MODIFICATION NO. M077
SUPPLEMENTAL AGREEMENT TO
CONTRACT NO. DE-AC02-98CH10886

MODIFICATION NO. M077

CONTRACTOR AND ADDRESS:	Brookhaven Science Associates, LLC Brookhaven National Laboratory Upton, NY 11973
MODIFICATION FOR:	Recognition of previous obligation increases; Modification to Article 31, Obligation of Funds; Revision to Article 64 and Article 65, Lobbying Restrictions; Revision to Articles 25 and 26, Buy American Act; Revision to Article 109, Small Business Subcontracting Plan; Revision to Appendix B, 2002 Performance Measure, Critical Outcome 3.4.1, Cyber Security and SAM for Legal Services; Revision to Appendix B, 2002 Performance Measure, Critical Outcome 2.0, Environmental Restoration; Replacement of Appendix H, Small/Disadvantaged Business Subcontracting Plan; Replacement of Appendix I, DOE Directives.
PRIOR OBLIGATION:	$ 1,906,471,550.18
INCREASE IN MODS. A074 through A076	$ 123,273,922.96
INCREASE IN THIS MODIFICATION	$ -0-
CURRENT TOTAL OBLIGATION:	$ 2,029,745,473.14

THIS MODIFICATION, effective the 31st day of May 2002, 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. **ARTICLE 31**. OBLIGATION OF FUNDS: The first sentence of paragraph (a) is revised to read as follows: "The amount presently obligated by the Government with respect to this contract is $ 2,029,745,473.14.

2. **ARTICLE 25.** Delete 52.225-11, Buy American Act-Balance of Payment Program-Construction Material under Trade Agreements (FEB 2000) in its entirety and replace with the attached update revision of 52.225-11, Buy American Act-Balance of Payment Program-Construction Material under Trade Agreements (MAY 2002).

3. **ARTICLE 26.** Delete 52.225-1, Buy American Act-Balance of Payment Program-Supplies (FEB 2000) in its entirety and replace with the attached update revision of 52.225-1, Buy American Act-Balance of Payment Program-Supplies (MAY 2002).

4. **ARTICLE 64**. Delete Lobbying Restriction (Energy and Water Development Appropriations Act, 2001), (AL-2000-11) in its entirety and replace with the attached Lobbying Restriction (Energy and Water Development Appropriations Act, 2002) (AL-2002-02).

5. **ARTICLE 65**. Delete Lobbying Restriction (Department of Interior and Related Agencies Appropriations Act, 2001), (AL-2000-11) in its entirety and replace with the attached updated revision of Lobbying Restriction (Department of Interior and Related Agencies Appropriations Act, 2002) (Revision of AL-2002-02).

6. **ARTICLE 109.** Delete 52.219-9, Small Business Subcontracting Plan, (OCT 2000) in its entirety and replace with the attached update revision of 52.219-9, Small Business Subcontracting Plan, (JAN 2002).

7. **APPENDIX B** – CRITICAL OUTCOMES (CO), OBJECTIVES AND PERFORMANCE MEASURES.

   a. Critical Outcome Performance Measure- 3.0, Laboratory Management and Operations, 3.4.1 – Cyber Security. Performance Measure 3.4.1.1, Cyber Security Program Plan Implementation measure is revised by adding an additional performance measure after Item No. 1 of the section. The revision is as reflected in the attached revision of CO Section 3, page CO3-21. Delete Section CO3 in its entirety and replace with the attached revised Section CO3.

   b. Supporting Assessment Measures (SAMs) – Legal Services. The third (3rd) bullet under Legal Services, page CO3-5,"Consideration of thoughtful alternative dispute resolution (ADR)," has been revised to read, "Thoughtful consideration of alternative dispute resolution (ADR)."

   c. Critical Outcome Performance Measure- 2.0, Environmental Restoration. Critical Outcome 2.1.1-On-Time Starts of Major Projects is revised changing the delivery milestone. CO 2.2.2- Schedule Performance is revised by updating the language in paragraph 1. CO Table 2, FY 02 Major Project Starts is revised by adding a new performance measure, Item No. 1 and deleting the old CO measure Item No. 1. These revisions are as reflected in the attached revised CO Section 2, pages CO2-1, CO2-2 and CO2-5. Delete Section CO2 in its entirety and replace with the attached revised Section CO2, identified as Modification M077.

8. **APPENDIX H** – Small Business, Small Disadvantaged Business, Women-Owned Small Business, and HUB Zone Small Business Subcontracting Plan, identified as modification M055 is deleted in its entirety and replaced with the attached revised Appendix H, identified as Modification M077.

9. **APPENDIX I** - DOE DIRECTIVES: DOE Directives identified as Modification M073 is deleted in its entirety and replaced with the attached Appendix I, identified as Modification M077.

IN WITNESS WHEREOF, the parties have executed this document.

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY

BY: Rita J. Smotherman
Rita J. Smotherman
Contracting Officer
(Title)
DATE: 6/17/02

BROOKHAVEN SCIENCE
ASSOCIATES, LLC

BY: Brian P. Sack
Brian P. Sack
Chief Financial Officer
(Title)
DATE: 6/14/02

CONTRACT MODIFICATION M077
BROOKHAVEN SCIENCE ASSOCIATES, LLC
CONTRACT NO. DE-ACO2-98CH10886

MOD NO.	INCREASED AMOUNT	REMARKS
A074	$ 40,627,245.98	
A075	$ 25,634,070.10	
A076	$ 57,012,606.88	
TOTAL	$ 123,273,922.96	

CURRENT BSA CONTRACT AMOUNT (THRU MOD M073, INCL.)	$ 1,906,471,550.18
INCREASED AMOUNT (MODIFICATION A074 - A076)	$ 123,273,922.96
NEW CONTRACT TOTAL	$ 2,029,745,473.14

ARTICLE 25 **52.225-11 Buy American Act-Construction Materials under Trade Agreements. (MAY 2002)**

(a) Definitions. As used in this clause-

"Component" means an article, material, or supply incorporated directly into a construction material.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

"Cost of components" means-

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

"Designated country" means any of the following countries:

Aruba	Kiribati
Austria	Korea, Republic of
Bangladesh	Lesotho
Belgium	Liechtenstein
Benin	Liechtenstein
Bhutan	Luxembourg
Botswana	Malawi
Burkina Faso	Maldives
Burundi	Mali
Cape Verde	Mozambique
Central African Republic	Nepal
Chad	Netherlands
Comoros	Niger
Denmark	Norway

Djibouti
Equatorial Guinea
Finland
France
Gambia
Germany
Greece
Guinea
Guinea-Bissau
Haiti
Hong Kong
Iceland
Israel
Italy
Japan
Portuga
Rwanda
Sao Tome and Principle
Sierra Leone
Singapore
Spain
Sweden
Switzerland
Tanzania U.R
Togo
Tuvalu
Uganda
United Kingdom
Vanuatu
Western Samoa
Yemen

"Designated country construction material" means a construction material that-

(1) Is wholly the growth, product, or manufacture of a designated country; or
(2) (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different construction material distinct from the materials from which it was transformed.

"Domestic construction material" means-

(1) An unmanufactured construction material mined or produced in the United States; or
(2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

"Foreign construction material" means a construction material other than a domestic construction material.

"North American Free Trade Agreement country" means Canada or Mexico.

"North American Free Trade Agreement country construction material" means a construction material that-

(1) Is wholly the growth, product, or manufacture of a North American Free Trade Agreement (NAFTA) country; or
(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a NAFTA country into a new and different construction material distinct from the materials from which it was transformed.

"United States" means the 50 States and the District of Columbia, U.S. territories and possessions, Puerto Rico, the Northern Mariana Islands, and any other place subject to U.S. jurisdiction, but does not include leased bases.

(b) Construction materials.
(1) This clause implements the Buy American Act (41 U.S.C. 10a - 10d) by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the Trade Agreements Act and the North American Free Trade Agreement (NAFTA) apply to this acquisition. Therefore, the Buy American Act and Balance of Payments Program restrictions are waived for designated country and NAFTA country construction materials.
(2) The Contractor shall use only domestic, designated country, or NAFTA country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.
(3) The requirement in paragraph (b)(2) of this clause does not apply to the construction materials or components listed by the Government as follows:

"NONE"
[*Contracting Officer to list applicable excepted materials or indicate "none"]*

(4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that-
(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;
(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or
(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act.
(1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including-
(A) A description of the foreign and domestic construction materials;
(B) Unit of measure;
(C) Quantity;

(D) Price;
(E) Time of delivery or availability;
(F) Location of the construction project;
(G) Name and address of the proposed supplier; and
(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act or Balance of Payments Program applies, use of foreign construction material is noncompliant with the Buy American Act.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign And Domestic Construction Materials
Price Comparison

Construction Material Description		Unit of Measure	Quantity	Price (Dollars)*
Item 1:				
Foreign material	construction	_____	_____	_____
Domestic material	construction	_____	_____	_____
Item 2:				
Foreign material	construction	_____	_____	_____
Domestic material	construction	_____	_____	_____

[*List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]*
[Include other applicable supporting information.]
[Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]*

(End of clause)

ARTICLE 26 52.225-1 BUY AMERICAN ACT -SUPPLIES (MAY 2002)

(a) *Definitions*. As used in this clause—

"Component" means an article, material, or supply incorporated directly into an end product.

"Cost of components" means—

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

"Domestic end product" means—

(1) An unmanufactured end product mined or produced in the United States; or An end product manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as those that the agency determines are not mined, produced, or manufactured in sufficient and reasonably available commercial quantities of a satisfactory quality are treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic.

"End product" means those articles, materials, and supplies to be acquired under the contract for pubic use.

"Foreign end product" means an end product other than a domestic end product.

"United States" means the 50 States and the District of Columbia, U.S. territories and possessions, Puerto Rico, the Northern Mariana Islands, and any other place subject to U.S. jurisdiction, but does not include leases bases.

(b) The Buy American Act (41 U.S.C. 10a-10d) provides a preference for domestic end products for supplies acquired for use in the United States.

(c) Offerors may obtain from the Contracting Officer a list of foreign articles that the Contracting Officer will treat as domestic for this contract.

(d) The Contractor shall deliver only domestic end products except to the extent that it specified delivery of foreign end products in the provision of the solicitation entitled "Buy American Act Certificate."

ARTICLE 64 LOBBYING RESTRICTION (ENERGY AND WATER DEVELOPMENT APPROPRIATIONS ACT, 2002)

The contractor agrees that none of the funds obligated on this award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

ARTICLE 65 LOBBYING RESTRICTION (DEPARTMENT OF INTERIOR AND RELATED AGENCIES APPROPRIATIONS ACT, 2002)

The contractor agrees that none of the funds obligated on this award shall be made available for any activity of the publication or distribution of literature that in any way tends to promote public support or opposition to any legislative proposal on which Congressional action is not complete. This restriction is in addition to those prescribed elsewhere in statute and regulation.

ARTICLE 109 52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (JAN 2002)

(a) This clause does not apply to small business concerns.

(b) Definitions. As used in this clause-

"Commercial item" means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulation.

"Commercial plan" means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

"Individual contract plan" means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

"Master plan" means a subcontracting plan that contains all the required elements of an individual contract plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approved.

"Subcontract" means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

(c) The offeror, upon request by the Contracting Officer, shall submit and negotiate a subcontracting plan, where applicable, that separately addresses subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business concerns, small disadvantaged business, and women-owned small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate the subcontracting plan shall make the offeror ineligible for award of a contract.

(d) The offeror's subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and

women-owned small business concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs.

(2) A statement of-

(i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;

(ii) (ii) Total dollars planned to be subcontracted to small business concerns;

(iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;

(iv) Total dollars planned to be subcontracted to service-disabled veteran-owned small business;

(v) Total dollars planned to be subcontracted to HUBZone small business concerns;

(vi) Total dollars planned to be subcontracted to small disadvantage business concerns; and

(vii) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to-

(i) Small business concerns;

(ii) Veteran-owned small business concerns;

(iii) Service-disabled veteran-owned small business concerns;

(iv) HUBZone small business concerns;

(v) Small disadvantaged business concerns; and

(vi) Women-owned small business concerns.

(4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.

(5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Procurement Marketing and Access Network (PRO-Net) of the Small Business Administration (SBA), veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm merely on the information contained in PRO-Net as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of PRO-Net as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.

(6) A statement as to whether or not the offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with-

(i) Small business concerns;
(ii) Veteran-owned small business concerns;
(iii) Service-disabled veteran-owned small business concerns;
(iv) HUBZone small business concerns;
(v) Small disadvantaged business concerns; and
(vi) Women-owned small business concerns.

(7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts the offeror will make to assure that small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of $500,000 ($1,000,000 for construction of any public facility) to adopt a subcontracting plan that complies with the requirements of this clause.

(10) Assurances that the offeror will-

(i) Cooperate in any studies or surveys as may be required;
(ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;
(iii)Submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with paragraph (j) of this clause. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with the instructions on the forms or as provided in agency regulations.
(iv)Ensure that its subcontractors agree to submit SF 294 and SF 295.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-

owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated):

(i) Source lists (e.g., PRO-Net), guides, and other data that identify small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii)Records on each subcontract solicitation resulting in an award of more than $100,000, indicating-

(A) Whether small business concerns were solicited and, if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether service-disabled veteran-owned small business concerns were solicited and, if not, why not;

(D) Whether HUBZone small business concerns were solicited and, if not, why not;

(E) Whether small disadvantaged business concerns were solicited and, if not, why not;

(F) Whether women-owned small business concerns were solicited and, if not, why not; and

(G) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact-

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through-

(A) Workshops, seminars, training, etc.; and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owned small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(f) A master plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided-

(1) The master plan has been approved;

(2) The offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer; and

(3) Goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Commercial plans are also preferred for subcontractors that provide commercial items under a prime contract, whether or not the prime contractor is supplying a commercial item.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) The failure of the Contractor or subcontractor to comply in good faith with-
(1) The clause of this contract entitled "Utilization Of Small Business Concerns;" or

(2) An approved plan required by this clause, shall be a material breach of the contract.

(j) The Contractor shall submit the following reports:

(1) Standard Form 294, Subcontracting Report for Individual Contracts. This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to this contract. This report is not required for commercial plans.

(2) Standard Form 295, Summary Subcontract Report. This report encompasses all of the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant NAICS Industry Subsector.

(End of clause)

Critical Outcome 2.0 Environmental Restoration

BNL WILL DELIVER "BEST-IN-CLASS" SOLUTIONS IN CONDUCTING THE ENVIRONMENTAL RESTORATION PROGRAM. FOCUSED UPON COMPLETION, THE RESULTS WILL BE PROTECTIVE OF THE ENVIRONMENT, COST EFFECTIVE, AND PERFORMED IN AN OPEN EXCHANGE WITH THE COMMUNITY, OUR REGULATORS, AND OTHER STAKEHOLDERS. BNL WILL CONTINUE TO KEEP THE COMMITMENTS AGREED TO IN THE MEMORANDUM OF UNDERSTANDING SIGNED BY DR. MARBURGER AND MR HOLLAND ON MAY 4, 2001.

The weight of this Outcome is 8% of total.

Objective 2.1 Operational Excellence in Environmental Restoration

The weight of this Objective is 60%.

BSA will incorporate operational excellence into work planning, authorization and implementation. Hazards are identified and mitigations developed during work planning. Work authorization includes levels of coordination and management review appropriate to risks and impacts. Incidents are reported promptly and timely actions are taken to resolve the problem and prevent recurrence. Trends are analyzed and feedback provided to improve performance. Management systems in use are effective tools in minimizing or avoiding events that could compromise safety or impact project costs and schedule.

Measure 2.1.1 On Time Starts of Major Projects

The weight of this Measure is 100%.

BSA will be evaluated on the quality of work planning and schedule management via the achievement of schedule start dates for major projects. The identification and start dates are mutually agreed to with BAO and are contained in Table 2.

Performance Level Metrics

Outstanding	BSA achieves all 12 Major Project Starts (MPS's); 11 no later than 2 weeks of specified start date, 1 no later than 4 weeks of specified start date.
Excellent	BSA achieves all 12 MPS's; 9 no later than 2 weeks of specified start date, 3 no later than 4 weeks of specified start date.
Good	BSA achieves all 12 MPS's no later than 4 weeks of specified start date.
Marginal	BSA achieves all 12 MPS's; 6 no later than 4 weeks of specified start date, 6 more than 4 weeks after specified start date.
Unsatisfactory	BSA does not achieve any of the 12 MPS's within 4 weeks of specified start date.

Conditions

1. The specified dates for the MPS's may be changed via DOE and BNL's formal baseline change control process. Reasons for change may include need for substantial additional characterization, substantive stakeholder concerns that affect project starts, force majeure, etc. The change control level for MPS is level 2b.
2. A Major Project Start represents a tangible field, remediation or removal activity that is significant to the customer and stakeholders. The project start represents the culmination and integration of the appropriate planning, procurement, resources, documents and reviews. It is recognizable and auditable in the field. Once started, the project will continue to make substantive progress through an on-schedule completion.
3. BSA will reevaluate the path forward and baseline for the BGRR and present their recommendations by February 15, 2002 including preliminary dates for the BGRR MPSs denoted TBD and new IAG milestones/schedules. Changes to all BGRR schedules and milestones resulting from this effort will be implemented through change control. The final version of these BCPs will be submitted to DOE by April 15, 2002

Objective 2.2 Execution of Program Activities

The weight of this Objective is 40%.

BSA will expertly, expeditiously, and economically plan, conduct, and complete decontamination and decommissioning of surplus facilities; removal and disposal of wastes; and remediation of soils and groundwater contaminated by past practices. These projects will be safely but aggressively undertaken, closely controlled, and focused on completion. BSA will aggressively manage cost and schedule performance within acceptable performance measures and achieve all major Interagency Agreement milestones on or before their commitment date with the regulatory agencies.

Measure 2.2.1 Cost Performance

The weight of this Measure is 50%.

BSA will be evaluated on its cost effective performance management of the baseline for FY 2002.

Cost Performance Index = (Budgeted Cost of Work Performed)/(Actual Cost of Work Performed)

Performance Level Metrics

Outstanding	CPI $\geq$ 1.020
Excellent	0.980 < CPI <1.020
Good	0.950 < CPI $\leq$ 0.980
Marginal	0.900 < CPI $\leq$ 0.950
Unsatisfactory	CPI $\leq$ 0.900

Conditions:

1.) Because of the uncertainties associated with the project scope, the above metric does not include the BGRR. However, the Project to Date Cost Variance (BCWP-ACWP)/BCWP * 100%) at the end of FY 2002 for the BGRR must be greater than – 20 percent for the BGRR as verified by BAO.
2.) BCWP from BCPs processed for activities performed and costed in prior years (i.e. pre-2002) is excluded from the calculation. This information will be included in the BCPs.

Measure 2.2.2 Schedule Performance

The weight of this Measure is 50%.

BSA will meet and accelerate all primary, secondary and removal action milestones scheduled under the Interagency Agreement (IAG) as agreed upon with the U.S. EPA and NYSDEC and all Level 1, 2A, and 2B Milestones. Additionally, BSA will accelerate out-year milestones to demonstrate superior schedule performance. These are listed in Table 1.

Performance Level Metrics

Outstanding	All FY02 Milestones described above are met on schedule. In addition, 3 or more of the FY03/FY04 Acceleration milestones are completed by September 30, 2002.
Excellent	All FY02 Milestones described above are met on schedule. In addition, 2 of the FY03/FY04 Acceleration Milestones are completed by September 30, 2002.
Good	BSA completes all FY02 milestones described above on schedule.
Marginal	BSA misses one FY02 milestone.
Unsatisfactory	BSA misses two or more FY02 milestones.

Assumptions

1. No IAG milestones dates agreed upon with the Regulators may be missed. However, IAG milestone dates are subject to change through IAG Milestone Extension requests.
2. Level 1 and 2 milestones are subject to change through baseline change control.
3. Accelerated FY03/FY04 milestones may be substituted for missed FY02 milestones in a two for one ratio.
4. BNL must continue to make good progress towards IAG and level 1 and 2 milestones that occur in FY 2003 during FY 2002. FY 2002 performance cannot result in missing FY 2003 milestones.

Environmental Restoration Supporting Assessment Measures (SAMs)

Project and Program Management Systems: BSA will assess its implementation of project management systems in accordance with DOE requirements and industry standards including progress on implementing its Re-Engineering agenda through FY 2002; DOE Order 413 compliance; earned value and project reporting; and baseline change and maintenance. Both DOE and BSA will continue the assessment reviews initiated in FY01. BSA action will be taken to improve performance in this area as part of its Re-Engineering agenda.

Stakeholder Involvement: BSA will assess the condition and success of stakeholder and regulatory relations for the EM program. This assessment will evaluate the quality, timeliness and effectiveness of interactions with regulators and other stakeholders; interface and coordination with Community Education Government and Public Affairs (CEGPA) and DOE; communication, outreach and regulatory planning; development of materials (including supporting documents, fact sheets and other communication items, and regulatory reports such as EE/CA's, etc.); and, execution. BSA management action will be taken as necessary to improve performance in this area.

Waste Management: BSA will assess its progress in implementing an integrated and cost effective waste management for its EM program. The focus in FY 2002 will be to identify and take the necessary actions to minimize non-conforming waste shipments; identify and implement cost effective waste transportation and disposal mechanisms; and the reduction of waste inventories at the BGRR. BSA management action will be taken as necessary to improve performance in this area.

Work Management: BSA will assess the implementation of ISM practices within the planning and execution of environmental restoration and decontamination and decommissioning fieldwork and waste management operations. The focus in FY 2002 will be implementation of work planning processes, minimization of radiological contamination events, and incorporation of lessons learned. BSA management action will be taken as necessary to improve performance in this area.

Table 1 FY03 / FY04 Acceleration Milestones

1. Submit HWMF Soil Draft RA Work Plan to EPA/DEC –March 7, 2003
2. Submit Magothy Summary Report to BNL/DOE-Oct 15, 2002
3. Submit Magothy Characterization Report to EPA/DEC –Dec 16, 2002
4. Submit Airport System RA Work Plan to EPA/DEC –Oct 29, 2002
5. Submit Industrial Park East RA Work Plan to EPA/DEC –Dec 20, 2002
6. Submit North Street RA Work Plan to EPA/DEC – Dec 12, 2002
7. Submit LIPA System RA Work Plan to EPA/DEC – June 12, 2003
8. Submit OU IV Deletion Report to DOE – Oct 24, 2002
9. Submit OU IV Deletion Report to EPA/DEC Feb 6, 2003
10. Submit OU VI Remediation System RA WP to EPA/DEC – Oct 10, 2002

11. Submit UGP Draft Completion Report to Regs for R&C –Nov 20, 2002
12. Submit Draft Chem Holes C/O Rept to EPA/DEC – April 8, 2004
13. Submit Ash Pit RD/RA Work Plan to EPA/DEC – Nov 3, 2003
14. Submit Draft Ash Pit C/O Rept to EPA/DEC - Jun 4, 2004
15. Submit Meadow Marsh Work Plans to EPA/DEC – Dec 01, 2003
16. Submit Meadow Marsh Closeout Rept to EPA/DEC – Jun 21, 2004
17. Submit Sr-90 90% design to EPA/DEC – May 6, 2004
18. Submit Sr-90 RA Work Plan to EPA/DEC – July 19, 2004
19. Submit STP Closeout Rept to EPA/DEC – Mar 31, 2003
20. Complete Disposal of EM Liability Waste – Sept 30, 2004

Table 2 FY02 Major Project Starts

DESCRIPTION - DATE	COMPLETION CRITERIA	BASELINE ACTIVITY ID & DESCRIPTION
1) 701/702 and Remaining Soils Characterization Field Work Start - 17 Jun 02	The Blue Book is complete (Technical Work Document, Radiation Work Permits, Digging Permits, Confined Space Permits, Job Safety Analysis), the SAP has been submitted to DOE, and the Readiness Review has been completed.	BGBPO3 – 701/702 and Remaining Soils Characterization. ***Item 1) Modified by M077***
2) Bldg 650 S/O Mobilization – 10/22/01	Kick-off meeting held, contractor(s) issued Notice to Proceed for clearing and grubbing, supplemental investigation and overburden removal, contractor onsite mobilizing equipment.	010495A - Bldg. 650 Mobilization
3) Mobilize and Sort Stockpile 7 –7/3/02	Kick-off meeting held, contractor(s) issued Notice to Proceed, contractor on-site mobilizing equipment.	011048 – Mobilize and Sort SP 7
4) Mobilize and Sort Stockpile 4 and 15 – 8/1/02	Kick-off meeting held, contractor(s) issued Notice to Proceed, contractor on-site mobilizing equipment.	010987A30 – Mobilization/Sorting SP 4-15
5) Construct Permanent Sediment Trap – 2/4/02	Staging area is laid out, upstream debris cleared, DEC equivalency permit issued and all physical work prerequisites complete. Rip rap material is staged adjacent to river bed and placement of geotextile material on the river bed has been initiated.	050670DE – Install Silt Trap
6) Initiate Remediation of STP Beds and Berms – 6/18/02	Contractor issued Notice to Proceed, contractor mobilized, remediation area Surveyed and delineated for contamination extent removal, excavation of soil has been initiated.	050454H – Remediate STP Berms
7) Middle Road Remediation System Start-Up – 11/08/01	The system is complete, specifically all major components are operational. The Operational Readiness Evaluation has been completed and any items identified as pre-start items in the ORE are completed.	Related To 03 M0550 – Prepare Startup Report Middle Road
8) Construction of Western South Boundary System – 10/1/01	The remedial Action Work Plan has been submitted, notice to proceed has been issued to the contractor, kickoff meeting held, contractor is mobilized	03WS145 – Construction SWB
9) Construction of Sr-90 Pilot System – 5/15/02	Kick-off meeting held, contractor(s) issued Notice to Proceed, contractor on job site	03S9030 – Construct Sr-90 Pilot System
10) Underground Filter Removal – TBD	Readiness review document completed (includes technical work documents, RWPs work permits, JSAs) and closure of any open items identified during the review. Physical work has been initiated.	BGBG0136 – Remove Filters (16 Sections)
11) Liner Removal – TBD	Readiness review document completed (includes technical work documents, RWPs work permits, JSAs) and closure of any open items identified during the review. Physical work has been initiated.	BGBG3520 – Remove & Dispose North Liner Phase I
12) Underground Cooler Removal – 11/30/01	Readiness review document completed (includes technical work documents, RWPs work permits, JSAs) and closure of any open items identified during the review. Physical work has been initiated.	BGBG0081 – Remove Coils (Remove & Fix cut & Plug)

Critical Outcome 3.0 Laboratory Management and Operations

BNL WILL MANAGE AND ENHANCE OPERATIONS AND MANAGEMENT PROCESSES TO PROVIDE AN EFFECTIVE AND EFFICIENT WORK ENVIRONMENT THAT ENABLES THE EXECUTION OF THE BNL MISSION IN A MANNER RESPONSIVE TO CUSTOMER AND STAKEHOLDER EXPECTATIONS.

The weight of this Outcome is 32% of total.

Objective 3.1 Management and Business Processes

The weight of this Objective is 55% of total.

BSA will develop, implement, evaluate, and improve management tools and processes to attract, hire and retain a highly qualified and diverse workforce and enable the workforce to effectively and efficiently support the Laboratory scientific and cleanup missions.

Measure 3.1.1 Assessment and Improvement

The weight of this Measure is 70%.

3.1.1.1 Overall Evaluation of the Laboratory Self-Assessment Program

The weight of this Measure is 90%.

Purpose and Supporting Information

BSA is committed to rigorous and candid self-assessment in order to monitor performance and promote early identification and resolution of issues that may impact achievement of the Laboratory's organizational performance objectives. In FY02, BSA and the DOE agreed to enhance the role of the Laboratory's self-assessment process in performance-based management.

BSA will coordinate and conduct an overall evaluation of the Laboratory's Assessment Program. The evaluation team will include DOE representatives (BAO and others selected by BAO), BSA Representatives and "peer reviewers" from other Laboratories.

The evaluation will consider the "approach/definition, deployment/implementation, and improvement/ results" of Laboratory assessment processes which include Line management (organizational assessments), management system (programmatic assessments), and independent assessments (which can either look at programmatic or organizational performance). Substantive (as distinguished from self assessment process) performance determined from self-assessment activities defined by SAMs may also be considered in the evaluation of the Laboratory's self-assessment program where this substantive performance provides indication of the quality of the self-assessment program. *Note: Independent assessments are considered to be those assessment activities managed by the BSA Internal Audit and Independent Oversight organizations.*

Note: A process/protocol for conducting the evaluation of the self-assessment program including criteria for determining the performance rating will be developed by BSA and DOE/BAO by 3/31/02. Upon completion, the process will be included in Appendix B either directly or by reference.

Performance Level Metrics

As determined by the evaluation process/protocol.

3.1.1.2 Enhance Evaluation of Management Systems

The weight of this measure is 10%.

Purpose and Supporting Information

Verification of the Quality Assurance Program (QAP) was planned for FY01. One of the strategies used in the development of the evaluation approach was to develop a process that could be used as a tool in the continuous improvement process of other Laboratory management systems. The verification process was designed to initially evaluate the maturity of the eight management systems/processes that support the QAP. The Verification was not completed in FY01. However, the work done to develop an evaluation method for management systems has been fruitful in that this method will be evaluated for incorporation into the Laboratory Assessment Program.

The FY02 measure will focus on performing evaluations on the five remaining management systems and generating a summary report of all eight management system evaluations and the state of the BNL QAP. In addition, the management system evaluation process will be refined based on the experience gained through the QAP Verification. The remaining five management systems include:

- Integrated Assessment Program
- Training & Qualifications Management System
- Records Management System
- Quality Management System
- Human Resources Management System – R2A2 Process

A Management System Evaluation consists of the following:

- Establishment of an evaluation team.
- Development of an Information Package about the performance and operation of the management system
- Conducting an Evaluation Workshop to score the maturity of the MS.
- Generation of a report documenting the evaluation process and results.

A single MS evaluation is complete once the final report of that evaluation is issued.

Performance Level Metrics

Outstanding	All 5 remaining MS evaluations are complete and the Summary Report on the QAP Verification is issued.
Excellent	4 MS evaluations are complete.
Good	3 MS evaluations are complete.
Marginal	2 MS evaluations are complete.
Unsatisfactory	Less than 2 MS evaluations are complete.

Measure 3.1.2 Business Processes

The weight of this measure is 25%.

3.1.2.1 Baseline Study of Laboratory Business Systems

The weight of this measure is 50%.

Purpose and Background

BSA seeks to continuously improve the effectiveness and efficiency of the Laboratory's business processes. Over the past several years, improvements have been made to the business management tools and infrastructure (i.e., Peoplesoft, etc.). A natural progression, following these investments, is the identification of key operational measures and indicators that can be used to monitor and evaluate performance of these systems. This measure is focused on an effort to baseline/benchmark management processes and systems to identify the set of indicators that collectively can be used to evaluate the ongoing effectiveness and efficiency of the Laboratory business related management systems.

Measure

BNL and DOE/BAO will partner to perform a baseline study that identifies those Management Systems that can be effectively compared.

Performance Level Metrics

Outstanding	Study partially implemented.
Excellent	Study completed with specific indicators identified.
Good	Study is scoped.
Marginal	Study is not scoped.
Unsatisfactory	No progress.

3.1.2.2 Work-for-Others (WFO) Business Systems

The weight of this measure is 50%.

Purpose and Background

Approximately 20 percent of Laboratory research funding comes from Work for Others (WFO), with well over half related to non-DOE research interests (NIH, NASA, etc.). Assessment activities have indicated the need to enhance the WFO business and information management processes, primarily associated with the billing system. These measures are focused on improving the billing system and the development of a database that will be shared between the DOE/BAO and the Laboratory in accordance with the Office of Science's 2001 Report and in accordance with BNL's FY 2001 Self-Evaluation of WFO-Federal. This database will aid in ensuring that information used in the billing process essential to both the Laboratory and DOE are accurate and current.

3.1.2.2.1 Improve WFO Billing System

Performance Level Metrics

Outstanding	WFO Billing System owned and operated by BNL.
Excellent	WFO Billing System has improved but short of full BNL ownership.
Good	WFO Billing System reconciles satisfactorily monthly.
Marginal	WFO Billing System continues to experience missing data and incomplete information.
Unsatisfactory	WFO Billing System had material errors.

3.1.2.2.2 Develop WFO Database

Performance Level Metrics

Outstanding	Shared database is completely operational.
Excellent	Shared database plan completed.
Good	Shared database scoped.
Marginal	Shared database is not fully scoped.
Unsatisfactory	No progress in planning of a shared database.

Measure 3.1.3 Workforce/Diversity

The weight of this measure is 2%.

Purpose and Supporting Information

As a Federal Contractor, the Laboratory has the responsibility to take affirmative action to recruit diverse people--women, minorities and people with disabilities. Special efforts should be taken to diversify higher-level positions such as in the Official and Managers and Professional job categories, which have been identified as underutilized.

Annually, Human Resources and the Diversity Office develop a recruitment program targeting underrepresented people. Of particular interest for BSA is to improve the representation in managerial and professional positions. Internally, one-on-one meetings with management, as well as meetings with Laboratory Committees and training classes for managers, are conducted to increase the awareness of the manager's responsibility for affirmative action.

To support these efforts, the Laboratory provides funds to the Diversity Office. The Diversity Initiative, Professional Associates Program, Science and Engineering, and similar programs offer complimentary funding to departments for recruiting and hiring underrepresented people.

This measure serves to ensure these initiatives are effective in ensuring the availability of viable diversity candidates in the pool of individuals applying for managerial and professional positions.

Measure

Percentage improvement from average of 1998 and 1999 position openings in "Officials & Managers" and "Professionals" for which at least one viable diversity candidate was included in the applicant pool

Performance Level Metrics

Outstanding	10% or more improvement.
Excellent	5% - 9.9% improvement.
Good	Maintain current level + or – 4.9%.
Marginal	5% - 9.9% decline.
Unsatisfactory	10% or more decline.

Measure 3.1.4 Corporate Involvement

The weight of this measure is 3%.

Purpose and Supporting Information

Brookhaven Science Associates believes that active corporate involvement is a critical success factor in the management of BNL. To implement this, BSA is committed to the following types of activities at BNL:

- Providing highly skilled candidates for senior management positions at the Laboratory.
- Providing proven management systems and processes for enhancing business operations.
- Facilitating the implementation of these with long-term assignments of key leaders and short-term assignments of subject matter experts.
- Conducting management assessments in various areas of Laboratory operations.
- Providing strategic guidance to the science, technology and cleanup missions of the Laboratory.
- Facilitating the exchange of ideas and practices between other organizations affiliated with BSA corporate partners that bring benefits to DOE and/or BNL.

Metrics

Performance relative to each item will be determined as acceptable or unacceptable. Performance related to the measure, as a whole, will be determined as follows:

Outstanding	All 6 items determined acceptable.
Excellent	5 of the 6 items determined acceptable.
Good	4 of the 6 items determined acceptable.
Marginal	3 of the 6 items determined acceptable.
Unsatisfactory	2 or less of the 6 items determined acceptable.

Laboratory Management and Operations Supporting Assessment Measures (SAMs)

Combined with the specific performance measures discussed above, these activities define the scope of planned institutional level assessments that support BSA's Management and Business Processes Objective. Performance relative to these assessments is considered in the evaluation of the Laboratory's self-assessment program addressed under Measure 3.1.1.1, Assessment and Improvement.

Human Resources: BSA will conduct assessments of the benefits and compensation programs to ensure consistency with appropriate benchmarks and best practices to enable attracting and retaining a world-class research staff and highly competent support staff.

Legal services: BSA will consider the following indicators to evaluate the effectiveness and efficiency of Legal services:

- Innovative improvements to Laboratory's Legal Services.
- Timeliness and quality of work products submitted for DOE approval and use are supported by timely, sound, and thoroughly researched legal advice.
- Thoughtful consideration of alternative dispute resolution (ADR).
- Compliance with DOE approved legal management procedures.

Note: specific measures and expectations associated with the Legal Service SAM will be provided to the Laboratory in writing by the Contracting Officer (CO)

Property Management: BNL will conduct a comprehensive review of the Laboratory's property management processes used for control and accountability of the Government's assets. A Balanced Scorecard (BSC) plan will be used as the primary self-evaluation tool.

Procurement Management: BNL will conduct a comprehensive review of the control and accountability of the Laboratory's procurement business processes. A Balanced Scorecard (BSC) plan will be used as the primary self-evaluation tool.

Requirements Management: A cornerstone of SBMS is the requirements management process, which systematically links external regulatory requirements to internal management processes and procedures. BSA will conduct an assessment to determine the effectiveness of this process.

Technology Transfer BSA will consider the following information to evaluate the effectiveness of Technology Transfer processes:

Agreements: Level of customer satisfaction as derived from annual CRADA and Non-Federal WFO customer satisfaction surveys.

Intellectual Property: (1) Level of patent licensing activity as measured by the amount of licensing related revenue received by the Laboratory and the quality of BSA patent properties as measured by the percentage of patent properties that have been licensed; (2) Utilization of appropriate mechanisms to protect Laboratory-generated data and degree of interaction with DOE Patent Counsel regarding Intellectual Property data rights issues.

Training and Qualifications: BSA will use the following indicators to monitor the status of satisfying training and qualification requirements for Laboratory employees and transient staff. Management action will be taken to address significant deviations from expected performance trends:

- % of individuals linked to job-specific training assessments.
- % of training and qualification requirements completed by staff.

Uncosted Balances: BSA will monitor the percentage of uncosted operating balances of SC and EM funding (approximately 85 percent of DOE funding for BNL) to operating funds received in the financial plan. Management action will be taken to ensure uncosted operating balances are maintained at levels needed to ensure continuity of operations (expected target <10%).

Work-for-Others (WFO), Federal and Non-Federal: BNL will evaluate WFO customer satisfaction and proposal processing cycle time. The March 16, 2001, Office of Science Review will be used as guide for this evaluation. Additionally, BSA will monitor progress towards the preparation of a document that summarizes all of the requirements of the WFO Program including Federal programs.

Objective 3.2 Environment, Safety, and Health

BNL will develop, implement, and continuously improve management systems, processes, and services to effectively and efficiently manage environment, safety, and health risks associated with the legacy vulnerabilities and work associated with support of ongoing Laboratory mission activities.

The weight of this Objective is 15%.

Measure 3.2.1 Legacy ES&H Risk Management

The weight of this measure is 30%.

3.2.1.1 Site Hazard Footprint Management

The weight of this measure is 50%.

Purpose and Supporting Information

Long-term legacy ES&H risk management requires assurance that site hazards are primarily associated with on-going mission or mission support activities. Site hazards that are not associated with on-going work can present significant legacy vulnerabilities. They also present inefficiencies because the resources and attention required to effectively manage the hazards detract from work that is clearly connected to the Laboratory mission.

This measure is intended to begin establishing a "hazard footprint" for conditions that are not directly related to achieving the Laboratory mission and have not been transitioned to EM for disposition/ resolution. In the context of this measure, a "footprint" is defined as records in the form of drawings, databases, and other documents, which collectively define the scope of hazard sufficient to enable effective management (i.e., location, source term, volume, etc.) and definition of areas regarding future decommissioning needs. The focus will be on establishing the footprint for radiological hazards.

Non-mission related radiological hazards will be identified through field walk-throughs; interviews with current and former employees; document review and limited characterization surveys; and identified on-site plans as appropriate. Buildings will be prioritized based on knowledge and experience of the BNL Radiological Controls Division. The following buildings are scheduled to be base-lined in FY02:

- 490 Medical
- 463 Biology
- 801 EENS/Medical
- AGS Lead Yard
- AGS Steel Yard
- AGS Block Yard
- Greenhouses
- Large Animal Facilities
- 830 EENS
- 555 Chemistry
- 462 Hot Shop

Once the footprint is established, management processes can be developed and action can be taken to address specific issues. This initiative is a natural continuation of the facility review project because it develops and implements management processes designed to aid in the prevention of the need for any such site-wide initiative in the future.

Measure

Baseline Radiological Footprint

Performance Level Metrics

Outstanding	footprint established for >= 90 % of priority buildings
Excellent	footprint established for 80-89% of priority buildings
Good	footprint established for 60-79% of priority buildings
Marginal	footprint established for 40-59% of priority buildings
Unsatisfactory	footprint established for < 40% of priority buildings

3.2.1.2Chemical Disposition Upon Employee Termination

The weight of this measure is 50%.

Purpose and Supporting Information

Proper and timely disposition of the chemicals when employees are terminated minimizes the potential for generation of future legacy risks. Laboratory termination processes contain checks to ensure transfer of responsibilities for the management of chemicals when employees are terminated. This measure is focused on evaluating the adequacy and effectiveness of those processes.

The following approach will be used:

- Measure the percentage of terminated staff with 100% disposition of assigned chemical containers within one month of termination date.
- All terminations that occurred within the previous12 months will be evaluated.

Performance Level Metrics

	Score
Outstanding	>90 % of terminated staff with all chemicals dispositioned
Excellent	80 – 90 % of terminated staff with all chemicals dispositioned
Good	70 – 79.9 % of terminated staff with all chemicals dispositioned
Marginal	60 – 69.9 % of terminated staff with all chemicals dispositioned
Unsatisfactory	<60 % of terminated staff with all chemicals dispositioned

Measure 3.2.2 On-going ES&H Risk Management

The weight of this Measure is 70%.

3.2.2.1 Pollution Prevention

The weight of this Measure is 20%.

Purpose and Supporting Information

Investment in pollution prevention can help BSA save money, create a safer workplace, and help protect the environment at the same time. The Laboratory's Pollution Prevention (P2) is focused on incorporating P2 into work planning (facility design, experimental review, process assessment, and work planning).

Proposals for funding pollution prevention opportunities are submitted to the Laboratory Pollution Prevention Council based on several factors, including funding availability, return on investment, and achieving goals associated with specific waste streams. Project plans are developed to an appropriate level based on complexity for funded P2 projects.

This measure focuses on driving site-wide involvement in the Pollution Prevention Program. It will help develop a rich database of pollution prevention opportunities so when funding becomes available we are prepared to take advantage of the opportunity. It enhances the communication of best practices and lessons learned. Additionally, having clear evidence of site-wide management commitment to, and, implementation of, Pollution Prevention initiatives, helps the Laboratory to be recognized as leaders in the DOE community and improves our chances of obtaining additional pollution prevention funds.

Measure

Each organizational unit must demonstrate active involvement in the BNL Pollution Prevention Program. For the listed organizational units (see list below), "Demonstrating involvement" is evidenced by submitting at least two pollution prevention project proposals to the P2 Council and/or two success stories and/or lessons learned stories. Other organizational units not specifically listed shall demonstrate

involvement by establishing a pollution prevention objective in their organization's EMS Program.

List of organizations that must submit P2 Proposals and success stories/lessons learned:

Basic Energy Sciences Directorate
EENS Directorate
Environmental Management Directorate
Facilities and Operations Directorate
Finance and Administration Directorate
High Energy & Nuclear Physics Directorate
Life Sciences Directorate

Performance Level Metrics

Outstanding	90% of organizational units demonstrated involvement in the P2 Program.
Excellent	80-89% of organizational units demonstrated involvement in the P2 Program.
Good	70-79% of organizational units demonstrated involvement in the P2 Program.
Marginal	60-69% of organizational units demonstrated involvement in the P2 Program.
Unsatisfactory	50-59% of organizational units demonstrated involvement in the P2 Program.

3.2.2.2 Transportation Safety Implementation

The weight of the Measure is 30%.

Purpose and Supporting Information

In FY00, BAO performed an assessment of the Laboratory's Radioactive Material Transportation Safety Program. The assessment indicated substantial regulatory vulnerabilities associated with transportation safety of radioactive and hazardous materials, particularly with transportation of those materials on site. Additionally, there were several occurrence reports related to transportation issues at BNL.

BSA responded by developing a Transportation Safety Re-engineering Project Plan. The project was focused on defining the Laboratory program. It was completed in FY01 and an implementation plan was developed. To ensure the program is effectively deployed and implemented, focus needs to continue through FY02. The purpose of this measure is to satisfactorily complete key milestones associated with field deployment/implementation which are scheduled for FY02, and prepare the Laboratory for a DOE independent assessment of the Transportation Safety Program required by DOE Order 460.2.

3.2.2.2.1 Complete the Following Milestones

The weight of this measure is 50%

- Develop and implement hazardous material training for Contractor Vendor Orientation, General Employee Training and General Awareness Training by 11/30/01.
- Complete development of a "Hazardous Material Transportation" web site to facilitate communication of hazmat requirements to the staff by 1/30/02.
- Identify personnel who need the general awareness training and train them, and modify their Job Training Assessments (JTA's) as appropriate by 3/30/02.
- Identify, prioritize, and schedule Safety Assessment Methodologies (SAMs) needed throughout the departments/divisions to cover current transportation activities by 3/30/02.

Performance Level Metrics

Outstanding	4 of 4 completed ahead of schedule.
Excellent	3 of 4 completed within 30 days of scheduled due date.
Good	2 of 4 completed within 30 days of scheduled due date.
Marginal	1 of 4 completed within 30 days of scheduled due date.
Unsatisfactory	None completed within 30 days of scheduled due date.

3.2.2.2.2 Develop Safety Assessment Methodologies (SAM's) Schedule for FY02
The weight of this measure is 50%

Performance Level Metrics

Outstanding	100% of SAM's completed ahead of schedule.
Excellent	90-99% of SAM's completed in accordance with the HMTM within 14 days of scheduled due date.
Good	80-89% of SAM's completed in accordance with the HMTMwithin 14 days of scheduled due date.
Marginal	70-79% of SAM's completed in accordance with the HMTMwithin 14 days of scheduled due date.
Unsatisfactory	<70% of SAM's completed in accordance with the HMTMwithin 14 days of scheduled due date.

3.2.2.3 OSHA Reportable Injury Management

The weight of this measure is 30%.

Purpose and Supporting Information

BNL seeks to achieve excellence in worker safety and health protection through its Integrated Safety Management Program. Although a lagging indicator of performance, the frequency and severity of worker injuries provide management information regarding the effectiveness of the Laboratory's Integrated Safety Management System. BNL will seek to improve the following reportable rates:

Total Recordable Case Rate (OSHA Recordables) TRCR
Lost Workday Case Rate (LWCR)
Lost Work Day Rate (LWDR)

Where:

$$\text{TRCR per 100 FTEs} = \frac{\text{Number of OSHA reportable injuries/illnesses} \times 200{,}000}{\text{Total Hours Worked}}$$

$$\text{LWCR per 100 FTEs} = \frac{\text{Number of Lost Workday Cases} \times 200{,}000}{\text{Total Hours Worked}}$$

$$\text{LWDR per 100 FTEs} = \frac{\text{Number of Days Away From Work+Restricted Days} \times 200{,}000}{\text{Total Hours Worked}}$$

The following Table reflects expectations in these areas. The metrics used for this performance measure are derived from the DOE 5-year averages published on *CAIRS Table S3, Injury and Illness Ranking of Research Contractors.* The metric compares the most recent complete BNL calendar year data to the DOE 5-year Research Averages on the same S3 Table (e.g., for 2001, 1996 through 2000).

Table 1

Metric/Weight	Outstanding	Excellent	Good	Marginal	Unsatisfactory
TRCR/0.33 **LWDR/0.33** **LWCR/0.33**	<30%	<15% to 30%	+/-15% of Mean	>15% to 30%	>30%

Table 2

Score	Performance for TRCR, LWCR & LWDR
4	<30% of Mean
3	<15% to 30%
2	+/- 15%
1	>15% to 30%
0	>30%

Composite Score = TRCR score x .33 + LWDR score x.33 + LWCR score x .33

Table 3

Rating Level	Composite Score Based on Table 2
Outstanding	3.5 – 4.0
Excellent	2.5 – 3.49
Good	1.5 – 2.49
Marginal	0.5 – 1.49
Unsatisfactory	<0.5

3.2.2.4 Chemical Safety Performance

The weight of this measure is 20%.

Internal and external assessment activities have indicated the need for the Laboratory to continue focusing on chemical management operational performance. Laboratory requirements, processes and tools are intended to ensure clear accountability and control of chemical inventories. This measure is intended to evaluate the effectiveness of those processes and tools in managing chemical risks.

3.2.2.4.1 Chemical Inventories and Accountabilities

BNL will seek to ensure that chemical containers are properly inventoried. The following approach will be used:

- Survey all containers in seven rooms - (Use lottery to select departments/divisions/rooms). Note: The definition of "container" and "room" are consistent with 29 CFR 1910.1200. No more than one test per organization.

- Survey will be limited to rooms with more than 50 chemical containers. If the room contains more than 400 containers, the room will count as two rooms.
- BNL and BAO will jointly participate in the compilation and evaluation of this data.
- The field verification will be unannounced.

The following Table reflects expectation in this area where the composite score is determined by 70% of the percentage of containers with barcodes plus 30% of the percentage of bar coded containers assigned to the correct owners (current staff or visitors at the time of field verification). The following equation will be used to determine the composite score:

$$[\sum_{i=1}^{n}((0.7)(C_{Bi})+(0.3)(C_{Oi}))]/n$$

C_{Bi}= % of containers with barcodes for the i_{th} room.
C_{Oi}=% of containers for the i_{th} room assigned to correct owners
n= # of rooms

Performance Level Metrics

	Composite Score
Outstanding	>90 %
Excellent	80 – 90 %
Good	70 – 79.9 %
Marginal	60 – 69.9 %
Unsatisfactory	<60 %

3.2.2.4.2 Peroxide Forming Compounds

The potential for peroxide forming compounds in Laboratory chemicals presents particular risks for the Laboratory environment. This measure is intended to ensure that peroxide forming chemicals are being managed in accordance with Laboratory requirements.

BNL will ensure the proper storage and control of peroxide forming chemical containers as per BNL ESH Standard 2.1.1. The following approach will be used:

- Survey all peroxide forming compound containers in five rooms from the pool of rooms that CMS indicates contain a chemical from Table 1 of ESH 2.1.1 (Use lottery to select departments/divisions/rooms).
- No more than 1 test per organization.
- BNL and BAO will jointly participate in the compilation and evaluation of this data.
- The field verification will be unannounced.
- Measure the percentage of containers properly labeled, stored, and tested.

Performance Level Metrics

	Score
Outstanding	>90 %
Excellent	80 – 90 %
Good	70 - 79.9 %
Marginal	60 - 69.9 %
Unsatisfactory	<60 %

Environment, Safety, and Health Supporting Assessment Measures

Combined with the specific performance measures discussed above, these activities define the scope of planned institutional level assessments that support BSA's ES&H performance objective. Performance relative to these assessment activities is considered in the evaluation of the Laboratory's self-assessment program addressed under Measure 3.1.1.1, Assessment and Improvement.

Environmental Compliance: The Laboratory has established a program to evaluate compliance to applicable regulations on a three-year cycle. The focus of the Laboratory's programmatic assessment in this area during FY02 will be in the following areas:

- Air Emissions (radioactive and non-radioactive; i.e., Clean Air Act and NESHAPs)
- PCB Management

Maintain ISO 14001 Registration: BSA has committed to maintaining BNL's ISO 14001 Environmental Management System registration to satisfy requirements in the BSA/DOE contract and the DOE/EPA Memorandum of Agreement (3/98). In order to maintain the registration certificate, the Laboratory will undergo a surveillance audit in Spring 2002. Two independent auditors will conduct a four-day audit covering a subset of the EMS Program requirements.

Note: Internal programmatic assessments of select EMS Program requirements will be conducted as part of the QA Program Verification of key Management Systems (see measure 3.1.1.2 for further description).

Progress Toward Accelerator Authorization Basis Upgrades: BSA has a 5-year schedule for upgrading accelerator authorization basis documents to fully conform to current requirements and expectations. BSA will review progress towards this and take management action, as necessary, to ensure progress is made to complete the upgrade in accordance with the June 23, 2000 Accelerator Facilities Implementation Plan and SBMS requirements.

Radiological Control: BSA is required to conduct a comprehensive assessment of the Radiological Control Program over a three-year period. In FY02, the Laboratory programs and implementation will be assessed in the following areas:

- ALARA Program
- Organization and Administration
- External Dosimetry
- Radiological Dose Reports to individuals
- Emergency Exposure Situations
- Instrumentation and Calibration
- Release Criteria

In addition to those assessment activities, BSA will consider the following indicators for evaluation of the Laboratory's ALARA Program. Management action will be taken to address deviations from expected performance trends.

- Personnel Contamination Events
- Radioactive Exposures

Recycling of Solid Waste: BSA will monitor the solid waste recycling rate based on established and accepted performance measures to continue as an active participant in Brookhaven Town's Solid Waste Recycling Program. Management action will be taken (e.g., improve employee awareness through communication with BNL employees via our custodial workforce, Brookhaven Bulletin, Monday Memo, etc.) as appropriate to improve the percentage of solid waste recycled.

Regulated Waste Management: BSA will monitor and evaluate the following indicators to evaluate regulated waste management activities. Management action will be taken to address significant deviations from expected performance trends:

- Track and trend waste generation rates for routine and non-routine waste streams. Communicate results to Laboratory management and waste generating organizations.
- Assess compliance of BNL waste accumulation activities by assessing compliance at all 90-day accumulation areas and a representative sampling of Satellite Accumulation Area's (SAA's).
- Assess compliance with DOE Order 435.1, Radioactive Waste Management, WMD's 435.1 Implementation Plan, and the BNL Radioactive Waste Management Basis Document.
- Perform all regulatory reporting on time.

Safety and Health: In the area of safety and health, BSA will evaluate elements of the Laboratory programs and implementation for the analysis and controls for the following:

- Design Review Program
- OSHA Regulated Carcinogens
- NFPA 70E Compliance
- Biohazards/Biotoxins
- Construction Safety Inspection
- Industrial Exhaust Ventilation

Worker Involvement in Work Planning and Control: A critical element of Integrated Safety Management is the involvement of workers in work planning and control activities. BSA conducted baseline surveys in FY1999 and FY2000. A reassessment will be conducted as a measure of the worker's perspective of their involvement in work planning and control activities. The results will be evaluated to help direct management response to observed trends.

Objective 3.3 Site Infrastructure, Facilities, and Operations

The weight of this Objective is 10%.

BNL will maintain and improve the efficiency and reliability of the site infrastructure and manage projects to upgrade site facilities to meet the objectives of the Strategic Facility Plan and Master Site Plan. Site operations will be managed to ensure effective protection of personnel, property, the general public, national security interests, proprietary information, classified matter, and sensitive unclassified information.

3.3.1 Pursue Alternative Financing for Infrastructure Projects

The weight of this Measure is 30%.

Purpose and Supporting Information

It is apparent that available infrastructure funding at BNL (capital replacement, capital renewal) is not adequate to meet past, current and future needs. Under funding of infrastructure has persisted throughout the 1990's and has resulted in very large backlogs of infrastructure requirements. Therefore, BSA will continue to evaluate whether "third-party" (non-DOE) project funding is available, feasible and should be used to meet selected infrastructure needs.

Depending on the nature of the project, third-party funding could come from a variety of sources, including energy services performance contractors (ESPC's), utility energy services contracts (e.g., with NYPA, LIPA, KeySpan), private sector developers, BSA financing, New York State financing, or grants from other government (non-DOE) agencies.

We believe that the most attractive method of funding an infrastucture need at BNL is through "direct" federal funding (construction/operating funds) of the project or need. Absent that funding, third-party funding may be an acceptable means of accomplishing needed projects. Our criteria for using third-party funding is:

- No DOE or BNL funding available for the project.

- Project investment could be repaid using the savings resulting from project implementation – preferably from investments with less than a five-year payback (future operating funds would not be "mortgaged.")

- The project could be repaid by available/related revenues paid by willing "customers" deriving direct benefits (e.g., space charges on new or renovated space) and other benefits accrued to the Laboratory

(attracting new research, improved user experience, improved image, improved quality of work-life for employees).

- The project is deemed by BSA to be essential to continued Laboratory operations and no reasonable alternative funding exists (e.g., available funding committed to equal or higher priority projects).

BSA has already begun to seek opportunities to use "third-party funding beginning in FY2001. This measure will drive BSA's continued commitment to on-going efforts.

Measures

- Make opportunities known to potentially interested parties through solicitations, advertisements, targeted letter writing, and other interactions - 1 point awarded per solicitation, advertisement, letter campaign, etc.
- Meet with and work with "third-parties" to investigate and develop economically attractive projects - 2 points awarded per formal discussion/negotiation with a third-party.
- Enter into agreement or contract to fund (or partially fund) and/or develop an acceptable/feasible third-party funded project(s) at BNL - 8 points awarded per third-party project.

Performance Level Metrics

Performance on this Third-Party Project (TPP) effort will be evaluated by adding the above point values for efforts in FY2002, as follows:

Outstanding	=>8 points
Excellent	=7-8 points
Good	=5-6 points
Marginal	=3-4 points
Unsatisfactory	=<3 points

3.3.2 Project Management

The weight of this Measure is 70%.

Purpose and Supporting Information

In a regime of very scarce infrastructure resources, BSA will manage its construction and construction-like projects to ensure scope, schedule and cost objectives are readily met. Approved projects are completed on time, within budget, and meet baseline expectations. Uncosted carryovers are minimized.

This performance measure is for all capital-funded construction projects, excluding Strategic Systems (formerly Major Projects and Major Systems Acquisitions) and EM Projects. It is measured as a composite that accounts for the percent of capital funds committed and costed per fiscal year, the percent of projects on schedule, and the number of capital construction projects with scope completed within the Total Estimated Cost (TEC). The formula for calculating the performance is:

PROJECT RATING (PM): $(PM) = 0.2\,(a^1 + a^2) + 0.2\,(b^1 + b^2) + 0.2\,(c)$

Each variable is discussed below as separate measures:

3.3.2.1 Funds Committed: (a^1)

$(a^1) = \frac{\textit{Actual Funds Committed}}{\textit{Total Planned Funds Committed}}$

Description of Proposed Method

$\frac{\text{Actual Present Year Funds [Line Item + GPP] Committed}}{\text{Total Planned [Line Item + GPP] Committed}}$

Notes

1. Measure funds commitment performance only for funds received in the fiscal year being measured.
2. Total planned funds committed excludes planned contingency funds (usually about 12 percent).
3. Only planned (requested) project funds will be included.
4. Funds committed (obligated) will continue to be measured when contracts and PO's are "pinned," as reflected in the B&E Report.

3.3.2.2 Funds Costed: (a^2)

$(a^2) = \frac{\textit{Actual Funds Costed}}{\textit{Total Planned Funds Costed}}$

Description of Method

$\frac{\text{Actual Present Year Funds [Line Item + GPP] Costed}}{\text{Total Planned [Line Item + GPP] Costed}}$

Notes

1. Measure funds costed performance for funds received in fiscal year being measured.
2. Only planned (requested) project funds will be included.

3.3.2.3 Project Schedule Compliance (GPP and IHEM): (b^1)

$(b^1) = \frac{\textit{No. of GPPs Completed on Schedule}}{\textit{No. of GPPs Scheduled to Complete}}$

Description of Method

1. BNL and DOE agree on actual completion milestone dates and document and track them in the Plant Engineering Monthly Project Report.
2. List all GPP and IHEM projects with TEC >$300K and completion milestone falling in current fiscal year.
3. Determine how many were completed on-time using construction "substantially complete" as complete.
4. "Substantially complete" means project is ready for beneficial occupancy or use, as described in the

Project Management Control System.

Notes

1. GPP and IHEM project schedules will be established in cooperation with BHG in continuation of current approval process.

3.3.2.4 Project Schedule Compliance (Line Item): (b^2)

$$(b^2) = \frac{\text{No. of Line Item Milestones}(^1)\text{ Completed on Schedule}}{\text{No. of Line Item Milestones}(^1)}$$

(1) Key controlled Milestones

Description of Method

- BNL and DOE agree on actual baseline completion milestone dates and document and track them in the Plant Engineering Monthly Report.
- List all Line Item projects with key controlled milestones falling in the current fiscal year.
- Determine current year milestones completed on or ahead of schedule.

Notes

1. Key controlled milestones are those described in the approved Project Management Plan:

2. Design Start
   - Design Complete
   - Construction Start
   - Construction Complete

3. Construction complete is defined as "substantially complete."

4. "Substantially complete" means project is ready for beneficial occupancy or use as described in the Project Management Control System.

3.3.2.5 Scope Completed Within Approved Baseline (Line Item, GPP and IHEM [>300K]): (c)

$$(c) = \frac{\textit{Projects completed within Approved Baseline}}{\textit{Total Projects Complete}}$$

Description of Method

1. Review Line Item, GPP and IHEM (>$300K TEC) projects completed through the fiscal year.

2. Upon project completion, determine whether project baseline scope was completed within the approved baseline Total Estimated Cost (TEC).

3. Determine the total number of Line Item, GPP and IHEM (>$300K TEC) projects completed within approved baseline (approved original project and approved baseline change proposals)

4. Determine total number of projects completed.

Calculate:

$$(c) = \frac{\text{Projects Completed within Approved Baseline}}{\text{Projects Completed}}$$

Notes:

1. Justifiable BCPs will be approved by DOE-BHG for legitimate scope changes or reductions (i.e., due to program changes, reasonable unforeseen project conditions, new regulatory requirements, etc.)

2. Plant Engineering is not currently managing any projects classified as "Strategic Systems" under LCAM (formerly Major Projects and Major System Acquisitions). Presently, the RHIC Project is the only such project at BNL.

Performance Level Metrics

Outstanding	=0/90 to 1.00
Excellent	=0.80 to 0.89
Good	=0.70 to 0.79
Marginal	=0.60 to 0.69
Unsatisfactory	=less than 0.60

Site Infrastructure, Facilities, and Operations Supporting Assessment Measures (SAMs)

Combined with the specific performance measures discussed above, these assessment activities define the scope of planned institutional level assessments that support BSA's Site Infrastructure, Facilities, and Operations performance objective. Performance relative to these assessments is considered in the evaluation of the Laboratory's self-assessment program addressed under Measure 3.1.1.1, Assessment and Improvement.

Building Manager Program: BSA will monitor progress towards enhancement of the Laboratory's building manager program. The focus in FY 02 will be on ensuring progress in enhancing Facility Use Agreement documents and processes.

Safeguards and Security: BNL is required to conduct Safeguards and Security operations to ensure effective protection of national security interests, proprietary information, personnel, property, and the general public. To ensure these requirements are met, the BNL Safeguards and Security Division will conduct an annual self-assessment on the following elements:

- Program Planning and Management
- Protection Program Operations
- Information Security
- Material Control and Accountability
- Personnel Security

Counterintelligence: If the DOE Office of Counterintelligence or another DOE entity does not conduct an annual inspection of the CI Program, BSA/BNL will conduct an internal self-assessment on the following elements:

- Personnel Management/Resource Allocation
- Foreign Visits and Assignments
- Investigations/Liaison Activities
- CI Cyber Security
- CI Awareness
- Executive Management/Program Management
- CI Analysis/Threat Assessment

Emergency Planning and Preparedness:

Several aspects of the Laboratory's infrastructure related to emergency preparedness are aging (e.g. site siren system, plectron system, and response support centers). Site facilities and hazards have also changed. Due to the investment required for upgrades, the laboratory needs to thoroughly evaluate the associated costs and benefits. Three such analysis will be conducted in FY02. Each are briefly described below.

Evaluation of the Site Siren System: The site siren system has been in place for over 30 years. Currently it is used to inform Laboratory personnel of an emergency, and to alert emergency response personnel to report to their emergency response locations. *A* cost-benefit analysis of the site siren system will be conducted to determine if, based upon the current hazard conditions at the Laboratory, it is still a viable system.

Monitoring and Assessment Support Center (MASC): The MASC was developed and was utilized primarily for emergencies initiated by the HFBR or the BMRR. There are other radiological hazards, which still exist at BNL which can be managed out of the MASC. A cost-benefit analysis, taking into account the current hazards at BNL, will be conducted to determine if the MASC is still a viable entity, and make recommendations to either eliminate it completely or modify its functionality.

The Plectron System: One of the primary means of warning BNL personnel of lab-wide events is the Plectron tone-alert warning system. The current system is many years old and components are failing and in need of repair. Federal Communications Commission rules will be changing in the next four years to require a change in the frequencies used at BNL, including the Plectron frequency. An analysis of the usefulness of the current system will be performed. The analysis will include recommendations regarding replacement with a state-of-the art system including the ability and costs associated with incorporating the system into buildings' public address system.

Emergency Plan Consolidation:. The BNL Emergency Plan, maintained by the Emergency Services Division, deals primarily with radiological and to a lesser extent chemical hazards. A security plan maintained by the Safeguards and Security Division deals with security-related events and response. The laboratory is developing a single plan for BNL to cover all hazards including security. That information which will cause this new plan to become classified will only be incorporated by reference. BSA will monitor progress toward emergency plan consolidation and take actions as necessary to ensure timely completion of the consolidation initiative.

Energy Management: BSA will monitor building and energy consumption rates based on established and accepted performance measures to continue BNL's long history of active energy management. Management action will be taken, within the constraints of available resources, towards meeting Federal (Executive Order) and DOE goals.

Management of Maintenance Activities: BSA will continue its initiative to better understand and quantify BNL's maintenance requirements, resource shortfalls, and existing backlogs. This effort will be multi-pronged and will be aligned with DOE's efforts to better understand maintenance issues across the DOE laboratory complex.

- BSA will continue its senior facilities management initiative to perform a bottoms-up measurement of laboratory maintenance and capital renewal performed, annual needs and back-logs. We will strive to use facility management industry standard definitions, and will work with all levels of DOE to improve the consistency of maintenance reporting.

- BSA will conduct a Condition Assessment Survey (CAS) of its remaining (not surveyed in past three years) structures in FY02. This survey will allow the Laboratory to "catch up" on CAS, and will complete the three-year cycle. Buildings will be inspected using qualified, experienced personnel and "high-level, walk-through" techniques. The purpose of this inspection will be to improve BNL's maintenance backlog numbers and building condition data

- BSA will continue to populate requested fields in DOE's FIMS database. FIMS data will be quality checked to assure accuracy using statistical sampling techniques.

- BSA will respond accurately and timely to DOE-HQ maintenance data calls.

Objective 3.4 Information Technology

BNL will provide a cost effective, reliable, and secure computing/communications infrastructure for administrative computing, and support to scientific programs for unique computing problems.

The weight of this Objective is 10% of total.

Performance Level Metrics

Note:, All the measures within this objective are date driven milestones. The following metrics apply:

Metric: Each milestone will be awarded points as follows based on accomplishment of that milestone:

Outstanding	Bettering a milestone date by >30 days	4 Points
Excellent	Meeting a milestone date	3 Points
Good	Missing a milestone date by <45 days	2 Points
Marginal	Missing a milestone date by >45 days	1 Point
Unsatisfactory	Missing a milestone date by >90 days	0 Points

The evaluation of the Performance Measure will be the numerical average of the scores of the supporting milestones.

3.4.1 Cyber Security

The weight of this Measure is 55%.

Purpose and Supporting Information

BNL will maintain/improve a Cyber Security program that is designed to protect the unclassified portion of the computing and networking infrastructure from attacks originating from inside or outside the Laboratory, based on: social engineering, physical destruction of network components, or electronic attacks utilizing the network and the Internet. The program must balance the need for openness and the science mission against the security required to reduce the threats to acceptable levels. Two elements of this measure are:

- Completion of the Laboratory's computer security program according to DOE guidelines and directives,

and as documented in BNL's Cyber Security Program Plan (CSPP).

- Establishing mechanisms to test, review and evaluate the CSPP to ensure it's value as a "living document;" as such, it will continue to meet the rapidly evolving cyber security risks, with response to external/internal threats balanced appropriately against the needs of the Laboratory science mission.

Performance Measure Milestones

3.4.1.1 Cyber Security Program Plan implementation – *Modified by M077*

The weight of this Measure is 50%.

1. Complete the deployment of Kerberos (token-based, single sign-on, authentication system) and the phase-out of clear-text, reusable passwords by 03/31/02.
2. Based on the results of the Kerberos pilot, evaluate and deploy a Kerberos (token-based, strong authentication system) pilot, using Lightweight Directory Access Protocol (LDAP) as the common Application Program Interface (API) by 9/30/02.
3. To ensure an effective host-based security architecture, complete the deployment of HP Openview, with emphasis on installing agents on the scientific desktops by 12/31/01.
4. Begin implementation of the Cyber Security Application strategy developed in FY01. The strategy will address the security requirements of both mission/enterprise applications and infrastructure applications. 01/31/02

4.4.1.2 CSPP Test, Review, and Evaluation Mechanisms

The weight of this Measure is 50%.

1. Establish a formal review process for the CSPP with Cyber Security Operations, Department Chairs ("Line Management"), the Cyber Security Advisory Council (CSAC), Counterintelligence, and DOE/BAO, focused on the need for continual upgrade of the Program. 12/31/01
2. Establish a plan for utilizing the results produced by the MITTENS (Monitoring Independent Trends to Enhance Network Security) tool and distributing the resultant assessment/advice site-wide. This should include strategy for how BNL (i.e. BNL System Administrators) should respond to MITTENS output as well as a process for incorporating any newly-detected threats into the CSPP review/upgrade process. 04/30/02
3. Establish a process for the review of scientific IT requirements in order to determine those impacts on BNL's Cyber Security program that could force additional IT investments. For example, Network upgrades, driven by the requirements of scientific programs for increased bandwidth (OC12) will require hardware upgrades to maintain an effective Perimeter Defense Network. 04/30/02
4. Introduce a formal threat analysis program as described in the BNL CSPP, including a description of how results of associated risk assessments will drive changes to the CSPP. 09/30/02
5. Develop a plan for responding to the Cyber Security "paradigm shift", predicted within the next 3-5 years, i.e. a dramatic change in strategy/technology, not to be confused with "continuous improvement". Experts predict increased intensity of attacks using strategies and techniques that will greatly outpace current defense mechanisms. The plan must include mechanisms for raising Laboratory awareness as well as defining the approaches required to keep pace with technology advances -- which will affect both the threats and the defense strategies. As the Cyber Security environment changes, the Critical Assumptions on which the BNL CSPP was established will no longer be true, driving a total re-engineering of the Program. 09/30/02

3.4.2 Scientific Computing Infrastructure

The weight of this Measure is 45%.

Purpose and Supporting Information

BNL will continue to develop and maintain a scientific computing infrastructure that is fully supportive of the Laboratory's scientific mission, focusing on those areas where leveraging existing expertise and local/regional collaborations can produce significant improvement over the current status. This includes:

- Strengthening and upgrading the existing Visualization Program to address the visualization and data analysis requirements for the major BNL scientific initiatives--in particular, for RHIC and ATLAS.
- Strengthening and upgrading the scientific computing resources present in the BNL Computing Facility (BCF), to provide strategic value to the major scientific programs at the Laboratory, as well as to local/regional collaborations.
- Inaugurating a program of New Technology Implementation Assessments (NTIAs). Within this program, a specific new information technology will be investigated for a given Laboratory program/application, by mutual agreement with program/application owner.

Performance Measure Milestones

3.4.2.1 Visualization Program

The weight of this Measure is 33.3%.

1. Implement and support a high-speed visualization system based on parallel processing techniques on a Linux Cluster platform. Milestone date: 02/28/02
2. Develop and deploy remote visualization methods using Linux clusters as visual servers with visual workstations on the scientists' desktops as clients. Milestone date: 06/30/02

3.4.2.2Computing Resources

The weight of this Measure is 33.3%.

1. Upgrade the high-performance computing resources required for support of Laboratory scientific initiatives; particularly the hardware and advanced system administration for the BNL Linux Cluster (BLC). This includes augmentation of the cluster processors by at least 50% and deployment of a Storage Area Network for both the Linux and Sun systems. Milestone date: 09/30/02
2. Commence installation and testing of a prototype configuration for the BNL Riken QCDOC machine by 09/30/02.

3.4.2.3New Technology Implementation Assessments (NTIAs)

The weight of this Measure is 33.3%.

1. Perform a prototype New Technology Implementation Assessment for integrating the Java programming language into the AGS Control system by 7/31/02.
2. Establish a service for Parallel Processing Conversion of legacy computer codes, so that they may take advantage of the speedup and cost effectiveness inherent in distributed memory cluster processors. Milestone date: 02/28/02
3. Initiate a program of investigating, deploying and supporting Computational Grid technology; which is likely to serve as the mechanism for a number of multi-site collaborations, including US Atlas and the DOE SciDac programs. Milestone date: 09/01/02

Information Technology Supporting Assessment Measures (SAMs)

Combined with the specific performance measures discussed above, these assessment activities define the scope of planned institutional level assessments that support BSA's Information Technology objective. Performance relative to these assessments is considered in the evaluation of the Laboratory's self-assessment program addressed under Measure 3.1.1.1, Assessment and Improvement.

Information Services: BNL will continue to enhance the institutional-level information services needed to improve the site-wide computing/communications infrastructure, with emphasis on those services that will both improve efficiency and reduce cost while ensuring that the requirements of BNL's scientific mission are met. FY02 initiatives focus on developing a Network Bridging Plan and developing a resource-efficient NT server environment. BSA will monitor progress towards achieving the goals of these initiatives.

World Wide Web: BNL will continue to establish the World Wide Web support model that will address the Laboratory's requirements. This model is defined by a centralized component or Center of Excellence for technical support and a distributed component, for support of local web functionality. The Center of Excellence will be created for the application of web technologies to support BNL scientific and administrative initiatives, with focus on web application programming, web server, and database technologies. BSA will monitor progress towards these initiatives.

Objective 3.5 Communications and Trust

The Laboratory will enhance the foundation of trust and confidence it has built by: strengthening existing relationships and building new relationships with key stakeholders, elected and appointed officials, civic leaders, and other important constituencies; effectively communicating the Laboratory's scientific initiatives and accomplishments; generating community enthusiasm for Laboratory research programs; and working to fulfill the education mission shared with DOE.

The weight of this Objective is 10%.

Purpose and Supporting Information

The Laboratory's Communications, Community Involvement, and Education Program plans serve as a guide to the many activities and initiatives that will be pursued in FY02 to fulfill this objective and to help meet the expectations and performance measures of science and operational departments and divisions across the Laboratory.

Each element of the plan will include associated self-assessment activities for the appropriate organization (e.g. CIGPA, Departments, and Divisions). Stakeholder feedback will be collected and research and self-assessments will be conducted throughout the year to determine program effectiveness, to evaluate program utility, and to make mid-course corrections as necessary.

Performance towards this objective will be based on accomplishment of the goals set forth in the Communications, Community Involvement and Education plans. BNL and BAO will conduct an independent peer review process or other selected process that both parties agree is necessary and appropriate to evaluate the Laboratory's communications, community involvement, and education programs. The peer review or other process selected will focus primarily on the measures below.

Measures

3.5.1 Building Regional and National Recognition

The weight of this Measure is 50%.

The objective of this measure is to increase regional and national recognition of the Laboratory and the Department of Energy. Strategic issues include enhancing the effectiveness of Laboratory communications with internal and external publics, showcasing the results of Lab research with special emphasis on RHIC and other high profile initiatives that produce exciting and scientifically interesting new information, building relationships with the press, and developing and improving the Laboratory's use of electronic media.

Other science initiatives, e.g. a BNL nanoscience center, are carefully tracked and communications plans are prepared and updated in anticipation of developments during FY02.

The World Wide Web continues to grow in importance as a medium for national recognition of scientific progress. During FY02, the Laboratory will reorganize its educational web site, revamping and updating graphics to complement and conform to the main scientific pages. New content will be introduced, target audiences will be refined and the metatags and other aspects of the educational web site will be upgraded to optimize search ability and enhance ease of use for visitors.

The Laboratory will design and launch a new web-based virtual publication to aid in showcasing science developments, exploring their significance and excitement and recognizing the role funding agencies, particularly the Department of Energy, in making them possible.

The Lab's Office of Educational Programs (OEP) has played an important but limited role in gaining regional and national recognition for the Laboratory and the Department of Energy. The strategic thrust of OEP for FY02 will be the planning of a new strategic direction and the development of a comprehensive plan to enhance current activities, explore new directions, and fulfill the education mission that the Laboratory shares with the DOE. An educational programs plan will be prepared and initiation of the plan will commence by 4th quarter FY02.

3.5.2 Stakeholder Involvement and Understanding

The weight of this Measure is 50%.

The Laboratory is committed to ensuring that internal and external stakeholders have access to information about issues of interest and concern, and to providing two-way channels of communication so that stakeholders feel there is a frank and open dialogue with Laboratory management on issues of importance. Responsibility for stakeholder involvement on specific projects rests primarily with the project line manager with strong support from the Laboratory in terms of issues identification, community involvement training programs, information materials development, communications activities such as meetings and roundtables, collection and evaluation of community input, and feedback to the community. For FY02, the Laboratory will:

- Develop an Issues Anticipation Process, linked to the BNL Article Tracking Database and other internal and external sources. The goal of this process will be to better systematize the identification of potential and nascent issues that may affect the Laboratory and its stakeholders, to analyze these issues at some early stage in their development, and to begin developing appropriate and effective programs, focused on the issues.
- Upgrade the training concentration of Level 1 and 2 managers in the community involvement and decision-making process from the current 40 percent to 75 percent.
- Establish an advisory committee and introduce a new volunteerism initiative, entitled Partnership BNL, that will provide support for employee volunteers who wish to act as project managers for selected non-profit, charitable and other civic initiatives. The committee will analyze requests, arrange for support, review feedback on approved programs, and plan recognition for volunteers.

The Laboratory expects the results of a just-completed employee survey to become available at the outset of FY02. Analysis of the communications elements of that survey will be used to generate a plan to upgrade and enhance employee communications for FY02 and beyond. The plan to guide this upgrade will be developed at the close of 1st quarter FY02; employee and senior management feedback will be gathered and modifications

will be incorporated during 2nd quarter; and initial implementation of the plan is expected for 3rd quarter.

In addition, work will be initiated to introduce an HTML/PDF-based searchable archive for the Brookhaven Bulletin

APPENDIX H

(Modified by Mod M077 dated May 31, 2002)

SMALL BUSINESS, SMALL DISADVANTAGED BUSINESS, WOMEN-0WNED SMALL BUSINESS, AND HUB ZONE SMALL BUSINESS SUBCONTRACTING PLAN

Contract No. DE-AC02-9810886
Modification No. M077

ANNUAL SUBCONTRACTING PLAN

Identification Data

Contractor: BROOKHAVEN SCIENCE ASSOCIATES, LLC

Address: BROOKHAVEN NATIONAL LABORATORY
Upton, New York 11973-5000

Contract Number: DE-AC02-98CH10886

Item/Service: BASIC RESEARCH

Total Amount of Contract (Including Options): $ 440,641,000

Period of Contract Performance (DAY, MO. & YR.): FY 2002

1. **Type of Plan (check one)**

__X__ **Individual Contract Plan** - Individual contract Plan, as used in this subpart, means a subcontract plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purpose may be allocated on a prorated basis to the contract.

____ **Master Plan** - Master Plan, as used in this subpart, means a subcontracting plan that contains all of the required elements of the individual plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approve.

____ **Commercial Products Plan** - Commercial Plan, as used in this subpart, means a subcontracting plan that covers the offeror's fiscal year and that applies to the entire producting of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line). The contractor must provide a copy of the approved plan. **NOTE:** A commercial plan is the preferred the preferred type of subcontracting plan for contractors furnishing commercial items.

2. **Goals**

State separate dollar and percentage goals for small business concerns, small disadvantaged business concerns, women-owned business concerns, veteran-owned small businesses, disabled veteran-owned small businesses, and HUB Zone Small Business Concerns as subcontractors, for the basic and each option year, as specified in FAR 19.704

A. Total estimated dollar value of all planned subcontracting, i.e., with all types of concerns under this contract, is $ 144,214,000 .

B. Total estimated dollar value and percent of planned subcontracting with small businesses (includes small disadvantaged businesses, women-owned small businesses, HUB Zone Small businesses veteran-owned small businesses and disabled veteran-owned small businesses): (% of "A")
$ 79,317,700 and 55 %

1. Type of Plan (check one)

X **Individual Contract Plan** - Individual contract Plan, as used in this subpart, means a subcontract plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purpose may be allocated on a prorated basis to the contract.

____ **Master Plan** - Master Plan, as used in this subpart, means a subcontracting plan that contains all of the required elements of the individual plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approve.

____ **Commercial Products Plan** - Commercial Plan, as used in this subpart, means a subcontracting plan that covers the offeror's fiscal year and that applies to the entire producting of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line). The contractor must provide a copy of the approved plan. **NOTE:** A commercial plan is the preferred the preferred type of subcontracting plan for contractors furnishing commercial items.

2. Goals

State separate dollar and percentage goals for small business concerns, small disadvantaged business concerns, women-owned business concerns, veteran-owned small businesses, disabled veteran-owned small businesses, and HUB Zone Small Business Concerns as subcontractors, for the basic and each option year, as specified in FAR 19.704

A. Total estimated dollar value of all planned subcontracting, i.e., with all types of concerns under this contract, is $ 144,214,000 .

B. Total estimated dollar value and percent of planned subcontracting with small businesses (includes small disadvantaged businesses, women-owned small businesses, HUB Zone Small businesses veteran-owned small businesses and disabled veteran-owned small businesses): (% of "A")
$ 79,317,700 and 55 %

C. Total estimated dollar value and percent of planned subcontracting with Small disadvantaged businesses: (% of "A"):

$7,210,700 and 5 %

D. Total estimated dollar value and percent of planned subcontracting with Women-owned small businesses: (% of "A"):

$7,210,700 and 5 %

E. Total estimated dollar value and percent of planned subcontracting with HUB Zone small businesses: (% of "A"):

$2,884,280 and 2 %

F.a. Total estimated dollar value and percent of planned subcontracting with Veteran-owned businesses: (% of "A"):

$2,163,210 and 1.5 %
BNL recognizes its responsibility to incorporate this new goal but will defer implementation until guidance is placed in the FAR.

F.b. Total estimated dollar value and percent of planned subcontracting with Disabled Veteran-owned businesses (% of "A"):

$2,163,210 and 1.5 %

G. Total estimated dollar value and percent of planned subcontracting with LARGE BUSINESS (% of "A"):

$64,896,300 and 45 % Balance of Procurements to GOCO's, Foreign and Universities.

H. Description of all the products and/or services to be subcontracted under this contract, and the types of businesses supplying them; (i.e., SMALL BUSINESS (SB), SMALL DISADVANTAGED BUSINESS (SDB), WOMEN-OWNED SMALL BUSINESS (WOSB), LARGE BUSINESS (LARGE), HUB ZONE SMALL BUSINESS (HUBZONE), VETERAN-OWNED SMALL BUSINESSES, DISABLED VETERAN-OWNED SMALL BUSINESSES.

Subcontracted Product/ Service	SB	SDB	WOSB	HUBS	LARGE	VET	DIS/VET
A&E	X	X	X		X	X	X
CONSTRUCTION	X	X	X	X		X	X
R&D	X	X	X		X	X	X
SERVICE	X	X	X	X	X	X	X
MAT'L/SUPPLIES	X	X	X	X	X	X	X
ELECTRICAL	X	X	X	X	X	X	X
ADPE	X	X	X		X	X	X
EQUIPMENT (MAJOR)	X	X	X		X	X	X

I. A description of the method used to develop the subcontracting goals for Small business, small disadvantaged business, women-owned small business concerns, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns (i.e., explain the method used and state the quantitative basis (in dollars) used to establish the percentage goals, in addition, how the areas to be subcontracted to small business, small disadvantaged business, women-owned small business concerns, veteran-owned small business concerns, disabled veteran-owned small business and HUB Zone small business concerns were determined, and how the capabilities of small business, small disadvantaged business, women-owned small business, veteran-owned small business/disabled veteran-owned small business, HUB Zone small business concerns were determined – include any source lists used in the determination process).

To develop these goals, small business, SDB, WOSB and Hubzone activity was measured in terms of past annual procurement dollars awarded, also the percentage of annual dollars purchased from these small business concerns, plus total number of these entities doing business with the Laboratory and self-perception of the potential success of BNL's Small/Disadvantaged Business Program. (Veteran-owned small business and disabled small businesses will also be measured as such). Directories consulted include: Try Us, The National Minority Business Directory, NY/NJ MPC Directory and NYEX Enterprises.

J. Indirect costs have been _____ have not been __X__ included in the dollar and percentage subcontracting goals stated above. (check one)

K. If indirect costs have been included, explain the method used to determine the proportionate share of such costs to be allocated as subcontract to small business, small disadvantaged business, women-owned small business concerns, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns.

N/A

I. A description of the method used to develop the subcontracting goals for Small business, small disadvantaged business, women-owned small business concerns, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns (i.e., explain the method used and state the quantitative basis (in dollars) used to establish the percentage goals, in addition, how the areas to be subcontracted to small business, small disadvantaged business, women-owned small business concerns, veteran-owned small business concerns, disabled veteran-owned small business and HUB Zone small business concerns were determined, and how the capabilities of small business, small disadvantaged business, women-owned small business, veteran-owned small business/disabled veteran-owned small business, HUB Zone small business concerns were determined – include any source lists used in the determination process).

To develop these goals, small business, SDB, WOSB and Hubzone activity was measured in terms of past annual procurement dollars awarded, also the percentage of annual dollars purchased from these small business concerns, plus total number of these entities doing business with the Laboratory and self-perception of the potential success of BNL's Small/Disadvantaged Business Program. (Veteran-owned small business and disabled small businesses will also be measured as such). Directories consulted include: Try Us, The National Minority Business Directory, NY/NJ MPC Directory and NYEX Enterprises.

J. Indirect costs have been _____ have not been __X__ included in the dollar and percentage subcontracting goals stated above. (check one)

K. If indirect costs have been included, explain the method used to determine the proportionate share of such costs to be allocated as subcontract to small business, small disadvantaged business, women-owned small business concerns, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns.

N/A

3. **Program Administrator**

Name, title, position within the corporate structure, and duties and responsibilities of the employee who will administer the contractor's subcontracting program.

Name: DENNIS HALL

Title: SMALL & SMALL DISADVANTAGED BUSINESS LIAISON OFFICER

Address: PROCUREMENT & PROPERTY MANAGEMENT DIVISION – BLD. 355
BROOKHAVEN NATIONAL LABORATORY, UPTON, NY 11973-5000

Telephone: 631/344-3173

Duties: has general overall responsibility for the contractor's subcontracting program, i.e., developing, preparing, and executing subcontracting plans and monitoring performance relative to the requirements of this particular plan. These duties include, but are not limited to, the following activities:

A. Developing and promoting company-wide policy initiatives that demonstrate the company's support for awarding contracts and subcontracts to small business, small disadvantaged business, women-owned small business concerns, HUB Zone small business concerns, veteran-owned small business concerns, and disabled veteran-owned small business concerns and assure that those identified small business concerns are included on the services they are capable of providing;

B. Developing and maintaining bidder's lists of small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns from all possible sources;

C. Ensuring periodic rotation of potential subcontractors on the bidder's lists;

D. Ensuring that procurement "packages" are designed to permit the maximum possible participation of small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns; within purchasing laws and regulations;

E. Make arrangements for the utilization of various sources for the identification of small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns such as the SBA's Procurement Marketing and Access Network Pro-Net, the National Minority Purchasing Council Vendor Information Service, the Office of Minority Business Data Center in the Department of Commerce, National Association of Women Business Owner Vendor Information Service, and the facilities of local small business, minority and women associations, and contact with Federal agencies' Small Business Program Managers;

F. Overseeing the establishment and maintenance of contract and subcontract award records;

G. Attending or arranging for the attendance of company counselors at Small Business Opportunity Workshops; Minority and Women Business Enterprise Seminars, Trade Fairs, Procurement Conferences, etc.;

H. Ensure small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns are made aware of subcontracting opportunities and how to prepare responsive bids to the Laboratory;

I. Conducting or arranging for the conduct of training for purchasing personnel regarding the intent and impact of Public Law 95-507 on purchasing procedures;

J. Monitoring the Laboratory's performance and making any adjustments necessary to achieve the subcontract plan goals;

K. Preparing, and submitting timely, required subcontract reports;

L. Coordinating the Laboratory's activities during the conduct of compliance reviews by Federal agencies;

M. Reviewing solicitations to remove statements, clauses, etc., which may tend to restrict or prohibit small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns, and HUB Zone small business participation, where possible;

N. Ensuring that the proposal review board documents its reasons for not selecting low bids submitted by small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns;

O. Ensuring the establishment and maintenance of records of solicitations and subcontract award activity;

P. Ensuring that Historically Black Colleges and Universities and minority institutions shall be afforded maximum practicable opportunity (if applicable);

F. Overseeing the establishment and maintenance of contract and subcontract award records;

G. Attending or arranging for the attendance of company counselors at Small Business Opportunity Workshops; Minority and Women Business Enterprise Seminars, Trade Fairs, Procurement Conferences, etc.;

H. Ensure small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns are made aware of subcontracting opportunities and how to prepare responsive bids to the Laboratory;

I. Conducting or arranging for the conduct of training for purchasing personnel regarding the intent and impact of Public Law 95-507 on purchasing procedures;

J. Monitoring the Laboratory's performance and making any adjustments necessary to achieve the subcontract plan goals;

K. Preparing, and submitting timely, required subcontract reports;

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M. Reviewing solicitations to remove statements, clauses, etc., which may tend to restrict or prohibit small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns, and HUB Zone small business participation, where possible;

N. Ensuring that the proposal review board documents its reasons for not selecting low bids submitted by small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns;

O. Ensuring the establishment and maintenance of records of solicitations and subcontract award activity;

P. Ensuring that Historically Black Colleges and Universities and minority institutions shall be afforded maximum practicable opportunity (if applicable);

4. Equitable Opportunity

The contractor agrees to ensure that small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns will have an equitable opportunity to compete for subcontracts. The various efforts include, but are not limited to, the following activities:

A. Outreach efforts to obtain sources:

(i) Contacting small, small disadvantaged women-owned small business, HUB Zone small business, veteran and disabled veteran-owned small business concerns trade associations.

. Buyers are encouraged to use the NY/NJ Regional Minority Vendor Directory, the Dept. Of Labor Surplus Trends Directory, and other directories provided by local small business and SDB organizations.

(ii) Contacting small business development organizations (identifying small business development organizations).

. The Small Business Administration, NY/NJ Minority Purchasing Council, The National Contract Management Association, The National Minority Purchasing Council, L.I. Small Business Association, The Office of Minority Business Administration.

(iii) Attending small, small disadvantaged (minority), women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business procurement conference and trade fairs (to the extent known, identifying specific procurement conferences and trade fairs and dates).

- Suffolk County Women's Initiative Trade Fair & Conference,
- DOE S/SDB Semi-annual Conference, Argonne
- NY/NJ Minority Purchasing Council Trade Fair S/SDB Opportunity
- BNL Credit Card/Small Business Matchmaker Event
- LI Government & Private Assistance Trade Fair.

(iv) Potential sources will be requested from SBA's Pro-Net System.

(v) Utilizing the Internet to attract new sources.

B. Internal efforts to guide and encourage purchasing personnel;

(i) Presenting workshops, seminars, and training programs including training on the use of PRONET;

(ii) Establishing, maintaining, and using small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business

source lists, guides, and other data for soliciting subcontracts; and

(iii) Monitoring activities to evaluate compliance with the subcontracting plan.

(iv) Trip reports will be issued to management after attendance at each function. Also, if attendance results in the discovery of potential new sources, the SDBLO will issue a memo to the cognizant buyer/contracts specialist(s) stating the firm, the commodity and a directive to utilize the firm and if not, the reason(s) why not. Responses will be required within 90 days. The SDBLO will monitor responses.

C. Additional efforts:_____

- Credit Card User Counseling
- Education courses – Buyers, Specialists, SDBLO.
- A Home Page section devoted to Small Business affairs.
- Internal Procurement Planning for Depts. (set-asides).
- "Partnering" arrangements between Large and SDB firms.
- Establishment of Individual and Section Goals: Each Buyer/Contract Specialist is expected to individually meet the Laboratory's S/SDB/WOSB/Hub/ Veteran/Disabled Veteran goal for the year. Also, each section of PPM, is expected to meet this goal on a cumulative basis. This will be made part of each Buyer/Contracts Specialist's appraisal.
- Incentive Awards: A "Minority Buyer of the Year" program has been established to recognize those Buyers/Contract Specialists who best meet the objectives of BNL's SDB Program.

5. Flow-Down Clause

The contractor agrees to include the provisions under FAR 52.219-8, "Utilization of Small Business Concerns," in all sub-contracts that offer further subcontracting opportunities. All subcontractors, except small business concerns, that receive subcontracts in excess of $500,000 ($1,000,000 for construction) must adopt and comply with a plan similar to the plan required by FAR 52.219-9 "Small Business Subcontracting Plan." (FAR 19.704 (a) (4)).

Such plans will be reviewed by comparing them with the provisions of Public Law 95-507, and assuring that all minimum requirements of an acceptable subcontracting plan have been satisfied. The acceptability of percentage goals shall be determined on a case-by-case basis depending on the supplies/services involved, the availability of potential small, small disadvantaged, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business subcontractors, and prior experience. Once approved and implemented, plans will be monitored through the submission of periodic reports, and/or, as time and availability of funds permit, periodic visits to subcontractors facilities to review applicable records and subcontracting program progress.

source lists, guides, and other data for soliciting subcontracts; and

(iii) Monitoring activities to evaluate compliance with the subcontracting plan.

(iv) Trip reports will be issued to management after attendance at each function. Also, if attendance results in the discovery of potential new sources, the SDBLO will issue a memo to the cognizant buyer/contracts specialist(s) stating the firm, the commodity and a directive to utilize the firm and if not, the reason(s) why not. Responses will be required within 90 days. The SDBLO will monitor responses.

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- Establishment of Individual and Section Goals: Each Buyer/Contract Specialist is expected to individually meet the Laboratory's S/SDB/WOSB/Hub/ Veteran/Disabled Veteran goal for the year. Also, each section of PPM, is expected to meet this goal on a cumulative basis. This will be made part of each Buyer/Contracts Specialist's appraisal.
- Incentive Awards: A "Minority Buyer of the Year" program has been established to recognize those Buyers/Contract Specialists who best meet the objectives of BNL's SDB Program.

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Such plans will be reviewed by comparing them with the provisions of Public Law 95-507, and assuring that all minimum requirements of an acceptable subcontracting plan have been satisfied. The acceptability of percentage goals shall be determined on a case-by-case basis depending on the supplies/services involved, the availability of potential small, small disadvantaged, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business subcontractors, and prior experience. Once approved and implemented, plans will be monitored through the submission of periodic reports, and/or, as time and availability of funds permit, periodic visits to subcontractors facilities to review applicable records and subcontracting program progress.

6. Reporting and Cooperation

The contractor gives assurance of (1) cooperation in any studies or surveys that may be required by the contracting agency or the Small Business Administration; (2) submission of periodic reports such as utilization reports, which show compliance with the subcontracting plan; (3) submission of Standard Form (SF) 294, "Subcontracting Report for Individual Contracts," and SF 295, "Summary Subcontract Report," in accordance with the instructions on the forms; and (4) ensuring that large business subcontractors with subcontracting plans agree to submit Standard Forms 294 and 295.

Reporting Period	Report Due	Due Date
Oct 1 – March 31	SF-294	04/30
Apr 1 – Sept 30	SF-294	10/31
Oct 1 – Sept 30	SF-295	10/31
Oct 1 – Sept 30	Forecast Opportunities	10/31

7. Record keeping

The following is a recitation of the types of records the contractor will maintain to demonstrate the procedures adopted to comply with the requirements and goals in the subcontracting plan. These records will include, but not be limited to, the following:

A. If the prime contractor is not using Pro-Net as its source for small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns and HUB Zone small business concerns, list the names of guides and other data identifying such vendors;

B. Organizations contacted in an attempt to locate small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns, HUB Zone small business sources;

C. On a contract-by-contract basis, records on all subcontract solicitations over $100,000 which indicate for each solicitation (1) whether small business concerns were solicited, and if not, why not; (2) whether small disadvantaged business concerns were solicited, and if not, why not; (3) whether women-owned small businesses were solicited, and if not, why not; and (4) reason for failure of solicited small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns or HUB Zone small business concerns to receive the subcontract award;

D. Records to support other outreach efforts, e.g., contacts with minority, small business, women-owned small business, veteran owned small business concerns, disabled veteran-owned small business concerns, HUB Zone small business trade associations, attendance at small business, minority, women-owned small business procurement conferences and trade fairs;

E. Records to support internal guidance and encouragement, provided to buyers through (1) workshops, seminars, training programs, incentive awards; and (2) monitoring of activities to evaluate compliance; and

F. On a contract-by-contract basis, records to support subcontract award data including the name, address and business size of each subcontractor. (This item is not required for company or division-wide commercial products plans.)

I. Additional records: _____

This subcontracting plan was submitted by:

Signature: Brian P. Sack

Typed Name: Brian P. Sack

Title: Assistant Laboratory Director
Finance & Administration

Date Prepared: 3/4/02

Phone No.: 631-344-3317

Approval:

Agency: DOE/BHO

Typed Name: Rita J. Smotherman

Title: Rita J. Smotherman
Contracting Officer

Date Prepared: 4/3/02

Phone No.: (631) 344-5920

E. Records to support internal guidance and encouragement, provided to buyers through (1) workshops, seminars, training programs, incentive awards; and (2) monitoring of activities to evaluate compliance; and

F. On a contract-by-contract basis, records to support subcontract award data including the name, address and business size of each subcontractor. (This item is not required for company or division-wide commercial products plans.)

I. Additional records: _____

This subcontracting plan was submitted by:

Signature: Brian P. Sack

Typed Name: Brian P. Sack

Title: Assistant Laboratory Director
Finance & Administration

Date Prepared: 3/4/02

Phone No.: 631-344-3317

Approval:

Agency: DOE/BAO

Typed Name: Rita J. Smotherman

Title: Rita J. Smotherman
Contracting Officer

Date Prepared: 4/3/02

Phone No.: (631) 344-5920

ATTACHMENT 1

A. The estimated total dollars available in the Laboratory's FY 2002 budget (based on current BNL budget projections) are as follows:

Operating Funds.....$392,903,000
Equipment Funds.....$ 30,673,000
General Plant Projects.....$ 6,120,000
Major Construction Projects.....$ 10,945,000

TOTAL.....$440,641,000

B. The estimated total dollars available for procurement are as follows:

Operating Funds.....$120,190,000
Equipment Funds.....$ 14,896,000
General Plant Projects.....$ 3,012,000
Major Construction Projects..... $ 6,116,000

TOTAL.....$144,214,000

C. Present indications are that the dollars available for Procurement next year may be broken down further into
the following categories:

1. Operating Funds
   a. Materials & Supplies.....$ 59,544,000
   b. Purchased Labor.....$ 45,291,000
   c. Stockroom.....$ 15,355,000

OPERATING SUBTOTAL.....$120,190,000

2. Equipment Funds.....$ 14,896,000
3. General Plant Projects.....$ 3,012,000
4. Major Construction Projects.....$ 6,116,000

TOTAL.....$144,214,000

E. The Laboratory plans to place approximately 55% of its procurement dollars ($144,214,000) with small businesses, roughly as follows:

a. Socio-economically Disadvantaged Business.....5%
($7,210,700)

b. Small Business Set-Aside.....40%
($57,685,600)

c. Women Owned Small Business.....5%
($7,210,700)

d. Hub-Zone Small Business.....2%
($2,884,280)

e. Veteran Owned Small Business.....1.5%
($2,163,210)

f. Disabled Veteran-Owed Small Business.....1.5%
($2,163,210)

TOTAL.....55%
($79,317,700)

g. Records to support other outreach efforts: Contact with Disadvantaged (Minority) and Small Business Trade Associates, etc. Attendance at small and minority business procurement conferences and trade fairs.

h. Records to support internal activities to guide and encourage buyers: Workshops, Seminars, Training programs, etc. Monitoring activities to Evaluate compliance.

i. On a contract-by-contract basis, records to support subcontract award data to include name and address of subcontracts.

	Prior Year Goals Through Sept. 30, 2001	**Prior Year Achievements Through Sept. 30, 2001***
Total Subcontract dollars	$151,069,000	$101,205,225
Small Business dollars	83,087,950	63,802,642
Small Business percent	55%	63.04%
Small Disadvantaged dollars	7,553,450	5,975,056
Small Disadvantaged percent	5%	5.9%
Small Woman Owned dollars	7,553,450	5,771,289
Small Woman Owned percent	5%	5.7%
Hub Zone dollars	3,021,380	286,085
Hub Zone percent	2%	0.3%

*Excludes purchases from government sources, GOCO's, Foreign and Universities which amounted to $25,411,227.

GOALS PROJECTED FOR CURRENT YEAR

	Standard
Total Subcontracting dollars	$144,214,000
Small Business dollars	79,317,700
Small Business percent	55%
Small Disadvantaged dollars	7,210,700
Small Disadvantaged percent	5%
Small Woman-Owned dollars	7,210,700
Small Woman-Owned percent	5%
Small Hub Zone dollars	2,884,280
Small Hub Zone percent	2%
Small Veteran-Owned dollars	2,163,210
Small Veteran-Owned percent	1.5%
Small Disabled Veteran-Owned dollars	2,163,210
Small Disabled Veteran-Owned percent	1.5%

g. Records to support other outreach efforts: Contact with Disadvantaged (Minority) and Small Business Trade Associates, etc. Attendance at small and minority business procurement conferences and trade fairs.

h. Records to support internal activities to guide and encourage buyers: Workshops, Seminars, Training programs, etc. Monitoring activities to Evaluate compliance.

i. On a contract-by-contract basis, records to support subcontract award data to include name and address of subcontracts.

	Prior Year Goals Through Sept. 30, 2001	**Prior Year Achievements Through Sept. 30, 2001***
Total Subcontract dollars	$151,069,000	$101,205,225
Small Business dollars	83,087,950	63,802,642
Small Business percent	55%	63.04%
Small Disadvantaged dollars	7,553,450	5,975,056
Small Disadvantaged percent	5%	5.9%
Small Woman Owned dollars	7,553,450	5,771,289
Small Woman Owned percent	5%	5.7%
Hub Zone dollars	3,021,380	286,085
Hub Zone percent	2%	0.3%

*Excludes purchases from government sources, GOCO's, Foreign and Universities which amounted to $25,411,227.

GOALS PROJECTED FOR CURRENT YEAR

	Standard
Total Subcontracting dollars	$144,214,000
Small Business dollars	79,317,700
Small Business percent	55%
Small Disadvantaged dollars	7,210,700
Small Disadvantaged percent	5%
Small Woman-Owned dollars	7,210,700
Small Woman-Owned percent	5%
Small Hub Zone dollars	2,884,280
Small Hub Zone percent	2%
Small Veteran-Owned dollars	2,163,210
Small Veteran-Owned percent	1.5%
Small Disabled Veteran-Owned dollars	2,163,210
Small Disabled Veteran-Owned percent	1.5%

DOE-CH Form 415a (3-88)

(631) 344-3444

U.S. DEPARTMENT OF ENERGY
CHICAGO FIELD OFFICE

PRE-AWARD REVIEW FORM - SMALL/DISADVANTAGED BUSINESS SUBCONTRACTING PLAN

1

TO: Office of Small/Disadvantaged Business Utilization Date: 2-6-02

FROM: I. Drawbridge (SPECIALIST) CD BHO (BRANCH) (EXTENSION)

SUBJECT: REQUEST FOR SUBCONTRACTING PLAN APPROVAL

DE-AC02-98CH10886 (CONTRACT NO./MODIFICATION NO.) Brookhaven Science Assoc, LLC (CONTRACTOR)

$ 440,641,000 (TOTAL ESTIMATED COST) $ 440,641,000 (DOE DOLLARS)

☒ Attached is a copy of the cost proposal, the subcontracting plan review checklist, and the proposed subcontracting plan dated 10-23-01 submitted for your determination of adequacy for negotiation purposes.

☐ Attached is a Findings and Determination (F&D) requesting an exemption from the Subcontracting Plan Clause of PL 95-507.

Enclosures:
1. Cost Proposal
2. Subcontract Plan
3. Subcontacting Plan Review Checklist
4. Findings and Determination

2

TO: CD I Drawbridge (BRANCH)

FROM: Office of Small/Disadvantaged Business Utilization

COMMENTS:

☐ The clauses are not appropriate for this action
☒ The plan as submitted can be used as a basis for negotiation.
☐ The plan as resubmitted on _____ can be used as a basis for negotiation.
☐ Plan is not acceptable for the following reason(s).

SIGNED: Larry Thompson DATE: 2-6-02

White Copy - Return to CD Yellow Copy - Retain by SADBU

* U.S. GPO: 1988-645-244/70070

APPENDIX I
(Modified by Mod M077 dated May 31, 2002)

DOE DIRECTIVES

Contract No. DE-AC02-98CH10886
Modification M077

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.

CRD=Contract Requirements Document

DIRECTIVES LIST		
DATE	DOE DIRECTIVE NUMBER	SUBJECT TITLE
7/14/99	N 142.1	UNCLASSIFIED FOREIGN VISITS AND ASSIGNMENTS (Extended until 8/15/02 by DOE N 251.43 dated 2/15/02)
2/26/01	N 153.1	CONNECTIVITY TO ATMOSPHERIC RELEASE ADVISORY CAPABILITY
10/02/00	N 203.1	CRD - SOFTWARE QUALITY ASSURANCE (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
7/26/99	N 205.1	CRD - UNCLASSIFIED CYBER SECURITY PROGRAM (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
11/1/99	N 205.2	CRD - FOREIGN NATIONAL ACCESS TO DOE CYBER SYSTEMS (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
11/23/99	N 205.3	CRD - PASSWORD GENERATION, PROTECTION, AND USE (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
7/12/01	N 221.7	CRD - REPORTING FRAUD, WASTE AND ABUSE
1/12/01	N 350.6	CRD - ACCEPTANCE OF VALID WORKERS COMPENSATION CLAIMS POLICY
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)
2/5/01	N 450.4	CRD - ASSIGNMENT OF RESPONSIBILITIES FOR EXECUTIVE ORDER 13148, GREENING THE GOVERNMENT THROUGH LEADERSHIP IN ENVIRONMENTAL MANAGEMENT (Extended until 9/1/02 by DOE N 450.5, dated 8/24/01)
10/17/01	N 450.7	CRD - THE SAFE HANDLING, TRANSFER, AND RECEIPT OF BIOLOGICAL ETIOLOGIC AGENTS AT DOE FACILITIES
12/15/00	N 470.2	CRD - REPORTING UNOFFICIAL FOREIGN TRAVEL (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
4/13/01	N 471.3	CRD - REPORTING INCIDENTS OF SECURITY CONCERN
5/26/00	N 473.4	CRD - DEPARTMENT OF ENERGY BADGES (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
6/5/00	N 473.5	CRD - SECURITY AREA VOUCHING AND PIGGYBACKING (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
9/18/00	N 473.6	CRD - SECURITY CONDITIONS (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
10/26/00	N 473.7	CRD - EXPLOSIVE DETECTION PROGRAM (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
11/3/99	O 110.3	CRD - CONFERENCE MANAGEMENT
9/29/95	O 130.1	CRD - BUDGET FORMULATION PROCESS

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
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)
11/01/00	O 151.1A	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
3/22/01	O 221.1	REPORTING FRAUD, WASTE, AND ABUSE TO THE OFFICE OF INSPECTOR GENERAL
3/22/01	O 221.2	CRD - COOPERATION WITH THE OFFICE OF INSPECTOR GENERAL
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 CANCELLATION - ES&H Reporting, dated 11/7/96, Paragraph 5b(2).
9/30/95 11/7/96 01/28/00	M 231.1-1 Change 1 Change 2	ENVIRONMENT, SAFETY, AND HEALTH REPORTING MANUAL CANCELLATION - ES&H Reporting Manual, dated 11/7/96, Chapter IV. (Paragraphs 2a, 2a(1), 2a(2), 2b(1) 2b(2), 2i(3)(a) through 2i(3)(d) of Chapter II and Appendix A Cancelled by DOE N 231.1 dated 1/15/02)
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)
4/9/01	O 241.1A	CRD - SCIENTIFIC AND TECHNICAL INFORMATION MANAGEMENT
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 (Extended until 12/30/01 by DOE N 311.1 DATED 12/20/00)
9/30/96 5/8/98	O 350.1 Change 1	CRD - CONTRACTOR HUMAN RESOURCE MANAGEMENT PROGRAMS CRD - EMPLOYEE BENEFITS
7/12/01	O 350.2	CRD - USE OF FACILITY CONTRACTOR EMPLOYEES FOR SERVICES TO DOE IN THE WASHINGTON, D.C., AREA
12/6/95	O 413.1	CRD - MANAGEMENT CONTROL PROGRAM (Extended until 12/6/01 by DOE O 413.1A is published, DOE N 413.1 dated 12/10/99)
1/08/01	O 413.2A	CRD - LABORATORY DIRECTED RESEARCH AND DEVELOPMENT

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
10/13/00	O 413.3	CRD - PROGRAM AND PROJECT MANAGEMENT FOR THE ACQUISITION OF CAPITAL ASSETS
11/24/98	O 414.1	CRD - QUALITY ASSURANCE
10/13/95 11/16/95 10/24/96 11/22/00	O 420.1 Change 1 Change 2 Change 3	CRD - FACILITY SAFETY
1/08/01	O 420.2A	CRD - SAFETY OF ACCELERATOR FACILITIES
12/21/00	O 425.1B	CRD - STARTUP AND RESTART OF NUCLEAR FACILITIES
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) (Extended until 6/13/01 by DOE N 430.3 Dated 12/13/00)
6/01/01	O 433.1	CRD - MAINTENANCE MANAGEMENT PROGRAM FOR DOE NUCLEAR FACILITIES
7/9/99 8/28/01	O 435.1 Change 1	CRD - RADIOACTIVE WASTE MANAGEMENT
7/9/99 6/19/01	M 435.1-1 Change 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 1/08/01	O 440.2 Change 1 Change 2 Change 3	CRD - AVIATION
6/6/01	O 442.1A	CRD - DEPARTMENT OF ENERGY EMPLOYEE CONCERNS PRG.
5/15/00	O 443.1	PROTECTION OF HUMAN SUBJECTS
10/26/00 9/28/01	O 451.1B Change 1	NATIONAL ENVIRONMENTAL POLICY ACT COMPLIANCE PROGRAM
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 8/15/02 by DOE N 251.43 dated 2/15/02)
03/01/00	O 470.2A	CRD - SECURITY AND EMERGENCY MANAGEMENT INDEPENDENT OVERSIGHT AND PERFORMANCE ASSURANCE PROGRAM
6/30/00	O 471.1A	CRD - IDENTIFICATION AND PROTECTION OF UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION
6/30/00 10/23/01	M 471.1-1 Change 1	IDENTIFICATION AND PROTECTION OF UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION MANUAL
3/27/97	O 471.2A	CRD - INFORMATION SECURITY PROGRAM (Extended until 8/15/02 by DOE N 251.43, dated 2/15/02)

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
1/6/99	M 471.2-1B	CRD - CLASSIFIED MATTER PROTECTION AND CONTROL MANUAL
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 (Extended until 8/15/02 by DOE N 251.43 dated 2/15/02)
7/12/01	M 472.1-1B	PERSONNEL SECURITY PROGRAM MANUAL
6/30/00	O 473.2	CRD - PROTECTIVE FORCE PROGRAM
1/17/02	M 473.2-1A	FIREARMS QUALIFICATION COURSES MANUAL
6/30/00 2/20/01	M 473.2-2 Change 1	PROTECTIVE FORCE PROGRAM MANUAL
11/20/00	O 474.1A	CRD - CONTROL AND ACCOUNTABILITY OF NUCLEAR MATERIALS
11/22/00	M 474.1-1A	CRD - MANUAL FOR CONTROL AND ACCOUNTABILITY OF NUCLEAR MATERIALS
5/8/98	M 475.1-1	CRD - IDENTIFYING CLASSIFIED INFORMATION
9/28/01	O 481.1B	CRD - WORK FOR OTHERS (NON DOE FUNDED WORK)
1/03/01 9/28/01	M 481.1-1A Change 1	REIMBURSABLE WORK FOR NON-FEDERAL SPONSORED PROCESS MANUAL
1/12/01	O 482.1	CRD - DOE FACILITIES TECHNOLOGY PARTNERING PROGRAMS
1/12/01	O 483.1	CRD - DOE COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS
1/12/01	M 483.1-1	DOE COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS
8/25/00	O 551.1A	CRD - OFFICIAL FOREIGN TRAVEL
7/05/01	O 534.1A	CRD - ACCOUNTING
7/12/00	M 573.1-1	MAIL SERVICES USER'S MANUAL
5/2/01	P 141.1	DEPARTMENT OF ENERGY MANAGEMENT OF CULTURAL RESOURCES
6/10/00	P 413.1	PROGRAM AND PROJECT MANAGEMENT POLICY FOR THE PLANNING, PROGRAMMING, BUDGETING, AND ACQUISITION OF CAPITAL ASSETS
5/08/01	P 470.1	INTEGRATED SAFEGUARDS AND SECURITY MANAGEMENT POLICY
6/23/92	1270.2B	SAFEGUARDS AGREEMENT WITH THE INTERNATIONAL ATOMIMC ENERGY AGENCY
1/17/93	2100.8A	COST ACCOUNTING, COST RECOVERY INTERAGENCY SHARING OF INFORMATION FACILITIES
7/14/88 10/5/88 5/18/92	2110.1A Change 1 Change 2	PRICING OF DEPARTMENTAL MATERIALS AND SERVICES
6/8/92	2300.1B	AUDIT RESOLUTION AND FOLLOWUP
2/10/94	4330.4B	MAINTENANCE MANAGEMENT PROGRAM (Nuclear Facilities Portion Only) (O 433.1 Cancels 4330.4b, Chapter II)
11/9/88 6/29/90	5400.1* Change 1	GENERAL ENVIRONMENTAL PROTECTION PROGRAM

*See Part II, Partial Deletions

DIRECTIVES		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
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
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
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