MODIFICATION NO. M043
SUPPLEMENTAL AGREEMENT TO
CONTRACT NO. DE-AC02-98CH10886

MODIFICATION NO. M043

CONTRACTOR AND ADDRESS:	Brookhaven Science Associates, LLC Brookhaven National Laboratory Upton, NY 11973
MODIFICATION FOR:	Recognition of previous obligation increases; modifies Article 31, Obligation of Funds; modifies of Article 17, Key Personnel; and replaces Appendix I - DOE Directives
PRIOR OBLIGATION:	$1,122,238,177.83
INCREASE IN MODS. A041 THROUGH A042	$23,573,557.67
INCREASE IN THIS MODIFICATION	-0-
CURRENT TOTAL OBLIGATION:	$1,145,811,735.50

THIS MODIFICATION, effective the 10th day of May 2000, by and between the UNITED STATES OF AMERICA (hereinafter referred to as the "Government"), as represented by the UNITED STATES DEPARTMENT OF ENERGY (hereinafter referred to as "DOE"), and BROOKHAVEN SCIENCE ASSOCIATES, LLC (hereinafter referred to as the "Contractor"),

WITNESSETH THAT:

WHEREAS, the Government and the Contractor entered into Contract No. DE-AC02-98CH10886) on the 5th day of January 1998, for the operation of the Brookhaven National Laboratory; and

WHEREAS, said contract has been modified previously, and the parties desire to modify said contract further, as hereinafter provided; and

WHEREAS, this modification is authorized by law, including 41 U.S.C. 252(c)(15), P.L. 95-91 and other applicable law;

NOW, THEREFORE, said contract, as modified previously, is hereby further modified as follows:

1. The first sentence of paragraph (a) of Article 31, OBLIGATION OF FUNDS, is revised to read as follows: "The amount presently obligated by the Government with respect to this contract is $1,145,811,735.50."

2. ARTICLE 17, KEY PERSONNEL: Delete Dr. Denis McWhan and replace with Dr. Richard Osgood, Associates Laboratory Director for Basic Energy Science.

3. APPENDIX I, DOE DIRECTIVES: Delete in its entirety and replace with the attached revised Appendix I.

IN WITNESS WHEREOF, the parties have executed this document.

UNITED STATES OF AMERICA

DEPARTMENT OF ENERGY

BY: _____

Robert P. Gordon
Contracting Officer
(Title)

DATE: 5-10-00

BROOKHAVEN SCIENCE ASSOCIATES, LLC

BY: _____

Brian P. Sack
Chief Financial Officer
(Title)

DATE: 5/9/00

APPENDIX I

DOE DIRECTIVES

There is no List A to this Appendix.

List B to this Appendix contains two parts as follows:

Part I: " Directives List"

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

Part II: "Partial Deletions of Directives"

This section contains a list of Directives that were accepted and implemented by the previous contractor but have subsequently been revised by DOE to remove certain sections.

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
7/14/99	N 142.1	UNCLASSIFIED FOREIGN VISITS AND ASSIGNMENTS
7/26/99	N 205.1	CRD - UNCLASSIFIED CYBER SECURITY PROGRAM
11/1/99	N 205.2	CRD - FOREIGN NATIONAL ACCESS TO DOE CYBER SYSTEMS
11/23/99	N 205.3	CRD - PASSWORD GENERATION, PROTECTION, AND USE
4/15/99	N 350.5	CRD - USE OF FACILITY CONTRACTING EMPLOYEES FOR SERVICES TO DOE IN THE WASHINGTON, D.C., AREA
7/15/97	N 440.1	CRD - INTERIM CHRONIC BERYLLIUM DISEASE PREVENTION PROGRAM
9/30/95	N 441.1	RADIOLOGICAL PROTECTION FOR DOE ACTIVITIES (using ORNL/TM-11497 in lieu of Attachment 1)(Extended until 6/30/00 by DOE N 441.4 dated 11/20/98)
3/2/00	N.473.2	CRD - STANDARDIZATION OF FIREARMS
11/3/99	O 110.3	CRD - CONFERENCE MANAGEMENT
9/29/95	O 130.1	CRD - BUDGET FORMULATION PROCESS
9/30/95	O.135.1	BUDGET EXECUTION-FUNDS DISTRIBUTION AND CONTROL (Extended until 9/30/00 by DOE N 135.1 dated 11/29/99)
9/25/95 10/26/95 8/21/96	O 151.1 Change 1 Change 2	CRD - COMPREHENSIVE EMERGENCY MANAGEMENT SYSTEM
9/30/96	O 200.1	CRD - INFORMATION MANAGEMENT SYSTEM
9/27/95 10/26/95 5/1/95	O 210.1 Change 1 Change 2	CRD - PERFORMANCE INDICATORS AND ANALYSIS OF OPERATIONS INFORMATION
12/8/97	O 224.1	CRD - CONTRACTOR PERFORMANCE-BASED BUSINESS MANAGEMENT PROCESS
11/26/97	O 225.1A	CRD - TYPE A AND B ACCIDENT INVESTIGATIONS
9/30/95 10/26/95 11/7/96	O 231.1 Change 1 Change 2	CRD - ENVIRONMENT, SAFETY & HEALTH REPORTING
9/30/95 11/7/96 01/28/00	DOE M 231.1-1 Change 1 Change 2	ENVIRONMENT, SAFETY, AND HEALTH REPORTING MANUAL
8/1/97	O 232.1A	CRD - OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION (As modified by letter Grahn/Gordon, dated 4/10/98, effective 5/5/98)
7/21/97	M 232.1-1A	OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION (As modified by letter Grahn/Gordon, dated 4/10/98, effective 5/5/98)

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
8/17/98	O 241.1	CRD - SCIENTIFIC AND TECHNICAL INFORMATION (STI) MGMT.
1/30/98	O 251.1A	CRD - DIRECTIVES SYSTEM
11/19/99	O.252.1	CRD - TECHNICAL STANDARDS PROGRAM
12/30/96	O 311.1A	CRD - EQUAL EMPLOYMENT OPPORTUNITY AND DIVERSITY PROGRAM
9/30/96 5/8/98	O 350.1 Change 1	CRD - CONTRACTOR HUMAN RESOURCE MANAGEMENT PROGRAMS CRD - EMPLOYEE BENEFITS
12/6/95	O 413.1	CRD - MANAGEMENT CONTROL PROGRAM (Extended until 12/6/00 by DOE N 413.1 dated 12/10/99)
3/5/97	O 413.2	CRD - LABORATORY DIRECTED RESEARCH AND DEVELOPMENT
11/24/98	O 414.1	CRD - QUALITY ASSURANCE
10/13/95 11/16/95 10/24/96	O 420.1 Change 1 Change 2	CRD - FACILITY SAFETY
11/5/98 5/26/99	O 420.2 Change 1	CRD - DOE O 420.2, SAFETY OF ACCELERATOR FACILITIES
12/28/98	O 425.1A	CRD - DOE O 425.1A, STARTUP AND RESTART OF NUCLEAR FACILITIES, DATED 12/28/98
10/14/98	O 430.1A	CRD - LIFE CYCLE ASSET MANAGEMENT
6/13/96	O 430.2	IN HOUSE ENERGY MANAGEMENT (NO CONTRACTS REQUIREMENT DOCUMENT)
7/9/99	O 435.1	CRD - RADIOACTIVE WASTE MANAGEMENT (Cancels D0E 5820.2A)
7/9/99	M 435.1-1	RADIOACTIVE WASTE MANAGEMENT MANUAL
3/27/98	O 440.1A	CRD - WORKER PROTECTION MANAGEMENT FOR DOE CONTRACTOR EMPLOYEES
9/25/95 10/13/95 10/26/95	O 440.2 Change 1 Change 2	CRD - AVIATION
2/1/99	O 442.1	CRD - DEPARTMENT OF ENERGY EMPLOYEE CONCERNS PRG.
10/2/96	O 460.1A	CRD - PACKAGING AND TRANSPORTATION SAFETY
9/27/95 10/26/95	O 460.2 Change 1	CRD - DEPARTMENTAL MATERIALS TRANSPORTATION AND PACKAGING MANAGEMENT
9/28/95 6/21/95	O 470.1 Change 1	CRD - CONTRACTOR SAFEGUARDS AND SECURITY PROGRAM REQUIREMENTS (Extended until 9/29/00 by DOE N 470-1 dated 9/23/99)

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
12/23/98	O 470.2	CRD - SAFEGUARDS AND SECURITY INDEPENDENT OVERSIGHT PROGRAM
9/25/95	O 471.1	CRD - IDENTIFICATION AND PROTECTION OF UNCLASSIFIED CONTROL NUCLEAR INFORMATION (Extended until 9/25/00 by DOE N 471.1 dated.9/2/99)
3/27/97	O 471.2A	CRD - INFORMATION SECURITY PROGRAM (Extended until 9/26/00 by DOE N 471.2, dated 9/23/99)
1/6/99	M 471.2-1B	CRD - PROTECTION AND CONTROL OF CLASSIFIED MATTE
8/3/99	M 471.2-2	CRD - CLASSIFIED INFORMATION SYSTEMS SECURITY MANUAL (DOE N 205.3, dated 11/23/99 cancel Paragraphs 4j(2) and 4j(6) of Chapter VI, and Paragraph 12a(2)(a) of Chapter VII.)
3/24/97	O 472.1B	CRD - PERSONNEL SECURITY ACTIVITIES
5/22/98	M 472.1-1	PERSONNEL SECURITY PROGRAM MANUAL (See CRD for DOE O 472.1B)
8/11/99	O 474.1	CRD - CONTROL AND ACCOUNTABILITY OF NUCLEAR MATERIALS
8/11/99	M 474.1-1	CRD - MANUAL FOR CONTROL AND ACCOUNTABILITY OF NUCLEAR MATERIALS
5/8/98	M 475.1-1	CRD - IDENTIFYING CLASSIFIED INFORMATION
9/30/96	O 481.1	CRD - WORK FOR OTHERS (NON DOE FUNDED WORK)
9/29/95	O 534.1	CRD - ACCOUNTING (Extended until 9/29/00 by DOE N 534.1 dated 9/29/99)
6/23/92	1270.2B	SAFEGUARDS AGREEMENT WITH THE INTERNATIONAL ATOMIC ENERGY AGENCY
8/23/90	1300.3	POLICY ON THE PROTECTION OF HUMAN SUBJECTS
11/10/86 2/5/87 6/17/87 12/22/87 3/30/89 5/18/90 2/28/92 7/6/94	1500.3 Change 1 Change 2 Change 3 Change 4 Change 5 Change 6 Change 7	FOREIGN TRAVEL AUTHORIZATION
5/18/92	2030.4B	REPORTING FRAUD, WASTE, AND ABUSE TO THE OFFICE OF INSPECTOR GENERAL
1/27/93	2100.8A	COST ACCOUNTING, COST RECOVERY, & INTERAGENCY SHARING OF INFORMATION TECHNOLOGY FACILITIES
7/14/88 10/5/88 5/18/92	2110.1A Change 1 Change 2	PRICING OF DEPARTMENTAL MATERIALS AND SERVICES

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
6/8/92	2300.1B	AUDIT RESOLUTION AND FOLLOWUP
	5/18/92	COOPERATION WITH THE OFFICE OF INSPECTOR GENERAL
2/10/94	4330.4B	MAINTENANCE MANAGEMENT PROGRAM (Nuclear Facilities Portion Only)
11/9/88 6/29/90	5400.1* Change 1	GENERAL ENVIRONMENTAL PROTECTION PROGRAM
2/8/90 6/5/90 1/7/93	5400.5* Change 1 Change 2	RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT
5/15/84 5/16/88 5/16/89 9/20/91	5480.4* Change 1 Change 2 Change 3	ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS
7/9/90 5/18/92	5480.19 Change 1	CONDUCT OF OPERATIONS REQUIREMENTS FOR DOE FACILITIES
11/15/94	5480.20A	PERSONNEL SELECTION, QUALIFICATION AND TRAINING REQUIREMENTS FOR DOE NUCLEAR FACILITIES
12/24/91	5480.21	UNREVIEWED SAFETY QUESTIONS
2/25/92 9/15/92 1/23/96	5480.22 Change 1 Change 2	TECHNICAL SAFETY REQUIREMENTS
4/10/92 3/10/94	5480.23 Change 1	NUCLEAR SAFETY ANALYSIS REPORTS
1/19/93	5480.30	NUCLEAR REACTOR SAFETY DESIGN CRITERIA
9/20/91	5530.1A	ACCIDENT RESPONSE GROUP
1/14/92 4/10/92	5530.3 Change 1	RADIOLOGICAL ASSISTANCE PROGRAM
5/8/85	5560.1A	PRIORITIES AND ALLOCATIONS PROGRAM
8/1/80	5610.2	CONTROL OF WEAPON DATA
7/15/94	5632.1C*	PROTECTION AND CONTROL OF SAFEGUARDS AND SECURITY INTERESTS
4/13/94	5632.7A	PROTECTIVE FORCE PROGRAM
5/26/94	5660.1B	MANAGEMENT OF NUCLEAR MATERIALS
9/4/92	5670.3	COUNTERINTELLIGENCE PROGRAM
5/18/92	5700.7C	WORK AUTHORIZATION SYSTEM

ACCOUNTING PRACTICES AND PROCEDURES HANDBOOK		
5/2/83	Chapter V	INVENTORIES
6/30/80	Chapter X	PRODUCT COST ACCOUNTING

Appendix I - Part II

PARTIAL DELETIONS OF DIRECTIVES				
DATE	DOE DIRECTIVE NUMBER	SUBJECT TITLE	DELETION DIRECTIVE DATE	SECTIONS DELETED
11/9/88 6/29/90	5400.1 Change 1	GENERAL ENVIRONMENTAL PROTECTION PROGRAM	O 231.1 9/30/95 Change 1 10/26/95 Change 2 11/7/96	Paras. 2d, 2b, 4b & 4c of Chap II; Paras 2d & 3b of Chap III; Para 10(c) of Chap IV
2/8/90 6/5/90 1/7/93	5400.5 Change 1 Change 2	RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT	O 231.1 9/30/95 Change 1 10/26/95	Chapter II: Para 1a(3) (a)
5/15/84 5/16/88 5/16/89 9/20/91	5480.4 Change 1 Change 2 Change 3	ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS	O 440.1 9/30/95 Change 1 10/26/95	Attachment 2: Paras 2c, 2d(2) - (3), 2e(1) - (8); and Attach. 3: Paras 2c,; 2d(2) - (3), 2e(1) - (7)
7/15/94	M5632.1C-1	MANUAL FOR PROTECTION AND CONTROL OF SAFEGUARDS AND SECURITY INTERESTS	O 470.1 9/28/95 O 471.2A 3/27/97	Chapter XI Chapter III, Paras 1, 2, 4-9