

# AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE \_\_\_\_\_ PAGE OF PAGES  
 1 | 2

2. AMENDMENT/MODIFICATION NO. <b>0037</b>	3. EFFECTIVE DATE <b>See Block 16C</b>	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY <b>U.S. Department of Energy Brookhaven Site Office 53 Bell Avenue, Building 464 Upton, NY 11973-5000</b>	CODE <b>06005</b>	7. ADMINISTERED BY (If other than Item 6) Code	<b>06005</b>

8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code)  <b>Brookhaven Science Associates, LLC Attn: Michael Furey Brookhaven National Laboratory Building 185, PO Box 5000 Upton, New York 11973-5000</b>	<input checked="" type="checkbox"/>	9. A. AMENDMENT OF SOLICITATION NO.
		9. B. DATED (SEE ITEM 11)
	<input checked="" type="checkbox"/>	10. A. MODIFICATION OF Contract/Order NO. <b>DE-SC0012704</b>
		10. B. DATED (SEE ITEM 13) <b>12/22/2014</b>
CODE <b>N/A</b>	FACILITY CODE <b>N/A</b>	

**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.**

<input type="checkbox"/>	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.
<input type="checkbox"/>	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).
<input checked="" type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: <b>Mutual agreement of the parties</b>
<input type="checkbox"/>	D. OTHER (Specify type of modification and authority)

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

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

This Modification is issued to establish the fee and award term. Revise Section H – Special Contract Requirements, TOC; revise clause H.21; revise TOC Part III, Section J – List of Documents, Exhibits, Attachments; replace Appendix I – DOE Directives/List B.

15A. NAME AND TITLE OF SIGNER (Type or print) <b>Peter Ferrara Acting Chief Financial Officer</b>	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) <b>Evelyn Landini Contracting Officer</b>
15B. CONTRACTOR/OFFEROR	16B. UNITED STATES OF AMERICA
15C. DATE SIGNED <b>2/16/16</b>	16C. DATE SIGNED <b>2/17/16</b>
  (Signature of person authorized to sign)	BY   (Signature of Contracting Officer)

14. Description of Amendment/Modification (continued):

**1. Computation of Fee / Award Term:** In accordance with Section B.3 of contract DE-SC0012704, and pursuant to the Performance Evaluation and Measurement Plan (Appendix B), BSA earned a performance fee amount of \$4,864,500.00 for the performance period of January 5, 2015 through September 30, 2015 out of the total available fee of \$5,175,000. Additionally, BSA has been awarded a one (1) year award term in accordance with Section F.2 of the contract.

**2. Section H – Special Contract Requirements, Table of Contents (TOC):** Section H is revised to update clause H.21.

**3. Part I, Section H – Special Contract Requirements:**

The following clause has been revised; insert the attachment provided herein:

- a. Clause H.21 – Employee Compensation: Pay and Benefits (Jan 2016): This clause is updated IAW Policy Flash 2016-11 / AL AL-2016-01 and further guidance for the Office of Science: Email from A. Ahlberg, ISC-CH to A. Clifton, SC-BHSO dated January 26, 2016.

**4. Part III, Section J – List of Documents, Exhibits, Attachments:** Section J is revised to reflect the following: Replace Appendix I – DOE Directives/List B.

- a. **Appendix I – DOE Directives/List** identified as Modification No. 0028 has been revised; replace the prior version with the attached Appendix I identified as Modification No. 0037. The revisions are as follows:

SUMMARY OF DIRECTIVE CHANGES			
ADDITIONS	TITLE	CHANGE	NOTES
O 227.1A	Independent Oversight Program	Updated to latest revision	Cancels DOE O 227.1
O 413.2C	Laboratory Directed Research and Development	Updated to latest revision	Cancels DOE O 413.2B dated 4-19-2006
O 470.6	Technical Security Program	Updated to latest revision	Cancels DOE M 470.4-4A Chg. 1 dated 10-12-2010  Section D of Technical Surveillance Countermeasures  DOE M 205.1-3, Admin. Chg. 1, dated 12-20-12.  M 470.4-4A Compliance Note

**Attachments:**

- Section H – Special Contract Requirements
  - ❖ H.21
- Part III, Section J – List of Documents, Exhibits, Attachments
  - ❖ Appendix I – DOE Directives/List B

## **CLAUSE H-21 - EMPLOYEE COMPENSATION: PAY AND BENEFITS**

### **(a) Total Compensation System**

The Contractor shall develop, implement and maintain formal policies, practices and procedures to be used in the administration of its compensation system consistent with FAR 31.205-6 and DEAR 970.3102-05-6; "Compensation for Personal Services" ("Total Compensation System"). DOE-approved standards, if any, shall be applied to the Total Compensation System. The Contractor's Total Compensation System shall be fully documented, consistently applied, and acceptable to the Contracting Officer. Periodic appraisals of contractor performance with respect to the Contractors' Total Compensation System will be conducted.

- (1) The description of the Contractor Employee Compensation Program should include the following components;
  - (A) Philosophy and strategy for all pay delivery programs.
  - (B) System for establishing a job worth hierarchy.
  - (C) Method for relating internal job worth hierarchy to external market.
  - (D) System that links individual and/or group performance to compensation decisions.
  - (E) Method for planning and monitoring the expenditure of funds.
  - (F) Method for ensuring compliance with applicable laws and regulations.
  - (G) System for communicating the programs to employees.
  - (H) System for internal controls and self-assessment.
  - (I) System to ensure that reimbursement of compensation, including stipends, for employees who are on joint appointments with a parent or other organization shall be on a pro-rated basis.

### **(b) Reports and Information**

The Contractor shall provide the Contracting Officer with the following reports and information with respect to pay and benefits provided under this Contract:

- (1) An Annual Contractor Salary-Wage Increase Expenditure Report to include, at a minimum, breakouts for merit, promotion, variable pay, special adjustments, and structure movements for each pay structure showing actual against approved amounts.

- (2) A list of the top five most highly compensated executives as defined in FAR 31.205-6(p)(2)(ii) and their total cash compensation at the time of Contract award, and at the time of any subsequent change to their total cash compensation.
- (3) The Compensation and Benefits Report no later than March 1 of each year.

(c) Pay and Benefit Programs

The Contractor shall maintain pay and benefit programs for its employees; provided, however, that employees scheduled to work fewer than 20 hours per week receive only those benefits required by law. Employees are eligible for benefits, subject to the terms, conditions, and limitations of each benefit program. Reimbursement for individual compensation is subject to the limits established by 41 U.S.C. 4304(16).

(1) Cash Compensation

- (A) The Contractor shall submit the following, as applicable, to the Contracting Officer for a determination of cost allowability for reimbursement under the Contract:
  - (i) Any proposed major compensation program design changes prior to implementation.
  - (ii) Variable pay programs/incentives. If not already authorized under Appendix A of the contract, a justification shall be provided with proposed costs and impacts to budget, if any.
  - (iii) In the absence of Departmental policy to the contrary (e.g., Secretarial pay freeze) a Contractor that meets the criteria, as set forth below, is not required to submit a Compensation Increase Plan (CIP) request to the Contracting Officer for an advance determination of cost allowability for a Merit Increase fund or Promotion/Adjustment fund:
    - The Merit Increase fund does not exceed the mean percent increase included in the annual Departmental guidance providing the WorldatWork Salary Budget Survey's salary increase projected for the CIP year. The Promotion/Adjustment fund does not exceed 1% percent in total.
    - The budget used for both Merit Increase funds and Promotion/Adjustment funds

shall be based on the payroll for the end of the previous CIP year.

- Salary structure adjustments do not exceed the mean WorldatWork structure adjustments projected for the CIP year and communicated through the annual Department CIP guidance.
- Please note: No later than the first day of the CIP cycle, Contractors must provide notification to the Contracting Officer of planned increases and position to market data by mutually agreed-upon employment categories.

- (iv) If a Contractor does not meet the criteria included in (iii) above, a CIP must be submitted to the Contracting Officer for an advance determination of cost allowability.

The Compensation Increase Plan (CIP) for a Contractor that has received Contracting Officer approval for having an Employee Compensation Program with the components identified under (a)(1) above should include the following components and data:

- (1) Market analysis summary, including a comparison of average pay to market average pay.
- (2) Merit Fund requests for each Employee Group (i.e., S&E, Administrative, Technical, Exempt/Non-Exempt)
- (3) Aging factors used for escalating survey data
- (4) Projection of escalation in the market
- (5) Information to support proposed structure adjustments, if any.
- (6) Analysis to support special adjustments or promotions that exceed the 1% Promotion/Adjustment fund authorized under Section III of Appendix A.
- (7) Discussion of recruitment/retention issues (e.g., turnover and hiring) relevant to the proposed increase amounts

(8) A discussion of the impact of budget and business constraints on the CIP amount.

- (v) Reimbursed salary levels are used to establish the annual CIP fund.
- (vi) All pay actions granted under the CIP are fully charged when they occur regardless of time of year in which the action transpires and whether the employee terminates before year end.
- (vii) Specific Employee or Payroll groups (e.g., exempt, nonexempt) for which CIP amounts are intended shall be defined by mutual agreement between the Contractor and the Contracting Officer.
- (viii) The Contracting Officer may adjust the CIP amount after approval based on major changes in factors that significantly affect the plan amount (for example, in the event of a major reduction in force or significant ramp-up).
- (ix) The Contractor may make minor shifts of merit funds between employment categories (e.g., Scientist/Engineer, Admin, Exempt, Non-Exempt) after approval of the CIP or if criteria under (c)(1)(A)(iii) was met, in order to meet the compensation requirements of its organization, subject to the following guidelines:
  - Minor shift is defined as up to 10% of the approved merit funds from one employment category to another (e.g, 10% of Admin merit funds shifted to Technician employment category)
  - Total merit increase expenditures will be limited to the total merit fund authorized.
  - Contractors will notify the Contracting Officer that funds have been shifted.
- (x) Individual compensation actions for the top contractor official (e.g., laboratory director/plant manager or equivalent) and Key Personnel not included in the CIP. For those Key Personnel included in the CIP, DOE will approve salaries upon the initial contract award and when Key Personnel are replaced during the life of the contract. DOE will have access to all individual salary reimbursements. This access is

provided for transparency; DOE will not approve individual salary actions (except as previously stated).

- (B) The Contracting Officer's approval of individual compensation actions will be required only for the top contractor official (e.g., laboratory director/plant manager or equivalent) and Key Personnel as stated in (c)(1)(A)(iii) above. The base salary reimbursement level for the top contractor official establishes the maximum allowable salary reimbursement under the contract. The contractor shall not be reimbursed for the top contractor official's incentive compensation. The base salary reimbursement level for the top contractor official establishes the maximum allowable salary reimbursement under the contract when compared to subordinate compensation, which would include base salary and any potential incentive compensation under an incentive compensation agreement. Unusual circumstances may require a deviation for an individual on a case-by-case basis. Any such deviations must be approved by the Contracting Officer.
  - (C) Severance Pay is not payable to an employee under this Contract if the employee:
    - (i) Voluntarily separates, resigns or retires from employment, (unless associated with a workforce restructuring action in accordance with Appendix A, Section XI, Reductions in Contractor Employment)
    - (ii) Is offered employment with a successor/replacement Contractor,
    - (iii) Is offered employment with a parent or affiliated company, or
    - (iv) Is discharged for cause.
  - (D) Service Credit for purposes of determining severance pay does not include any period of prior service for which severance pay has been previously paid through a DOE cost-reimbursement contract.
- (d) Pension and Other Benefit Programs
- (1) No presumption of allowability will exist when the Contractor implements a new benefit plan or makes changes to existing benefit plans that increase costs or are contrary to Departmental policy or written instruction or until the Contracting Officer

makes a determination of cost allowability for reimbursement for new or changed benefit plans. Changes shall be in accordance with and pursuant to the terms and conditions of the contract. Advance notification, rather than approval, is required for changes that do not increase costs and are not contrary to Departmental policy or written instruction.

- (2) Cost reimbursement for Employee pension and other benefit programs sponsored by the Contractor will be based on the Contracting Officer's approval of Contractor actions pursuant to an approved "Employee Benefits Value Study" and an "Employee Benefits Cost Survey Comparison" as described below.
- (3) Unless otherwise stated, or as directed by the Contracting Officer, the Contractor shall submit the studies required in paragraphs (A) and (B) below. The studies shall be used by the Contractor in calculating the cost of benefits under existing benefit plans. An Employee Benefits Value (Ben-Val) Study Method using no less than 15 comparator organizations and an Employee Benefits Cost Survey comparison Method shall be used in this evaluation to establish an appropriate comparison method. In addition, the Contractor shall submit updated studies to the Contracting Officer for approval prior to the adoption of any change to a pension or other benefit plan which increases costs.
  - (A) The Ben-Val, every two years for each benefit tier (e.g., group of employees receiving a benefit package based on date of hire), which is an actuarial study of the relative value (RV) of the benefits programs offered by the Contractor to Employees measured against the RV of benefit programs offered by comparator companies approved by the Contracting Officer. To the extent that the value studies do not address post retirement benefits other than pensions, the Contractor shall provide a separate cost and plan design data comparison for the post retirement benefits other than pensions using external benchmarks derived from nationally recognized and Contracting Officer approved survey sources and,
  - (B) An Employee Benefits Cost Study Comparison, annually for each benefit tier that analyzes the Contractor's employee benefits cost for Employees on a per capita basis per full time equivalent employee and as a percent of payroll and compares it with the cost reported by the U.S.

Department of Labor's Bureau of Labor Statistics or other Contracting Officer approved broad based national survey.

- (4) When the net benefit value exceeds the comparator group by more than five percent, the Contractor shall submit a corrective action plan to the Contracting Officer for approval, unless waived in writing by the Contracting Officer.
- (5) When the average total benefit per capita cost or total benefit cost as a percent of payroll exceeds the comparator group by more than five percent, the Contractor shall submit an analysis of the specific plan costs that are above the per capita cost range or total benefit cost as a percent of payroll and a corrective action plan to achieve conformance with a Contracting Officer directed per capita cost range or total benefit cost as a percent of payroll, unless waived in writing by the Contracting Officer.
- (6) Within two years of Contracting Officer approval of the Contractor's corrective action plan, the Contractor shall align employee benefit programs with the benefit value and per capita cost range or percent of payroll as approved by the Contracting Officer.
- (7) The Contractor may not terminate any benefit plan during the term of the Contract without the prior approval of the Contracting Officer in writing.
- (8) Cost reimbursement for post-retirement benefits other than pensions (PRBs) is contingent on DOE approved service eligibility requirements for PRB that shall be based on a minimum period of continuous employment service not less than 5 years under a DOE cost reimbursement contract(s) immediately prior to retirement. Unless required by Federal or State law, advance funding of PRBs is not allowable.
- (9) Each Contractor sponsoring a Defined Benefit pension plan and/or postretirement benefit plan will participate in the annual plan management process which includes written responses to a questionnaire regarding plan management, providing forecasted estimates of future reimbursements in connection with the plan(s) and participating in a conference call to discuss the Contractor submission.
- (10) Each Contractor will respond to quarterly data calls issued through iBenefits, or its successor system.

(e) Establishment and Maintenance of Pension Plans for which DOE Reimburses Costs

- (1) Employees working for the Contractor shall only accrue credit for service under this Contract after the date of Contract award.
- (2) Except for Commingled Plans in existence as of the effective date of the Contract, any pension plan maintained by the Contractor for which DOE reimburses costs, shall be maintained as a separate pension plan distinct from any other pension plan that provides credit for service not performed under a DOE cost-reimbursement contract. When deemed appropriate by the Contracting Officer, Commingled Plans shall be converted to separate plans at the time of new contract award or the extension of a contract.

(f) Basic Requirements

The Contractor shall adhere to the requirements set forth below in the establishment and administration of pension plans that are reimbursed by DOE pursuant to cost reimbursement contracts for management and operation of DOE facilities and pursuant to other cost reimbursement facilities contracts. Pension Plans include Defined Benefit and Defined Contribution plans.

- (1) The Contractor shall become a sponsor of the existing pension and other benefit plans (or comparable successor plans), including other PRB plans, as applicable, with responsibility for management and administration of the plans. The Contractor shall be responsible for maintaining the qualified status of those plans consistent with the requirements of ERISA and the Internal Revenue Code (IRC). The Contractor shall carry over the length of service credit and leave balances accrued as of the date of the Contractor's assumption of Contract performance.
- (2) Each Contractor defined contribution pension plan shall be subjected to a limited-scope audit annually that satisfies the requirements of ERISA section 103. The Contractor must submit the audit results to the Contracting Officer. In addition, the Contractor must provide the Contracting Officer with a copy of the qualified trustee or custodian's certification regarding the investment information that provides the basis for the plan sponsor to satisfy reporting requirements under ERISA section 104.

While there is no requirement to submit a full scope audit for defined contribution plans, contractors are responsible for maintaining adequate controls for ensuring that defined contribution plan assets are correctly recorded and allocated to plan participants.

- (3) The Contractor shall comply with the requirements of ERISA if applicable to the pension plan and any other applicable laws.

(g) Reporting Requirements for Designated Contracts

The following reports shall be submitted to DOE as soon as possible after the last day of the plan year by the Contractor responsible for each designated pension plan funded by DOE but no later than the dates specified below:

- (1) Forms 5500. Copies of IRS Forms 5500 with Schedules for each DOE-funded pension plan, no later than that submitted to the IRS.
- (2) Forms 5300. Copies of all forms in the 5300 series submitted to the IRS that document the establishment, amendment, termination, spin-off, or merger of a plan submitted to the IRS.

(h) Changes to Pension Plans

At least sixty (60) days prior to the adoption of any changes to a pension plan, the Contractor shall submit the information required below to the Contracting Officer. The Contracting Officer must approve plan changes that increase costs as part of a determination as to whether the costs are deemed allowable pursuant to FAR 31.205-6, as supplemented by DEAR 970.3102-05-6.

- (1) For proposed changes to pension plans and pension plan funding, the Contractor shall provide the following to the Contracting Officer:
  - (A) a copy of the current plan document (as conformed to show all prior plan amendments), with the proposed new amendment indicated in redline/strikeout;
  - (B) except in circumstances where the Contracting Officer indicates that it is unnecessary, a legal explanation of the proposed changes from the counsel used by the plan for purposes of compliance with all legal requirements applicable to private sector defined benefit pension plans;

- (C) the Summary Plan Description; and,
  - (D) any such additional information as requested by the Contracting Officer.
- (2) Contractors shall submit new benefit plans and changes to plan design or funding methodology with justification to the Contracting Officer for approval, as applicable [see (d)(1) above]. The justification must:
- (A) demonstrate the effect of the plan changes on the contract net benefit value or per capita benefit costs,
  - (B) provide the dollar estimate of savings or costs, and
  - (C) provide the basis of determining the estimated savings or cost.
- (i) Terminating Plans
- (1) DOE contractors shall not terminate any pension plan (Commingled or site specific) without requesting Departmental approval at least 60 days prior to the scheduled date of plan termination.
  - (2) To the extent possible, the Contractor shall satisfy plan liabilities to plan participants by the purchase of annuities through competitive bidding on the open annuity market or lump sum payouts. The Contractor shall apply the assumptions and procedures of the Pension Benefit Guaranty Corporation.
- (j) Special Programs
- Contractors must advise DOE and receive prior approval for each early-out program, window benefit, disability program, plan-loan feature, employee contribution refund, asset reversion, or incidental benefit.
- (k) Definitions
- (1) Commingled Plans. Cover employees from the Contractor's private operations and its DOE contract work.
  - (2) Current Liability. The sum of all plan liabilities to employees and their beneficiaries. Current liability includes only benefits accrued to the date of valuation. This liability is commonly expressed as a present value.

- (3) Defined Benefit Pension Plan. Provides a specific benefit at retirement that is determined pursuant to the formula in the pension plan document.
- (4) Defined Contribution Pension Plan. Provides benefits to each participant based on the amount held in the participant's account. Funds in the account may be comprised of employer contributions, employee contributions, investment returns on behalf of that plan participant and/or other amounts credited to the participant's account.
- (5) Pension Fund. The portfolio of investments and cash provided by employer and employee contributions and investment returns. A pension fund exists to defray pension plan benefit outlays and (at the option of the plan sponsor) the administrative expenses of the plan.
- (6) Separate Plan. Must satisfy IRC Sec. 414(l) definition of a single plan, designate assets for the exclusive benefit of employees under DOE contract, exist under a separate plan document (having its own Department of Labor plan number) that is distinct from corporate plan documents and identify the Contractor as the plan sponsor.

## **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>

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
9/29/1995	Order	130.1		Budget Formulation
5/2/2001	Policy	141.1		Department of Energy Management of Cultural Resources
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		Unclassified Foreign Visits and Assignments Program
3/31/2014	Order	150.1A		Continuity Programs
11/2/2005	Order	151.1C		Comprehensive Emergency Management System
6/27/2007	Order	153.1		Departmental Radiological Emergency Response Assets
12/23/2008	Order	200.1A		Information Technology Management
1/7/2005	Order	203.1		Limited Personal Use of Government Office Equipment Including Information Technology
5/8/2001	Policy	205.1		Departmental Cyber Security Management Policy
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
4/19/2008	Order	221.1A		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
12/21/2015	Order	227.1A		Independent Oversight Program
6/27/2011	Order	231.1B	Admin Chg. 1 11/28/12	Environment, Safety and Health Reporting
8/30/2011	Order	232.2	Admin Chg. 1 3/12/14	Occurrence Reporting and Processing of Operations Information
12/13/2010	Order	241.1B		Scientific and Technical Information Management
3/11/2013	Order	243.1B		Records Management Program
2/2/2006	Order	243.2		Vital Records
2/23/2011	Order	252.1A	Admin Chg. 1 3/12/13	Technical Standards Program

## Appendix I - Part I

## DOE DIRECTIVES LIST

DOE Directives may be found at the following address: <http://www.directives.doe.gov>

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
11/19/2009	Order	313.1		Management and Funding of the Department's Overseas 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
9/29/2014	Order	350.3		Labor Standards Compliance, contractor Labor Relations, and Contractor Workforce Restructuring Programs
5/31/2011	Order	350.2B		Use of Management and Operating or Other Facility Management Contractor Employees for Services to DOE in the Washington D.C. Area
4/14/2014	Policy	364.1		Health and Safety Training Reciprocity
8/17/2009	Order	410.2	Admin Chg. 1 4/10/14	Management of Nuclear Materials
4/21/2005	Order	412.1A	Admin Chg. 1 6/21/14	Work Authorization System
10/28/2008	Order	413.1B		Internal Control Program
10/22/2015	Order	413.2C		Laboratory Directed Research and Development
11/29/2010	Order	413.3B		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	Admin Chg. 1 1/16/13	Information Technology Project Management
2/8/2011	Policy	420.1		Department of Energy Nuclear Safety Policy <b>Compliance Note:</b> Only applicable to BNL facilities categorized as Hazardous Category 1, 2 or 3 nuclear facilities
12/4/2012	Order	420.1C		Facility Safety <b>Compliance Note:</b> 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

### Appendix I - Part I DOE DIRECTIVES LIST

DOE Directives may be found at the following address: <http://www.directives.doe.gov>

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
6/29/2010	Order	422.1	Admin Chg. 1 6/25/13	Conduct of Operations <b>Compliance Note:</b> 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
4/16/2010	Order	425.1D	Admin Chg. 1 4/2/13	Verification of Readiness to Start Up or Restart Nuclear Facilities <b>Compliance Note:</b> Only applicable to BNL facilities categorized as Hazardous Category 1, 2, or 3 nuclear facilities
4/21/2010	Order	426.2	Admin Chg. 1 7/19/13	Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities
9/24/2003	Order	430.1B	Admin Chg. 2 4/25/11	Real Property and Asset Management
4/21/2010	Order	433.1B	Admin. Chg. 1 3/12/13	Maintenance Management Program for DOE Nuclear Facilities <b>Compliance Note:</b> Only applicable to BNL facilities categorized as Hazardous Category 1, 2 or 3 nuclear facilities
11/7/2013	Policy	434.1A		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
11/27/2002	Order	440.2C	Admin Chg. 1 6/22/11	Aviation Management and Safety
3/7/2008	Manual	441.1-1		Nuclear Material Packaging Manual
6/6/2001	Order	442.1A		Department of Energy Employee Concerns Program
7/29/2011	Order	442.2		Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health
3/7/2011	Order	443.1B		Protection of Human Research Subjects
4/25/2011	Policy	450.4A		Integrated Safety Management Policy
7/21/2011	Order	452.8		Control of Nuclear Weapon Data
5/31/2011	Order	456.1	Admin Chg. 1 2/14/13	The Safe Handling of Unbound Engineered Nanoparticles
9/15/2005	Policy	456.1		Secretarial Policy Statement on Nanoscale Safety
2/11/2011	Order	458.1	Admin Chg. 3 1/15/13	Radiation Protection of the Public and the Environment

**Appendix I - Part I  
DOE DIRECTIVES LIST**

DOE Directives may be found at the following address: <http://www.directives.doe.gov>

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
5/14/2010	Order	460.1C		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
11/10/2008	Order	462.1	Admin Chg. 1 7/10/13	Import and Export of Category 1 and 2 Radioactive Sources Aggregated Quantities
12/29/2010	Policy	470.1A		Safeguards and Security Program
8/12/2008	Order	470.3B		Graded Security Protection (GPS) Policy
7/21/2011	Order	470.4B		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
6/27/2011	Order	473.3		Protection Program Operations
6/27/2011	Order	474.2	Admin Chg. 3 5/15/15	Nuclear Material Control and Accountability

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12/10/2004	Order	475.1		Counterintelligence Program
10/3/2014	Order	475.2B		Identifying Classified Information
12/17/2014	Policy	481.1		DOE's Policy Regarding Laboratories, Plants and Sites Engaging in Strategic Partnership Projects with Other Federal Agencies, Independent Organizations, and the Private Sector
1/3/2001	Manual	481.1-1A	Admin Chg. 1 9/28/01	Reimbursable Work for Non Federal Sponsored Process Manual
11/6/2013	Order	483.1A		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
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. 1 (Pg.Chg.) 8/13/15	Official Foreign Travel
3/30/2012	Order	580.1A	Admin Chg. 1 10/22/12	Department of Energy Personal Property Management Program