

MODIFICATION NO. M072
CONTRACT NO. DE-ACO2-98CH10886

1 of 3

MODIFICATION NO. M072
SUPPLEMENTAL AGREEMENT TO
CONTRACT NO. DE-AC02-98CH10886

MODIFICATION NO. M072

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;
Modification to Article 17, Key Personnel;
Replacement of Article 132, Whistleblower
Protection for Contractor Employees; Modification to
Appendix B, 2001 Performance Measures Critical
Outcomes; Replacement of Appendix I, DOE
Directives.

PRIOR OBLIGATION:	\$ 1,609,841,195.28
INCREASE IN MODS. A067 through A071	\$ 296,630,354.90
INCREASE IN THIS MODIFICATION	\$ -0-
CURRENT TOTAL OBLIGATION:	\$ 1,906,471,550.18

THIS MODIFICATION, effective the 8th day of February 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 \$1,906,471,550.18"
2. **ARTICLE 17. DEAR 952.215-70, KEY PERSONNEL (DEC 2000).** is revised by deleting the name of Dr. John H Marburger from the list of key personnel and by adding the name of Dr. Ralph James as a key personnel.
3. **ARTICLE 132.** Delete DEAR Clause 970.5204-59, Whistleblower Protection for Contractor Employees in its entirety and replace with the attached DEAR Clause 952.203-70 Whistleblower Protection for Contractor Employees (DEC 2000).
4. **APPENDIX B – CRITICAL OUTCOME PERFORMANCE MEASURES**
 - a. The Table of Content and Introduction sections of the FY 2001 Critical Outcome Performance Measures are revised as reflected on the attached revised pages. Delete pages 2-9 of in their entirety and replace with the attached revised pages 2-9, identified as Modification No. M072.
 - b. Critical Outcome Performance Measure- 2.0 Operational Excellence, 2.1.3.2, Chemical Safety Performance is revised as reflected on the attached revised page. Delete page 1-11 Attachment 1, Appendix B in their entirety, and replace with the attached revised page 1-11,. identified as Attachment I, Modification No. M072.

- c. Critical Outcome Performance Measure –Waste Management, 3.3.2, is revised as reflected on the attached revised pages. Delete pages 1-34 and 1-36, Attachment 1, Appendix B in their entirety, and replace with the attached revised pages 1-34 and 1-36, identified as Attachment 1, Modification No. M072.

- 5. **APPENDIX I - DOE DIRECTIVES:** DOE Directives identified as Modification M066 is deleted in its entirety and replaced with the attached revised Appendix I, identified as Modification M072.

IN WITNESS WHEREOF, the parties have executed this document.

**UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY**

**BROOKHAVEN SCIENCE
ASSOCIATES, LLC**

BY: 
Robert P. Gordon
Contracting Officer
(Title)

BY: 
Brian P. Sack
Chief Financial Officer
(Title)

DATE: 2-8-02

DATE: 2/5/02

ARTICLE 17 952.215-70 -- KEY PERSONNEL (DEC 2000)

(a) The personnel listed below or elsewhere in this contract [*Insert cross-reference, if applicable*] are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel, the Contractor must: (1) Notify the Contracting Officer reasonably in advance; (2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract; and (3) obtain the Contracting Officer's written approval. Notwithstanding the foregoing, if the Contractor deems immediate removal or suspension of any member of its management team is necessary to fulfill its obligation to maintain satisfactory standards of employee competency, conduct, and integrity under the clause at 48 CFR 970.5203-3, Contractor's Organization, the Contractor may remove or suspend such person at once, although the Contractor must notify Contracting Officer prior to or concurrently with such action.

(b) The list of personnel may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel.

- List of Key Personnel:**
- Dr. Peter Paul
 - Thomas Sheridan
 - Gregory Fess, J.D.
 - Dr. Thomas Kirk
 - Dr. Richard Osgood
 - Michael Bebon
 - Margaret Lynch
 - Dr. Nora D. Volkow
 - Dr. Brian P. Sack
 - Leslie M. Hill
 - Dr. Ralph James

**ARTICLE 132 952.203-70 -- WHISTLEBLOWER PROTECTION FOR
CONTRACTOR EMPLOYEES (DEC 2000)**

(a) The contractor shall comply with the requirements of "DOE Contractor Employee Protection Program" at 10 CFR part 708 for work performed on behalf of DOE directly related to activities at DOE-owned or leased sites.

(b) The contractor shall insert or have inserted the substance of this clause, including this paragraph (b), in subcontracts at all tiers, for subcontracts involving work performed on behalf of DOE directly related to activities at DOE-owned or leased sites.

(End of Clause)

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Performance Evaluation System

Introduction

This Contract Appendix sets forth the performance evaluation system (including processes, criteria, schedules, and measures) that will be used to evaluate the overall performance of Brookhaven Science Associates (BSA) in the management and operation of Brookhaven National Laboratory (BNL) in Fiscal Year 2001 (FY01).

For the period of FY01, in accordance with Article 6 of the Contract, the Parties have agreed to use a Performance-Based Management System (PBMS) which includes clear and reasonable objectives, against which BSA's overall performance will be evaluated. For this purpose, the parties have agreed to an objective hierarchy consisting of Critical Outcomes, underlying Objectives, and associated Performance Measures with predetermined weights and metrics for the assessment of BSA's performance and the resulting determination of fee. This "Critical Outcome Process" is designed to measure overall performance and drive the improvement agenda of the Laboratory by linking Laboratory rewards, i.e., performance ratings and associated fees, to a prioritized set of objectives that have been mutually developed by DOE and BSA. DOE and BSA have mutually agreed to the specific Critical Outcomes, Objectives, and Performance Measures contained herein and, as described in Articles 6 and 7, agree to a reassessment of the process, prior to the beginning of each evaluation period.

In a July 13, 1998 memorandum, the Director of the DOE Office of Science (SC) identified high-level expectations in six critical areas that SC would use to guide its regular assessment of Laboratory performance. These critical areas are Science, Leadership, Environment Safety & Health (ES&H), Infrastructure, Business Operations, and Stakeholder Relations. In this memorandum it was noted that SC expects SC/HQ program managers, field offices, and laboratories to work in partnership to develop laboratory-specific outcomes, objectives, and measures that support these high-level expectations and to use self-assessment as a tool to ensure desired outcomes and achieve continuous improvement.

Critical Outcomes, Objectives, and Performance Measures

The Critical Outcomes identified below were developed using this guidance and the site-specific needs for improvement at BNL. DOE-BHG, CH and HQ, in partnership with BSA, have mutually agreed that the specific Critical Outcomes appropriate for BNL would be drawn from the six high level expectations identified by SC. These Critical Outcomes are those end state results having the highest level of strategic impact and value to DOE.

The Laboratory's Critical Outcomes for Fiscal Year 2001 are:

- Science and Technology** - BNL will deliver innovative, forefront science and technology aligned with DOE strategic goals in a safe, environmentally sound, and efficient manner, and will conceive, design, construct, and operate world-class user facilities.
- Operational Excellence**- BNL will conduct all work and operate all facilities with distinction, fully integrated with and supportive of its science, technology, and cleanup missions, while being fully protective of its workers, its users, the public, and the environment, and fully responsive to DOE expectations for ES&H, Quality, Facility, and Information Management.
- Leadership and Management** - BNL will be recognized by its Users, staff, stakeholders, and customers as having the highest quality leaders and staff; being a community asset, good neighbor and valued employer; being an exemplary environmental steward; and supporting its missions with the best business practices.
- Environmental Restoration** - BNL will implement the Environmental Management (EM) program in accordance with the commitments contained in the environmental restoration program memorandum of understanding (Attachment A) executed between J. Marburger, BNL and M. Holland, BAO on May 4, 2001.

Flowing from these Critical Outcomes are underlying Objectives that constitute the necessary and sufficient accomplishments for achieving the Critical Outcomes they support. They are sustainable targets over a 1-3 year timeframe and form a complete, non-redundant set of results for evaluating progress toward achievement of the Critical Outcomes.

Performance Measures are a clear, unambiguous set of conditions that, by definition and mutual agreement, determine completely the extent to which an Objective is achieved. As with the Critical Outcomes and Objectives, Performance Measures form a complete, non-redundant set of achievements to ensure adequate coverage and balanced priorities for a given Objective. Performance Measures are specific to the performance period, i.e., the fiscal year, and require the development of metrics to facilitate adjectival ratings

The Critical Outcomes, Objectives, and Performance Measures agreed to for FY01 through the DOE/BSA Critical Outcome process are contained in Attachment 1 to this Appendix.

To determine the Laboratory's overall performance, Critical Outcomes, Objectives, and Performance Measures are weighted to reflect the priority DOE attaches to the accomplishment of each. Performance against each of the Measures is then assessed and rolled up into a rating not only for each Objective and Critical Outcome area, but also for the overall performance of the Laboratory.

In FY01, the relative weights of the Critical Outcomes reflect a high priority on the success of the Laboratory's science and technology mission and the need for continued improved performance in the areas of Operational Excellence and Leadership Management and Environmental Restoration. At the Objective level, the FY01 priorities reflect an emphasis on the continued implementation and improvement of Management Systems, Leadership improvements, and Environmental Cleanup initiatives.

It is important to emphasize that the Critical Outcome process must be flexible to accommodate changes as planned improvements are realized and/or customer priorities vary. For example, even though the Critical Outcomes and Objectives are designed as sustainable targets over a 3-5 year and 1-3 year time frame respectively, their relative weights are expected to change more frequently. Reprioritization of the Critical Outcomes, Objectives, and Performance Measures is a fundamental part of the annual Critical Outcome process.

There may be a need to change some Performance Measures (or metrics), and perhaps the relative weights of the corresponding Objectives, within the fiscal year as DOE priorities shift and/or new information is acquired. The process for this is described in the SBMS Subject Area entitled "Critical Outcome Performance Measures."

Annual Self-Evaluation and Improvement Agenda

Collectively, the Critical Outcomes, Objectives, and Performance Measures constitute a major portion of the BNL Integrated Information Management System. As such, they form the basis for the Laboratory's annual Self-Evaluation process and are key elements in the Integrated Assessment and Process Improvement Programs. These are the keys to closing the feedback loop of the Laboratory's Performance-Based Management System.

On an annual basis, the Laboratory will conduct a formal Self-Evaluation of its performance relative to each Critical Outcome, Objective, and Performance Measure identified in Attachment 1 to this Appendix. This will be part of the broader Integrated Assessment Program and will become a major part of an Annual Self-Evaluation Report to DOE. This Report will also address other significant issues or opportunities that arise from the Laboratory's broader Integrated Assessment Program whether or not they impact the Critical Outcomes.

Process improvement at BNL involves two levels, Laboratory-wide and the Directorate/Department/Division level. The Laboratory's Integrated Assessment Program is the primary mechanism to identify and prioritize improvement initiatives. At the Laboratory level, these would be factored into the Critical Outcomes, Objectives, and/or Performance Measures for the next performance period. The Program will also identify and prioritize improvement actions at Directorate/Department/Division levels. This is the level at which organizational specific requirements, e.g., Balance Score Card and Property and Procurement, may be addressed.

Schedule

In order to meet customer and stakeholder expectations, as well as clearly define the path forward, the following schedule is presented.

<u>DATE</u>	<u>ELEMENT</u>
02/01	Begin development process for FY02 Critical Outcomes, Objectives, and Performance Measures.
04/01	BNL/DOE Management retreat to assess customer strategic needs, refine FY 02 Critical Outcomes, Objectives, and Measures.
04/01	Contractor submits mid-year (FY01) status report.
8/01	DOE approval of FY 02 Critical Outcomes, Objectives, and Measures
09/30/01	FY01 evaluation period ends.
09/30/01	Incorporate FY02 Critical Outcomes into Contract.
10/30/01	Contractor submits FY01 Annual Self-Evaluation report to DOE.
11/15/01	DOE transmits draft Evaluation Report to Contractor.
11/30/01	Contractor submits comments on draft report.
12/15/01	DOE transmits final FY00 Evaluation report to contractor.

Scoring

Each of the Performance Measures has an associated metric accompanied by a scale that translates the level of performance to an adjectival rating. Unless otherwise specified for a given measure, the scoring methodology for the assessment process is based upon the following adjectival ratings:

- Outstanding - Significantly exceeds the standards of performance, achieves noteworthy results, accomplishes very difficult tasks in a timely manner.
- Excellent - Exceeds expectations and standards of performance, accomplishes difficult tasks in a timely manner, and minor deficiencies are more than offset by better performance in other areas.
- Good - Meets expectations and standards of performance, actions are carried out in an efficient and timely manner, deficiencies do not affect overall performance.
- Marginal - Below the standards of performance, deficiencies cause serious delays and re-scheduling, schedules are adversely affected.
- Unsatisfactory - Well below standards of performance, deficiencies cause serious delays and re-scheduling, corrective action requires high-level management attention.

Scoring of the individual Performance Measures is based on the following point scheme:

Outstanding	4
Excellent	3
Good	2
Marginal	1
Unsatisfactory	0

For example, in any given Performance Measure, if the adjectival rating is "Excellent," a score of 3 is given to the measure. An Objective score can then be computed by multiplying the weight of each Performance Measure in that Objective by its score. These are added together to develop an overall score for each Objective which is then translated into an adjectival rating. The process is continued for the Critical Outcomes by multiplying the scores for each Objective within a given Critical Outcome by its corresponding weight, adding the resulting numbers to get a Critical Outcome score, and converting this score to an adjectival rating as done for the Objective level. The same process is then used to calculate an overall score, and then the adjectival rating, at the Laboratory level.

The following list provides that scoring range for the Objective, Critical Outcome, and Laboratory levels.

OUTSTANDING	>3.5 to 4.0
EXCELLENT	>2.5 to 3.5
GOOD	>1.5 to 2.5
MARGINAL	>0.5 to 1.5
UNSATISFACTORY	≤ 0 to 0.5

Weighting

DOE and the Contractor have agreed that the individual Critical Outcomes, Objectives, and Performance Measures will be the primary (but not the sole) criteria for determining the Contractor's final performance ratings and fee for the performance period.

For the primary criteria, the following list provides the weights of each Critical Outcome, Objective, and Performance Measure for FY01. These weights were developed in a partnership between DOE and the Contractor and were designed to achieve an appropriate balance between mission priorities and improvement needs. Relative importance of a Critical Outcome, Objective, or Performance Measure is indicated by a higher relative weight.

- **1.0 Excellence in Science & Technology** **60%**
 - Objective 1.1 Research Quality 35%
 - Objective 1.2 Relevance to DOE Missions 10%
 - Objective 1.3 Constructing & Operating Res. Facilities 30%
 - Objective 1.4 Research Program Management 25%

- **2.0 Operational Excellence** **20%**
 - Objective 2.1 ES&H Operational Performance Objective 15%
 - Measure 2.1.1 Environmental Composite 25%

Measure 2.1.2	Radiological Control Composite	25%	
Measure 2.1.3	OSHA Composite	25%	
Measure 2.1.4	Training and Qualifications Composite	25%	
- Objective 2.2	Facility Infrastructure Objective	10%	
Measure 2.2.1	Facility Project Management	30%	
Measure 2.2.2	Facilities/Infrastructure Management	30%	
Measure 2.2.3	Real Property Performance	20%	
Measure 2.2.4	Strategic Infrastructure Plan	10%	
Measure 2.2.5	Recycling of Solid Waste	10%	
- Objective 2.3	ESH&Q Management Systems Objective	45%	
Measure 2.3.1	ISMS Composite	10%	
Measure 2.3.2	EMS Composite Performance	20%	
Measure 2.3.3	IAP Implementation Performance	30%	
Measure 2.3.4	Quality Management System Verification	20%	
Measure 2.3.5	Rad Con Program Implementation Performance	20%	
-Objective 2.4	Information Infrastructure Objective	25%	
Measure 2.4.1	Information Service Composite Performance	20%	
Measure 2.4.2	Cyber Security Performance	45%	
Measure 2.4.3	World Wide Web Support Strategy	15%	
Measure 2.4.4	Scientific Computing Infrastructure Performance	20%	
-Objective 2.5	Excellence in Safeguards and Security	5%	
Measure 2.5.1	Counterintelligence	100%	
3.0 Leadership and Management			
- Objective 3.1	Leadership Objective	35%	12%
Measure 3.1.1	Talented and Empowered Employees Performance	80%	
Measure 3.1.2	Quality of Worklife Performance	10%	
Measure 3.1.3	Corporate Involvement Performance	10%	
- Objective 3.2	Communications and Trust Objective	35%	
Measure 3.2.1	Effective and Understanding Performance	70%	
Measure 3.2.2	Stakeholder Involvement Performance	30%	
- Objective 3.3	Waste Management Objective	10%	
Measure 3.3.1	Routine Waste Disposal Performance	60%	
Measure 3.3.2	Waste Shipping and disposal Performance	40%	
- Objective 3.4	Business Management Objective	20%	
Measure 3.4.1	Business Services Composite	25%	
Measure 3.4.2	Business System Composite	75%	
4.0 Environmental Restoration			
- Objective 4.1	Near Term Expectations Objective	50%	8%
- Objective 4.2	Execution of Program Activities Objective	50%	

DOE Evaluation

The DOE evaluation of the Contractor's performance, and in turn, the DOE determination of the Contractor's Fee, will be based primarily on the performance levels achieved against the weighted Performance Measures identified above. In addition, for each Critical Outcome area, the Contracting Officer will also consider any

other relevant information directly related to the Critical Outcome which is deemed to have had an impact (either positive or negative) on the Contractor's performance. Should the Contracting Officer consider other relevant information in establishing the final performance rating for any Critical Outcome, the Contractor will receive written notice of such intent and will be given the opportunity to respond in writing. This agreement does not impact DOE's rights under Article 6 – Paragraph (f) of the Prime Contract.

Change Control

Both DOE and BSA acknowledge that implementation of this performance-based contract will require both parties to continually refine selected Performance Measures, develop appropriate metrics, implement data collection and reporting mechanisms, and establish benchmarks against which to set targets for performance improvement and/or measurement. It is also recognized that a continuing effort is needed to refine the system for scoring performance in each of the Critical Outcomes included in this Appendix and for integrating these scores into an overall evaluation rating for each performance period. Therefore, a change-control process will be used by DOE and BNL to manage the content of this contractual document.

Performance Measure Development

The following concepts were used in the development of the Performance Measures and are provided for information and clarification in the process.

1. Critical Outcomes, their underlying Objectives, and associated Performance Measures should influence the improvement agenda of the Laboratory. They should incorporate best practices and reflect the DOE and BNL functional manager's judgment as to the key performance elements for overall successful operations. Best practices should include cost/risk/benefit effectiveness. Examples of key elements addressed are:
 - Quality of product
 - Timely delivery
 - Cost reduction
 - Cycle time reduction
 - User friendliness
 - Meet DOE requirements
2. Performance Measures should be results-oriented and should include criteria which are objectively measurable and allow for meaningful trend and rate of change analysis where possible, and use qualitative criteria in those cases where objective criteria will not produce meaningful evaluation results.
3. Performance Measures may reference industry business standards that are meaningful, appropriate and consistent with DOE requirements rather than arbitrary standards. To this end, benchmarking initiatives are encouraged. Setting benchmarks and targets should consider whether it is cost-effective to make further improvements or if the target level should be raised.
4. The relative weighting and metric for each Performance Measure shall be established prior to the start of the performance measurement period by mutual agreement of the Contractor and the DOE Contracting Officer. If the parties cannot reach agreement, the Contracting Officer shall have the right to establish such weights, subject to the provisions outlined in Article 7 of the Prime Contract.
5. Management approach, assumptions (including definitions), and performance rating levels shall be documented as appropriate.
6. Measures are to be developed in a team approach involving DOE personnel and Laboratory functional managers. Care should be taken to ensure that Laboratory functional managers are accountable for the

resulting measures, reflecting their status as those responsible for performance and improvement.

7. Not including a Performance Measure does not diminish the need to comply with contractual requirements in that area of performance. Failure to comply with a significant contractual requirement may result in the Contracting Officer overriding the Performance Measures.
8. The Director of the Office of Science (SC-1) has the primary responsibility for evaluating Science and Technology performance (Critical Outcome 1), but practical input also will be sought from cognizant DOE Assistant Secretaries, Office Directors, and Program Managers. The Contracting Officer has the primary responsibility for evaluating performance relative to Critical Outcomes 2,3 and 4 in accordance with the Objectives, Performance Measures, and metrics of Attachment 1. However, the Contracting Officer shall inform SC-1 of any issues or concerns that should be considered when evaluating the Contractor's performance in Critical Outcome 1. This is especially important in those areas where operational performance could have a significant impact on the Contractor's ability to conduct successful research for the Department. The Contractor has responsibility to compile the data necessary to document its performance against all measures.

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

The weight of this element is 20%.

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 as recommended by the DOE Brookhaven Group.

Table 1

Metric/ Weight	Outstanding	Excellent	Good	Marginal	Unsatisfactory
TRCR/ 0.33	<30% of Mean	<15% to 30% of Mean	+/-15% of Mean	>15% to 30% of Mean	>30% of Mean
	<2.30	2.31 - 2.79	2.80 - 3.79	3.80 - 4.29	>4.29
LWD/0. 33	<31.99	31.99 - 38.44	38.85- 52.55	52.56-59.41	>59.41
LWCR/ 0.33	<50% of Mean	<25% to 50% of Mean	+/-25% of Mean	>25% to 50% of Mean	>50% of Mean
	<0.80	.80-1.19	1.20-2.00	2.01-2.40	>2.40

*Historical Averages 1995 - 1999 from the CAIRS Data Base (CY)

Table 2

Score	Performance for TRCR and LWDR	Performance for LWCR
4	<30% of Mean	<50% of Mean
3	<15% to 30%	25% to 50% of Mean
2	+/- 15%	+/- 25% of Mean
1	>15% to 30%	>25% to 50% of Mean
0	>30%	> 50% of Mean

$$\text{Composite Score} = \text{TRCR score} \times .33 + \text{LWDR score} \times .33 + \text{LWCR score} \times .33$$

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

requests, correspondence management, etc. in an efficient and timely manner. The Laboratory will also support subcommittees and task forces formed by the CAC as well as panel discussions and special events of interest to CAC members and the community. Feedback from Council membership will be provided to, or independently gathered by, reviewers for consideration in the evaluation to evaluate Laboratory responsiveness and commitment to the Council.

3.3 Waste Management

The weight of this Objective is 10%.

3.3.1 Routine Waste Disposition

The weight of this Measure is 60%

Expectation:

Wastes, derived from current laboratory activities, are managed properly to ensure regulatory compliance and cost efficiency. Laboratory institutionalizes processes which estimate planned waste generation, consider waste reduction options, formulate cost effective treatment/disposition approaches, and confirm available funding prior to the initiation of the activity of the waste producing activity. The contractor does not generate any waste that cannot be properly disposed of within 12 months or in accordance with the 435.1 Implementation Plan.

Performance Measure 3.3.1 addresses Laboratory routine waste generation and disposition in accordance with DOE Order 435.1 as outlined in the BNL DOE Order 435.1 Implementation Plan. Performance Measure 3.3.2 addresses Laboratory performance in reducing the "unplanned costs" concerning the dispositioning of Laboratory generated regulated wastes, including the costs associated with characterization, shipping, disposal, and general costs of mitigation/facilitation to resolve waste acceptance issues at the designated waste receiving facilities.

Measure Weighting Objectives:

Performance Level	Performance Metric
Outstanding	Lab disposes of 100 % of each newly generated, routine waste stream within 12 months or, in accordance with the 435.1 Implementation Plan, submits zero exemption requests.
Excellent	Lab disposes of 100 % of each newly generated, routine waste stream within 12 months or, in accordance with the 435.1 Implementation Plan, submits no more than five exemption requests.
Good	Lab disposes of 100 % of each newly generated, routine waste stream within 12 months or, in accordance with the 435.1 Implementation Plan, submits no more than 10, but greater than five exemption requests.
Marginal	Lab disposes of 100 % of each newly generated, routine waste stream within 12 months or, in accordance with the 435.1 Implementation Plan, submits no more than 15, but less than 10 exemption requests.
Unsatisfactory	Lab disposes of 100 % of each newly generated, routine waste stream within 12 months, or, in accordance with the 435.1 Implementation Plan, submits greater than 15 exemption requests.

3.4 Business Management

BNL will conduct its business operations with distinction, as described by and in support of the Leadership and Management Critical Outcome.

The weight of this Objective is 20%.

3.4.1 Business Services

The weight of this Measure is 25%.

3.4.1.1 BNL will manage uncosted operating balances for Landlord and EM activities at levels needed to ensure continuity of operations. This encompasses approximately 85% of the DOE funding for BNL.

To facilitate this, BNL will monitor the percentage of uncosted operating balances of SC and EM funding to operating funds received in the financial plan.

The weight of this element is 30%

Metric:

Expectations in this area are as follows:

8% or less	Outstanding
>8% - 9%	Excellent
>9% - 13%	Good
>13% - 16%	Marginal
>16%	Unsatisfactory

3.4.1.2 Assess results of implementing Enterprise Resource Planning (PeopleSoft) modules.

At the end of the fiscal year, the monthly average number of active PeopleSoft users will be measured.

The weight of this element is 40%

**APPENDIX I
(Modified by Mod M072)**

DOE DIRECTIVES

**Contract No. DE-AC02-98CH10886
Modification No. M072**

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.

Appendix I - Part I

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 12/31/01 by DOE N 251.40 dated 5/3/01)
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)
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
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

DIRECTIVES LIST		
DATE	DOE DIRECTIVE NUMBER	SUBJECT TITLE
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 <u>CANCELLATION</u> - ES&H Reporting, dated 11/7/96, Paragraph 5b(2).
9/30/95 11/7/96 01/28/00	DOE M 231.1-1 Change 1 Change 2	ENVIRONMENT, SAFETY, AND HEALTH REPORTING MANUAL <u>CANCELLATION</u> - ES&H Reporting Manual, dated 11/7/96, Chapter IV.
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	O 350.1	CRD - CONTRACTOR HUMAN RESOURCE MANAGEMENT PROGRAMS
5/8/98	Change 1	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
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

DIRECTIVES LIST		
DATE	DOE DIRECTIVE NUMBER	SUBJECT TITLE
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)
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 12/31/01 by DOE N 251.40 dated 5/3/01)
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 12/31/01 by DOE N 251.40, dated 5/3/01)
1/6/99 8/3/99	M 471.2-1B M 471.2-2	CRD - PROTECTION AND CONTROL OF CLASSIFIED MATTER 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.)

DIRECTIVES LIST		
DATE	DOE DIRECTIVE NUMBER	SUBJECT TITLE
3/24/97	O 472.1B	CRD - PERSONNEL SECURITY ACTIVITIES (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
7/12/01	M 472.1-1B	PERSONNEL SECURITY PROGRAM MANUAL
6/30/00	O 473.2	CRD - PROTECTIVE FORCE PROGRAM
6/30/00	M 473.2-2	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 ATOMIC ENERGY AGENCY
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)
11/9/88 6/29/90	5400.1* Change 1	GENERAL ENVIRONMENTAL PROTECTION PROGRAM
2/8/90 6/5/90 1/7/93	5400.5* Change 1 Change 2	RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT

DIRECTIVES		
DATE	DOE DIRECTIVE NUMBER	SUBJECT TITLE
5/15/84 5/16/88 5/16/89 9/20/91	5480.4* Change 1 Change 2 Change 3	ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS
7/9/90 5/18/92	5480.19 Change 1	CONDUCT OF OPERATIONS REQUIREMENTS FOR DOE FACILITIES
11/15/94	5480.20A	PERSONNEL SELECTION, QUALIFICATION AND TRAINING REQUIREMENTS FOR DOE NUCLEAR FACILITIES
12/24/91	5480.21	UNREVIEWED SAFETY QUESTIONS
2/25/92 9/15/92 1/23/96	5480.22 Change 1 Change 2	TECHNICAL SAFETY REQUIREMENTS
4/10/92 3/10/94	5480.23 Change 1	NUCLEAR SAFETY ANALYSIS REPORTS
1/19/93	5480.30	NUCLEAR REACTOR SAFETY DESIGN CRITERIA
9/20/91	5530.1A	ACCIDENT RESPONSE GROUP
1/14/92 4/10/92	5530.3 Change 1	RADIOLOGICAL ASSISTANCE PROGRAM
5/8/85	5560.1A	PRIORITIES AND ALLOCATIONS PROGRAM
8/1/80	5610.2	CONTROL OF WEAPON DATA
7/15/94	5632.1C*	PROTECTION AND CONTROL OF SAFEGUARDS AND SECURITY INTERESTS
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