, “RESERVED”.

b. Clause I.115 – DEAR 952.247-70, Foreign Travel (Jun 2010): This clause is hereby deleted from the Contract IAW Head of the Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018. Clause I.115 is now titled, “RESERVED”.

c. Clause I.121 – DEAR 970.5204-1, Counterintelligence (Dec 2010): This clause is hereby deleted from the Contract IAW Head of the Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018. Clause I.92 is now titled, “RESERVED”.

d. Clause I.133 – DEAR 970.5223-6, Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management (Oct 2010): This clause is hereby deleted from the Contract IAW Head of the Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018. Clause I.133 is now titled, “RESERVED”.

2. Part III, Section J – List of Documents, Exhibits, Attachments, Table of Contents (TOC): Section J TOC is revised to reflect the following: Replace Appendix I – DOE Directives/List B.

a. Appendix I – DOE Directives/List identified as Modification No. 0110 has been revised; replace the prior version with the attached Appendix I identified as Modification No. 0114. The revisions are as follows:
## SUMMARY OF DIRECTIVE CHANGES

<table>
<thead>
<tr>
<th>ORDER</th>
<th>TITLE</th>
<th>CHANGE</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>O 350.1 Chg. 6 (Min.Chg.)</td>
<td>Contractor Human Resource Management Programs</td>
<td>Update to latest version</td>
<td>Supersedes DOE O 350.1 Chg. 5</td>
</tr>
<tr>
<td>P 411.2A</td>
<td>DOE Scientific Integrity Policy</td>
<td>Add</td>
<td>Directly references DOE laboratories</td>
</tr>
</tbody>
</table>

### Attachments:

- Part II, Section I – Contract Clauses
  - I.18
  - I.130
  - I.139
  - I.140
  - I.141

- Part III, Section J – List of Documents, Exhibits, Attachments
  - Appendix I – DOE Directives/List B
CLAUSE I.18 - FAR 52.208-8 - REQUIRED SOURCES FOR HELIUM AND HELIUM USAGE (Apr 2014) (SC ALTERNATE) (Apr 2018)

(a) Definitions.


“Federal helium supplier” means a private helium vendor that has an in-kind crude helium sales contract with the Bureau of Land Management (BLM) and that is on the BLM Amarillo Field Office’s Authorized List of Federal Helium Suppliers available via the Internet at http://www.blm.gov/nm/st/en/fo/Amarillo_Field_Office.html.

“Major helium requirement” means an estimated refined helium requirement greater than 200,000 standard cubic feet (scf) (measured at 14.7 pounds per square inch absolute pressure and 70 degrees Fahrenheit temperature) of gaseous helium or 7510 liters of liquid helium delivered to a helium use location per year.

(b) Requirements --

(1) Contractors must purchase major helium requirements from Federal helium suppliers, to the extent that supplies are available.

(2) The Contractor shall provide a consolidated report of the following data to the Bureau of Land Management with a copy to the Contracting Officer within 45 days of the close of each fiscal quarter --

(i) The name of the supplier;

(ii) The amount of helium purchased;

(iii) The delivery date(s); and

(iv) The location where the helium was used.

(c) Subcontracts -- The Contractor shall insert this clause, including this paragraph (c), in any subcontract or order that involves a major helium requirement.
(a) The Contractor shall maintain adequate internal controls to ensure that employee overtime is authorized only if cost effective and necessary to ensure performance of work under this contract. The Contractor shall adhere to the principles of FAR 22.103-1 in managing overtime use. The Contractor shall, for example, only use overtime when lower overall cost to the Government will result or when it is necessary to meet urgent program needs.

(b) The Contractor shall notify the Contracting Officer when in any given year it is likely that overtime usage as a percentage of payroll may exceed 4%.

(c) The Contracting Officer may require the submission, for approval, of a formal annual overtime control plan whenever Contractor overtime usage as a percentage of payroll has exceeded, or is likely to exceed 4%.
This clause has as its purpose implementation of the National Competitiveness Technology Transfer Act of 1989 (Sections 3131, 3132, 3133, and 3157 of Pub. L. 101-189 and as amended by Pub. L. 103-160, Sections 3134 and 3160). The Contractor shall conduct technology transfer activities with a purpose of providing benefit from Federal research to U.S. industrial competitiveness.

(a) Authority.

(1) In order to ensure the full use of the results of research and development efforts of, and the capabilities of, the Laboratory, technology transfer, including Cooperative Research and Development Agreements (CRADAs), is established as a mission of the Laboratory consistent with the policy, principles and purposes of Sections 11(a)(1) and 12(g) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a); Section 3132(b) of Pub. L. 101-189, Sections 3134 and 3160 of Pub. L. 103-160, and of Chapter 38 of the Patent Laws (35 U.S.C. 200 et seq.); Section 152 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2182); Section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5908); and Executive Order 12591 of April 10, 1987.

(2) In pursuing the technology transfer mission, the Contractor is authorized to conduct activities including but not limited to: identifying and protecting Intellectual Property made, created or acquired at or by the Laboratory; negotiating licensing agreements and assignments for Intellectual Property made, created or acquired at or by the Laboratory that the Contractor controls or owns; bailments; negotiating all aspects of and entering into CRADAs; providing technical consulting and personnel exchanges; conducting science education activities and reimbursable Strategic Partnership Projects (SPP); providing information exchanges; and making available laboratory user facilities. It is fully expected that the Contractor shall use all of the mechanisms available to it to accomplish this technology transfer mission, including, but not limited to, CRADAs, user facilities, SPP, science education activities, consulting, personnel exchanges, assignments, and licensing in accordance with this clause.

(3) Trademarks and service marks. The Contractor, with notification to DOE Patent Counsel, is authorized to protect goods/services resulting from work at the Laboratory through Trademark and Service Mark protection. DOE reserves the right to require the Contractor to cancel registration or cease the use of any such mark upon written notice. The Laboratory name, including nicknames, and associated logos are owned by the Department of Energy and shall be protected by DOE Patent Counsel. In furtherance of the technology transfer mission, should the Contractor want to assert trademark or service mark protection for any word, phrase, symbol, design, or combination thereof that includes or is associated with the Laboratory name, the Contractor must first notify the DOE Patent Counsel. All marks resulting
from work at the Laboratory that are not owned by DOE, whether registered with the United States Patent and Trademark Office or not, are subject to paragraph (i) (Transfer to Successor Contractor) of this clause, below, unless an exception is allowed by the DOE Patent Counsel.

(b) Definitions.

(1) **Contractor's Laboratory Director** means the individual who has supervision over all or substantially all of the Contractor's operations at the Laboratory.

(2) **Intellectual Property** means patents, trademarks, copyrights, mask works, protected CRADA information, and other forms of comparable property rights protected by Federal Law and other foreign counterparts.

(3) **Cooperative Research and Development Agreement (CRADA)** means any agreement entered into between the Contractor as operator of the Laboratory, and one or more parties including at least one non-Federal party under which the Government, through its laboratory, provides personnel, services, facilities, equipment, intellectual property, or other resources with or without reimbursement (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, equipment, intellectual property, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the Laboratory; except that such term does not include a procurement contract, grant, or cooperative agreement as those terms are used in sections 6303, 6304, and 6305 of Title 31 of the United States Code.

(4) **Joint Work Statement (JWS)** means a proposal for a CRADA prepared by the Contractor, signed by the Contractor's Laboratory Director or designee which describes the following: (i) Purpose; (ii) Scope of Work which delineates the rights and responsibilities of the Government, the Contractor and Third Parties, one of which must be a non-Federal party; (iii) Schedule for the work; and (iv) Cost and resource contributions of the parties associated with the work and the schedule.

(5) **Assignment** means any agreement by which the Contractor transfers ownership of Laboratory Intellectual Property, subject to the Government's retained rights.

(6) **Laboratory Biological Materials** means biological materials capable of replication or reproduction, such as plasmids, deoxyribonucleic acid molecules, ribonucleic acid molecules, living organisms of any sort and their progeny, including viruses, prokaryote and eukaryote cell lines, transgenic plants and animals, and any derivatives or modifications thereof or products produced through their use or associated biological products, made under this contract by Laboratory employees or through the use of Laboratory research facilities.

(7) **Laboratory Tangible Research Product** means tangible material results of research which (i) are provided to permit replication, reproduction, evaluation or confirmation of the research effort, or to evaluate its potential commercial utility; (ii) are not materials generally commercially available; and (iii) were made under this contract by Laboratory employees or through the use of Laboratory research facilities.
(8) *Privately funded technology transfer* means the prosecuting, maintaining, licensing, and marketing of inventions which are not owned by the Government (and not related to CRADAs) when such activities are conducted entirely without the use of Government funds.

(9) *Bailment* means any agreement in which the Contractor permits the commercial or non-commercial transfer of custody, access or use of Laboratory Biological Materials or Laboratory Tangible Research Product for a specified purpose of technology transfer or research and development, including without limitation evaluation, and without transferring ownership to the bailee.

(10) *Department of Energy (DOE)*, as used in this clause, includes the National Nuclear Security Administration (NNSA), unless otherwise identified or indicated.

(11) *Patent Counsel* means the DOE or NNSA Patent counsel assisting the contracting activity. The Patent Counsel is the first and primary point of contact for activities described in this clause.

(c) **Allowable Costs.**

(1) The Contractor shall establish and carry out its technology transfer efforts through appropriate organizational elements consistent with the requirements for an Office of Research and Technology Applications (ORTA) pursuant to paragraphs (b) and (c) of Section 11 of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710). The costs associated with the conduct of technology transfer through the ORTA including activities associated with obtaining, maintaining, licensing, and assigning Intellectual Property rights, increasing the potential for the transfer of technology, and the widespread notice of technology transfer opportunities, shall be deemed allowable provided that such costs meet the other requirements of the allowable costs provisions of this Contract.

(2) The Contractor’s participation in litigation to enforce or defend Intellectual Property claims incurred in its technology transfer efforts shall be as provided in the clause entitled “Insurance - Litigation and Claims” of this contract.

(d) **Conflicts of Interest - Technology Transfer.** The Contractor shall have implementing procedures that seek to avoid employee and organizational conflicts of interest, or the appearance of conflicts of interest, in the conduct of its technology transfer activities. These procedures shall apply to other persons participating in Laboratory research or related technology transfer activities. Such implementing procedures shall be provided to the contracting officer for review and approval within sixty (60) days after execution of this contract. The contracting officer shall have thirty (30) days thereafter to approve or require specific changes to such procedures. Such implementing procedures shall include procedures to:

(1) Require employees with a substantial role in negotiation, approval and performance of the CRADA in paragraph (n) to conform with standards of conduct and integrity in connection with the CRADA activity in accordance with the provisions of paragraph (n)(5) of this clause;
(2) Review and approve employee activities so as to avoid conflicts of interest arising from commercial utilization activities relating to Contractor-developed Intellectual Property;

(3) Conduct work performed using royalties so as to avoid interference with or adverse effects on ongoing DOE projects and programs;

(4) Conduct activities relating to commercial utilization of Contractor-developed Intellectual Property so as to avoid interference with or adverse effects on user facility or SPP activities of the Contractor;

(5) Conduct DOE-funded projects and programs so as to avoid the appearance of conflicts of interest or actual conflicts of interest with non-Government funded work;

(6) Notify the contracting officer with respect to any new work to be performed or proposed to be performed under the Contract for DOE or other Federal agencies where the new work or proposal involves Intellectual Property in which the Contractor has obtained or intends to request or elect title;

(7) Except as provided elsewhere in this Contract, obtain the approval of the contracting officer for any licensing of or assignment of title to Intellectual Property rights by the Contractor to any business or corporate affiliate of the Contractor;

(8) Obtain the approval of the contracting officer prior to any assignment, exclusive licensing, or option for exclusive licensing, of Intellectual Property to any individual who has been a Laboratory employee within the previous two years or to the company in which the individual is a principal; and

(9) Notify non-Federal sponsors of SPP activities, of any relevant Intellectual Property interest of the Contractor prior to execution of SPPs.

(10) Notify the Contracting Officer and the funding party or program prior to evaluating a proposal by a third party or a DOE program, when the subject matter of the proposal involves an elected or waived subject invention under this contract or one in which the Contractor intends to elect to retain title under this contract.

(e) Fairness of Opportunity. In conducting its technology transfer activities, the Contractor shall prepare procedures and take all reasonable measures to ensure widespread notice of availability of technologies suited for transfer and opportunities for exclusive licensing and joint research arrangements. The requirement to widely disseminate the availability of technology transfer opportunities does not apply to a specific application originated outside of the Laboratory and by entities other than the Contractor.

(f) U.S. Industrial Competitiveness - for licensing and assignments of intellectual property.

(1) In the interest of enhancing U.S. Industrial Competitiveness, the Contractor shall, in its licensing and assignments of Intellectual Property, give preference in such a manner as to enhance the accrual of economic and technological benefits to the U.S. domestic economy. The Contractor shall consider the following factors in all of its licensing and assignment decisions involving Laboratory intellectual property where the Laboratory obtains rights during the course of the Contractor's operation of the Laboratory under this contract:
(i) whether any resulting design and development will be performed in the United States and whether resulting products, embodying parts, including components thereof, will be substantially manufactured in the United States; or

(ii) (A) whether the proposed licensee or assignee has a business unit located in the United States and whether significant economic and technical benefits will flow to the United States as a result of the license or assignment agreement; and
(B) in licensing any entity subject to the control of a foreign company or government, whether such foreign government permits United States agencies, organizations or other persons to enter into cooperative research and development agreements and licensing agreements, and has policies to protect United States Intellectual Property rights; and
(C) If the proposed licensee, assignee, or parent of either type of entity is subject to the control of a foreign company or government, the Contractor, with the assistance of the Contracting Officer, in considering the factors set forth in paragraph (f)(1)(ii)(B) of this clause, may rely upon the following information—
   (1) U.S. Trade Representative inventory of Foreign Trade Barriers;
   (2) U.S. Trade Representative Special 301 Report; and
   (3) Such other relevant information available to the Contracting Officer; and
(D) The Contractor shall review the U.S. Trade Representative Web site at: http://www.ustr.gov for the most current versions of these reports and other relevant information. The Contractor is encouraged to utilize other available resources, as necessary, to allow for a complete and informed decision.

(2) If the Contractor determines that neither of the conditions in paragraphs (i)(1)(i) or (ii) of this clause are likely to be fulfilled, the Contractor, prior to entering into such an agreement, must obtain the approval of the contracting officer. The contracting officer shall act on any such requests for approval within thirty (30) days.

(3) The Contractor agrees to be bound by the provisions of 35 U.S.C. 204 (Preference for United States industry).

(g) Indemnity - Product Liability. In entering into written technology transfer agreements, including but not limited to, research and development agreements, licenses, assignments and CRADAs, the Contractor agrees to include in such agreements a requirement that the U.S. Government and the Contractor, except for any negligent acts or omissions of the Contractor, be indemnified for all damages, costs, and expenses, including attorneys' fees, arising from personal injury or property damage occurring as a result of the making, using or selling of a product, process or service by or on behalf of the Participant, its assignees or licensees which was derived from the work performed under the agreement. Except for CRADA and SPP where the
guidance is already provided elsewhere, the Contractor shall identify and obtain the approval of the contracting officer for any proposed exceptions to this requirement such as where State or local law expressly prohibit the Participant from providing indemnification or where the research results will be placed in the public domain.

(h) Disposition of Income.
(1) Royalties or other income earned or retained by the Contractor as a result of performance of authorized technology transfer activities herein shall be used by the Contractor for scientific research, development, technology transfer, and education at the Laboratory, consistent with the research and development mission and objectives of the Laboratory and subject to Section 12(b)(5) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(b)(5)) and Chapter 38 of the Patent Laws (35 U.S.C. 200 et seq.) as amended through the effective date of this contract award or modification. If the net amounts of such royalties and income received from patent licensing after payment of patenting costs, licensing costs, payments to inventors and other expenses incidental to the administration of Subject Inventions during any fiscal year exceed 5 percent of the Laboratory's budget for that fiscal year, 15 percent of such excess amounts shall be paid to the Treasury of the United States, and the remaining amount of such excess shall be used by the Contractor for the purposes as described above in this paragraph. Any inventions arising out of such scientific research and development activities shall be deemed to be Subject Inventions under the Contract.

(2) The Contractor shall include as a part of its annual Laboratory Institutional Plan or other such annual document a plan setting out those uses to which royalties and other income received as a result of performance of authorized technology transfer activities herein will be applied at the Laboratory, and at the end of the year, provide a separate accounting for how the funds were actually used. Under no circumstances shall these royalties and income be used for an illegal augmentation of funds furnished by the U.S. Government.

(3) The Contractor shall establish subject to the approval of the contracting officer a policy for making awards or sharing of royalties with Contractor employees, other coinventors and coauthors, including Federal employee coinventors when deemed appropriate by the contracting officer. The Contractor shall notify the Contracting Officer of any changes to that policy, and such changes, shall be subject to the approval of the Contracting Officer.

(i) Transfer to Successor Contractor. In the event of termination or upon the expiration of this Contract, any unexpended balance of income received for use at the Laboratory shall be transferred, at the contracting officer's request, to a successor contractor, or in the absence of a successor contractor, to such other entity as designated by the contracting officer. The Contractor shall transfer title, as one or several packages if necessary, to the extent the Contractor retains title, in all patents and patent applications, licenses, accounts containing royalty revenues from such license agreements, including equity positions in third party entities, and other
Intellectual Property rights which arose at the Laboratory, to the successor contractor or to the Government as directed by the contracting officer.

(j) Technology Transfer Affecting the National Security.

(1) The Contractor shall notify and obtain the approval of the contracting officer, prior to entering into any technology transfer arrangement, when such technology or any part of such technology is classified by statute or executive order or controlled under Section 148 of the Atomic Energy Act (42 U.S.C. 2168), as amended, or is subject to export control for nonproliferation and other nuclear-related national security purposes. Such notification shall include sufficient information to enable DOE to determine the extent that commercialization of such technology would enhance or diminish security interests of the United States, or diminish communications within DOE’s nuclear weapon production complex. DOE shall use its best efforts to complete its determination within sixty (60) days of the Contractor’s notification, and provision of any supporting information, and DOE shall promptly notify the Contractor as to whether the technology is transferable.

(2) The Contractor shall include in all of its technology transfer agreements with third parties, including, but not limited to, CRADAs, licensing agreements and assignments, notice to such third parties that the export of goods and/or Technical Data from the United States may require some form of export control license or other authority from the U.S. Government and that failure to obtain such export control license may result in criminal liability under U.S. laws.

(3) For other than fundamental research as defined in National Security Decision Directive 189, the Contractor is responsible to conduct internal export control reviews and assure that technology is transferred in accordance with applicable law.

(k) Records. The Contractor shall maintain records of its technology transfer activities in a manner and to the extent satisfactory to the DOE and specifically including, but not limited to, the licensing agreements, assignments and the records required to implement the requirements of paragraphs (e), (f), and (h) of this clause and shall provide reports to the contracting officer to enable DOE to maintain the reporting requirements of Section 12(c)(6) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(c)(6)). Such reports shall be made annually in a format to be agreed upon between the Contractor and DOE and in such a format which will serve to adequately inform DOE of the Contractor’s technology transfer activities while protecting any data not subject to disclosure under the Rights in Technical Data clause and paragraph (n) of this clause. Such records shall be made available in accordance with the clauses of this Contract pertaining to inspection, audit and examination of records.

(l) Reports to Congress. To facilitate DOE’s reporting to Congress, the Contractor is required to submit annually to DOE a technology transfer plan for conducting its technology transfer function for the upcoming year, including plans for securing Intellectual Property rights in Laboratory innovations with commercial promise and plans for managing such innovations so as to benefit the competitiveness of United
States industry. This plan may be included in the Annual Laboratory Plan and provided to the contracting officer on or before October 1st of each year.

(m) **Oversight and Appraisal.** The Contractor is responsible for developing and implementing effective internal controls for all technology transfer activities consistent with the audit and record requirements of this Contract. Laboratory Contractor performance in implementing the technology transfer mission and the effectiveness of the Contractor's procedures will be evaluated by the contracting officer as part of the annual appraisal process, with input from the cognizant Secretarial Officer or program office.

(n) **Technology Transfer Through Cooperative Research and Development Agreements.** Upon approval of the contracting officer and as provided in a DOE approved Joint Work Statement (JWS), the Laboratory Director, or designee, may enter into CRADAs on behalf of the DOE subject to the requirements set forth in this paragraph.

(1) **Review and Approval of CRADAs.**

(i) Except as otherwise directed in writing by the contracting officer, each JWS shall be submitted to the contracting officer for approval. The Contractor's Laboratory Director or designee shall provide a program mission impact statement and shall include an impact statement regarding related Intellectual Property rights known by the Contractor to be owned by the Government to assist the contracting officer in the approval determination.

(ii) The Contractor shall also include (specific to the proposed CRADA), a statement of compliance with the Fairness of Opportunity requirements of paragraph (e) of this clause.

(iii) Within thirty (30) days after submission of a JWS or proposed CRADA, the contracting officer shall approve, disapprove or request modification to the JWS or CRADA. The contracting officer shall provide a written explanation to the Contractor's Laboratory Director or designee of any disapproval or requirement for modification of a JWS or proposed CRADA.

(iv) Except as otherwise directed in writing by the contracting officer, the Contractor shall not enter into, or begin work under, a CRADA until approval of the CRADA has been granted by the contracting officer. The Contractor may submit its proposed CRADA to the contracting officer at the time of submitting its proposed JWS or any time thereafter.

(2) **Selection of Participants.** The Contractor's Laboratory Director or designee in deciding what CRADA to enter into shall:

(i) Give special consideration to small business firms, and consortia involving small business firms;

(ii) Give preference to business units located in the United States which agree that products or processes embodying Intellectual Property will be substantially manufactured or practiced in the United States and, in the case of any industrial organization or other person subject to the control of a foreign company or government, take into consideration whether or not such foreign government permits United States agencies, organizations, or other persons to enter into cooperative research and development agreements.
and licensing agreements. The Contractor, in considering these factors, may rely upon the following information:

(A) U.S. Trade Representative inventory of Foreign Trade Barriers;
(B) U.S. Trade Representative Special 301 Report; and
(C) Such other relevant information available to the Contracting Officer. The Contractor shall review the U.S. Trade Representative Web site at: http://www.ustr.gov for the most current versions of these reports and other relevant information. The Contractor is encouraged to utilize other available resources, as necessary, to allow for a complete and informed decision.

(iii) Provide Fairness of Opportunity in accordance with the requirements of paragraph (e) of this clause; and
(iv) Give consideration to the Conflicts of Interest requirements of paragraph (d) of this clause.

(3) Withholding of Data. (i) Data that is first produced as a result of research and development activities conducted under a CRADA and that would be a trade secret or commercial or financial data that would be privileged or confidential, if such data had been obtained from a non-Federal third party, may be protected from disclosure under the Freedom of Information Act as provided in the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(c)(7)) for a period as agreed in the CRADA of up to five (5) years from the time the data is first produced. The DOE shall cooperate with the Contractor in protecting such data.

(ii) Unless otherwise expressly approved by the contracting officer in advance for a specific CRADA, the Contractor agrees, at the request of the contracting officer, to transmit such data to other DOE facilities for use by DOE or its Contractors by or on behalf of the Government. When data protected pursuant to paragraph (n)(3)(i) of this clause is so transferred, the Contractor shall clearly mark the data with a legend setting out the restrictions against private use and further dissemination, along with the expiration date of such restrictions. A final report, upon completion of a CRADA, shall be provided to DOE’s Office of Scientific and Technical Information; reports marked as Protected CRADA Information will not be released to the public for a period up to five years, in accordance with the terms of the CRADA.

(iii) In addition to its authority to license Intellectual Property, the Contractor may enter into licensing agreements with third parties for data developed by the Contractor under a CRADA subject to other provisions of this Contract. However, the Contractor shall neither use the protection against dissemination nor the licensing of data as an alternative to the submittal of invention disclosures which include data protected pursuant to paragraph (n)(3)(i) of this clause.

(4) Strategic Partnership Projects and User Facility Programs. (i) SPP and User Facility Agreements (UFAs) are not CRADAs and will be available for use by the Contractor in addition to CRADAs for achieving utilization of employee expertise and unique facilities for maximizing technology transfer. The Contractor agrees to inform prospective CRADA participants, which are intending to substantially pay full cost recovery for the effort under a proposed
CRADA, of the availability of alternative forms of agreements, i.e., SPP and UFA, and of the Class Patent Waiver provisions associated therewith. (ii) Where the Contractor believes that the transfer of technology to the U.S. domestic economy will benefit from, or other equity considerations dictate, an arrangement other than the Class Waiver of patent rights to the sponsor in SPP and UFAs, a request may be made to the contracting officer for an exception to the Class Waivers. (iii) Rights to inventions made under agreements other than funding agreements with third parties shall be governed by the appropriate provisions incorporated, with DOE approval, in such agreements, and the provisions in such agreements take precedence over any disposition of rights contained in this Contract. Disposition of rights under any such agreement shall be in accordance with any DOE class waiver (including SPP and User Class Waivers) or individually negotiated waiver which applies to the agreement.

(5) Conflicts of interest. (i) Except as provided in paragraph (n)(5)(iii) of this clause, the Contractor shall assure that no employee of the Contractor shall have a substantial role (including an advisory role) in the negotiation, approval or performance of a CRADA, if, to such employee’s knowledge:

(A) Such employee, or the spouse, child, parent, sibling, or partner of such employee, or an organization (other than the Contractor) in which such employee serves as an officer, director, trustee, partner, or employee -

(1) Holds financial interest in any entity, other than the Contractor, that has a substantial interest in the negotiation, approval or performance of the CRADA;

(2) Receives a gift or gratuity from any entity, other than the Contractor, that has a substantial interest in the negotiation, approval or performance of the CRADA; or

(B) A financial interest in any entity, other than the Contractor, that has a substantial interest in the negotiation, approval or performance of the CRADA, is held by any person or organization with whom such employee is negotiating or has any arrangement concerning prospective employment.

(ii) The Contractor shall require that each employee of the Contractor who has a substantial role (including an advisory role) in the negotiation, approval or performance of a CRADA certify through the Contractor to the contracting officer that the circumstances described in paragraph (n)(5)(i) of this clause do not apply to that employee.

(iii) The requirements of paragraphs (n)(5)(i) and (n)(5)(ii) of this clause shall not apply in a case where the contracting officer is advised by the Contractor in advance of the participation of an employee described in those paragraphs in the negotiation, approval or performance of a CRADA certify the circumstances described in paragraph (n)(5)(i) of this clause, and the contracting officer determines that such financial interest is not so substantial as to be considered likely to affect the integrity of the Contractor employee’s participation in the process of negotiating, approving or performing the CRADA.

(o) Technology Transfer in Other Cost-Sharing Agreements. In conducting research and development activities in cost-shared agreements not covered by paragraph (n) of
this clause, the Contractor, with prior written permission of the contracting officer, may provide for the withholding of data produced thereunder in accordance with the applicable provisions of paragraph (n)(3) of this clause.

(p) Technology Partnership Ombudsman.
(1) The Contractor agrees to establish a position to be known as “Technology Partnership Ombudsman,” to help resolve complaints from outside organizations regarding the policies and actions of the contractor with respect to technology partnerships (including CRADAs), patents owned by the contractor for inventions made at the laboratory, and technology licensing.

(2) The Ombudsman shall be a senior official of the Contractor’s laboratory staff, who is not involved in day-to-day technology partnerships, patents or technology licensing, or, if appointed from outside the laboratory or facility, shall function as such senior official.

(3) The duties of the Technology Partnership Ombudsman shall include: (i) Serving as the focal point for assisting the public and industry in resolving complaints and disputes with the laboratory or facility regarding technology partnerships, patents, and technology licensing; (ii) Promoting the use of collaborative alternative dispute resolution techniques such as mediation to facilitate the speedy and low cost resolution of complaints and disputes, when appropriate; and (iii) Submitting a quarterly report, in a format provided by DOE, to the Secretary of Energy, the Administrator for Nuclear Security, the Director of the DOE Office of Dispute Resolution, and the Contracting Officer concerning the number and nature of complaints and disputes raised, along with the Ombudsman’s assessment of their resolution, consistent with the protection of confidential and sensitive information.

(q) Nothing in paragraphs (c) Allowable Costs, (e) Fairness of Opportunity, (f) U.S. Industrial Competitiveness, (g) Indemnity - Product Liability, (h) Disposition of Income, and (i) Transfer to Successor Contractor of this clause are intended to apply to the contractor’s privately funded technology transfer activities if such privately funded activities are addressed elsewhere in the contract.

(a) The Government authorizes and consents to all use and manufacture of any invention described in and covered by a United States patent in the performance of this contract or any subcontract at any tier.

(b) If the Contractor is sued for copyright infringement or anticipates the filing of such a lawsuit, the Contractor may request authorization and consent to copy a copyrighted work from the contracting officer. Programmatic necessity is a major consideration for DOE in determining whether to grant such request.

(c)

(1) The Contractor agrees to include, and require inclusion of, the Authorization and Consent clause at 52.227-1, without Alternate 1, but suitably modified to identify the parties, in all subcontracts expected to exceed $100,000 at any tier for supplies or services, including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services.

(2) The Contractor agrees to include, and require inclusion of, paragraph (a) of this Authorization and Consent clause, suitably modified to identify the parties, in all subcontracts at any tier for research and development activities expected to exceed $100,000.

(3) Omission of an authorization and consent clause from any subcontract, including those valued less than the simplified acquisition threshold does not affect this authorization and consent.

(a) The Contractor shall report to the Contracting Officer promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) If any person files a claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed hereunder, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Except where the Contractor has agreed to indemnify the Government, the Contractor shall furnish such evidence and information at the expense of the Government.

(c) The Contractor agrees to include, and require inclusion of, this clause suitably modified to identify the parties, in all subcontracts at any tier expected to exceed the simplified acquisition threshold.
APPENDIX I

DOE Directives/List B

Applicable to the Operations of Brookhaven National Laboratory
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.
Appendix I - Part I
DOE DIRECTIVES LIST

DOE Directives may be found at the following address: [http://www.directives.doe.gov](http://www.directives.doe.gov)

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