



**BROOKHAVEN**  
NATIONAL LABORATORY

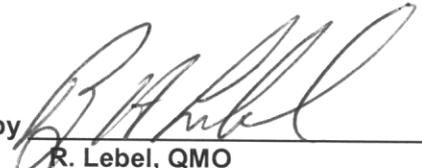
**ENVIRONMENTAL, SAFETY,  
HEALTH and QUALITY DIRECTORATE**

**PERFORMANCE MANAGEMENT PROGRAM**

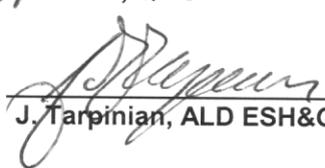
**2004**

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Revision 0

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### **MISSION**

*To serve the environment, safety, health and quality needs of our internal customers in an effective and efficient manner and to meet or exceed the expectations of our external customers.*

### **VISION**

*Our internal and external customers recognize us as best-in-class providers of environment, safety, health and quality services.*

## 1.0 Purpose/Scope

The real and perceived credibility and effectiveness of the Environmental Safety Health and Quality Directorate (ESH&Q) is essential to the ongoing success of Brookhaven National Laboratory. Along with fostering an improved safety culture, providing time and cost effective services, and maintenance of public confidence, the Directorate Self Assessment Program is a principal factor in our ongoing integrity.

This document defines the Directorate Self Assessment program in support of the ESH&Q mission and business interests. Specific objectives and targets for the Directorate for fiscal year 2004 are included in attachment 1. Assessment activities related to Division's within the Directorate are included in their individual self-assessment programs. .

## 2.0 Self Assessment Measures for Fiscal Year 2004

For Fiscal Year 2004, the ESH&Q Self Assessment Program will address 4 sets of criteria as follows:

1. Carry-over issues from the FY03 BNL Self Evaluation and the DOE response to same.
2. Fiscal Year 2004 Contractual Performance Measures as defined in Appendix-B to the prime contract.
3. Support for Laboratory Strategic Imperatives.
4. Support for Directorate Strategic Imperatives.

The above referenced criteria are described below. Detailed descriptions for the Contractual (Appendix-B) Performance Measures are included in Attachment-1, including a description of the measure, key milestones for performance, and the responsible individual.

### 2.1 Carry-over issues from Fiscal Year 2003.

The Department of Energy's response to BNL's Year End Self Evaluation Report ( "U.S. Department of Energy Fiscal Year 2003 Annual Evaluation of Brookhaven National Laboratory April 19, 2004") described an area of disagreement with the BSA year-end scores pertaining to injury rates and the Radiological Source Inventory Database. In FY03, BHSO reduced the score of Appendix-B Objective 3.3 (Environment Safety and Health) from 3.63 to 3.4. This has the effect of lowering the adjectival rating from *Outstanding* to *Excellent*. As indicated above, the issue lies primarily in the areas of Reportable Injury Management and the Radiological Source Inventory Database. The weight associated with Reportable Injury Management is 0% but our customer is clearly unhappy with the Laboratory's performance. The score associated with the Radiological Source Inventory Database was lowered from 2.8 to 2.6.

Both of these areas are again (FY04) included in the Laboratory's contractual performance measures. The Directorate is committed to addressing these shortcomings in fiscal year 2004.

### 2.2 Fiscal Year 2004 Contractual Performance Measures

The contractual performance measures for Fiscal Year 2004 are contained in Objectives 3.3 (Management System Planning, Assessment and Improvement) and 3.4 (Improved ESH&Q – Operations Services). The following Objectives, and Measures are the responsibility of the ESH&Q Directorate:

<b>Objective 3.3</b>	<b>Management System Planning, Assessment and Improvement</b>
Measure 3.3.1	Management System Assessment Planning
Measure 3.3.2	Consensus-based User/Peer Reviewer Maturity Determinations
Measure 3.3.3	Third Party Evaluation of the Management System Assessment Program
<b>Objective 3.4</b>	<b>Improved ESH&amp;Q – Operations Services</b>
Measure 3.4.1	Legacy Risk Management
Measure 3.4.2	Nuclear and Radiological Facilities and Operations

Measure 3.4.3  
Measure 3.4.4

Pollution Prevention  
Safety and Health Performance

The measures and metrics details associated with these Objectives are discussed in Attachment-1 of this document.

### **2.3 Laboratory Strategic Imperatives.**

The ESH&Q directorate is committed to sponsoring and facilitating the implementation of the following Laboratory-wide Strategic Imperatives:

**2.3.1 Evolution of the Laboratory's Safety Culture.** Over the past several years, Laboratory management in general, and the Directorate management in particular, have become increasingly concerned about an increase in significant occurrence reports. The trend suggests a declining safety culture at the Laboratory. Additionally, through 10CFR851 (Worker Safety and Health), the DOE has been directed to establish procedures that will enable fining of contractors for OSHA violations, in a similar to that of the PAAA program for radiological and quality deficiencies. A review conducted by a special OSHA inspection teams indicated the potential for substantial vulnerability at the laboratory. The trends in occurrence reports and the results of the OSHA inspection have gotten the attention of senior DOE/HQ management. It is imperative that this trend be reversed. The ESH&Q Directorate will facilitate this reversal and a strategic imperative for FY 2004 and beyond. Details are provided as part of the Safety and Health Services Division Self-Assessment Plan for Fiscal Year 2004.

**2.3.2 Long Term Stewardship.** When the DOE Environmental Management program completes its restoration mission at BNL, the LTRA responsibility for the cleanup areas will be transferred to the DOE's Office of Science. These responsibilities include maintaining waste containment systems, operations and maintenance of groundwater treatment systems, monitoring, reporting, and facilitating the 5-year review process, and satisfaction and termination of the Interagency Agreement (IAG) for which the source and level of funding is un resolved, representing potential liability to the Laboratory and DOE. It is imperative that the Laboratory and DOE work together to determine an appropriate path forward to ensure this potential liability is successfully managed. The ESH&Q Directorate will facilitate this cooperation as an imperative for FY 2004 and beyond. Details are provided as part of the Safety and Health Services Division Self-Assessment Plan for Fiscal Year 2004. Details are provided as part of the Environmental and Waste Management Services Division Self Assessment Plan for Fiscal Year 2004.

**2.3.3 Nuclear Facilities Consolidation:** Since its inception, the Laboratory has used and accumulated a large number of high-activity radioactive sources and nuclear material that are now excess and creating vulnerabilities in our safety systems. The timely disposition and secure storage of these materials is required to reduce the nuclear risk associated with these vulnerabilities. To minimize the potential generation of future legacy risks, it is imperative to strategically manage the timely disposition of the high-risk radiological and nuclear material. The ESH&Q Directorate will facilitate the management of this disposition as an imperative for FY 2004 and beyond. Details are provided as part of the Environmental and Waste Management Services Division Self Assessment Plan for Fiscal Year 2004 and the Safety and Health Services Division Self Assessment Plan for Fiscal Year 2004.

**2.3.4 Self-Assessment and Performance Measure Processes:** The Laboratory's Self Assessment processes have not evolved sufficiently to support the needs and expectations of Laboratory management and the Department of Energy. Specific areas of current concern include alignment with strategic planning, institutional event management, analysis and reporting capabilities, and metric development and management. It is imperative that the Self Assessment and Performance Measurement Processes continue to evolve and mature into an efficient and valuable closed loop management improvement mechanism. The ESH&Q Directorate will facilitate this maturation as an imperative for FY 2004 and beyond. Details are provided as part of the Quality Management Office's Self Assessment Plan for Fiscal Year 2004.

**2.3.5 Triennial Re-certification of the Laboratory's ISO-14001 recognition:** The Laboratory is committed to maintaining its ISO 14001 certification. As a fundamental principal of operation, BNL constantly strives to prevent and eliminate harmful effects on the environment caused by our activities. We do this by addressing our work processes to ensure that everything possible is done to assure that our operations have no adverse impact on the environment. Our ISO-14001 certification is a metric of success in this area and it's ongoing maintenance is a key success metric for the

Laboratory. The ESH&Q Directorate will do everything possible to foster a successful re-certification by providing needed organizational and technical expertise and resources. Details are provided as part of the Environmental and Waste Management Services Division Self Assessment Plan for Fiscal Year 2004.

**2.3.6 Third Party Registration of the Laboratory's ES&H Program Via the Occupational Safety and Health Assessment Series (OSHAS) Process:** In an ongoing effort to enhance the safety culture of the Laboratory, control occupational health and safety risks, and to reestablish ongoing improvement of the Laboratory's safety record; the Laboratory has embraced the Occupation Health and Safety Assessment Series for health and safety management systems, OHSAS 18001. The pilot program for this accreditation will include 4 major organizational entities within the Laboratory; Plant Engineering, Central Shops, Collider-Accelerator, and the ESH&Q Directorate. The ESH&Q Directorate has the responsibility to foster a successful process by providing needed organizational and technical expertise and resources. Details are provided as part of the Safety and Health Services Division Self Assessment Plan for Fiscal Year 2004.

**2.3.6 Address Prioritized List of OSHA Findings:** The Department of Energy has been directed by Congress to pursue external regulation by OSHA and NRC for all SC Laboratories. On site assessments by both NRC and OSHA were completed at BNL in the fall of 2003. The laboratory completed detailed cost estimates for the identified deficiencies for both the NRC and OSHA assessments. Currently the OSHA findings are being addressed on a hazard prioritized order using both Laboratory funds and Office of Science funding. The laboratory is also modifying programs and developing training to assure that future OSHA type violations are identified early and corrective actions are completed. Additionally, independent of external regulations, the DOE has been directed to initiate a program for the enforcement of OSHA regulations enabling them to fine laboratory contractors for OSHA violations (similar to PAAA enforcement). DOE is in the process of establishing the program to implement the requirements through the rule making process for which BNL has had substantial input. Details are provided as part of the Safety and Health Services Division Self Assessment Plan for Fiscal Year 2004.

#### **2.4 Directorate Strategic Imperatives**

In addition of the strategic imperatives for the Laboratory, the ESH&Q directorate is committed to sponsoring and facilitating the implementation of the following Directorate Strategic Imperatives:

- Enable Lab to achieve OHSAS 18001 registration
- Enable the Lab to develop credible self assessments and sustainable corrective actions
- "Projectize" SBMS
- Fully deploy tracking/trending process
- Refine business management processes
- Improve both internal and external communications
- Create opportunities to enhance organizational interdependency
- Develop/implement waste disposal strategy
- Establish the Long Term Stewardship Action
- Achieve EPA "Performance Track" certification
- Continue to reduce radiological profile
- Continue to demonstrate progress in unfunded liabilities
- Maintain ISO 14001 registration
- Strategic reorganization of the Quality Management Office
- Maintain ISM verification
- Continue to benchmark all services for efficiency

Details pertaining the metrics and implementation of these Directorate measures are included in the individual Division and Office Self Assessment programs.

### **3.0 Responsibilities**

The Assistant Laboratory Director for Environment, Safety, Health, and Quality provides the overall leadership and direction for self-assessment activities within the Directorate. Specifically, these responsibilities are:

- Ensuring that a self-assessment program exists, self-assessment programs for Directorate Divisions and Offices are prepared, and are implemented within the Directorate.
- Ensuring that the R2A2s and individual performance goals of direct reports reflect expectations regarding self-assessment activities and are aligned with achieving organizational and institutional objectives and measures.

ESH&Q Division and Office Managers are responsible to:

- Implement self-assessment programs within their respective organizations.
- Ensure that systems, processes, guidance, tools, and expert support are provided as necessary to Laboratory Departments/Divisions to support the performance of organizational assessment activities.
- In accordance with the Integrated Assessment Subject Area, plan and implement management system assessments, for which they are stewards or points of contact, to ensure the system procedures (e.g., subject areas, ESH Standards etc.) are appropriately defined, being implemented as expected, are achieving desired results, and are continually improved.
- Team with their DOE/BAO counterparts in determining the scope of management system assessment activities.
- Report results of self-assessment activities that may have Directorate level implications at regularly scheduled Management Team meetings.

#### **4.0 Review and Evaluation of Assessment Results**

Accomplishments against the objectives and measures of this plan are reviewed approximately quarterly at regularly scheduled bi-weekly managers meetings. Follow-up actions are recorded and typically tracked through an “action item” in the minutes. Actions that may require more formal tracking or are expected to be open for an extended period of time may be tracked through the Family Assessment Tracking System (FATS).

The management team shall determine:

- Appropriate Directorate level corrective and improvement actions.
- Need to submit assessment results to the Lab-wide Lessons Learned program.
- The need to report issues identified through ESH&Q assessment activities to the Laboratory Price Anderson Amendments Act Coordinator.

Progress against the objectives and measures will be formally evaluated annually in accordance with the organizational self-evaluation cycle of the Laboratory’s Integrated Assessment Program. This evaluation is usually scheduled to coincide with the Environmental Management System (EMS) management review and takes place in the first quarter of the fiscal year (reviewing performance of the previous year). When conducting the annual evaluation, in addition to the measures established in this plan other indicators of performance applicable to the objective including the programs described in the approach; occurrence reports, non-conformance reports and external audits (e.g., BAO, EPA, Registration audits, etc.) applicable to ESH&Q Directorate activities are also considered. The results of the annual evaluation serve as a basis for improvement actions and assessment activities for the subsequent year.

#### **5.0 Corrective Action Management**

Corrective and improvement actions identified through assessment activities shall be managed in accordance with ESH Standard 1.2.1, Corrective Action Management and Tracking for Internal and External Assessments.

The management Team shall determine corrective and improvement actions applicable Directorate-wide. These shall be tracked to closure through the Bi-weekly meeting notes or the Family Assessment Tracking System (FATS).

The cognizant Division/Office Manager tracks corrective actions applicable to single organizations.

## **6.0 Documentation**

Formal documentation generated as the result of any assessment, and any follow-up actions should be documented and electronically attached through the FATS or filed with the assessment records. The Management meeting agenda and minutes provide documentation of periodic reviews.

## ATTACHMENT – 1 CONTRACTUAL PERFORMANCE MEASURES

Initiative	Description/Objectives	Metric(s)	Lead																											
<p>Management System Planning, Assessment, and Improvement is an integral part assuring effective Management System performance and self evaluation. REF: App-B, 3.3</p>	<p>This self assessment initiatives responds to 3 contractual performance measures:</p> <p>3.3.1...Building on the analogous events from FY '03, Document Management Systems plans for modification and revisions to the Integrated Assessment Program for the following Management Systems:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Acquisition Mgmt,</td> <td style="width: 33%;">Emergency Preparedness,</td> <td style="width: 33%;">Environmental Mgmt.</td> </tr> <tr> <td>Facility Safety,</td> <td>Financial Mgmt.</td> <td>Hazardous Material Transportation</td> </tr> <tr> <td>Integrated Planning</td> <td>Intellectual Property</td> <td>Legal</td> </tr> <tr> <td>LCAM</td> <td>Property Management</td> <td>Quality Management</td> </tr> <tr> <td>Radiological Control</td> <td>Records Management</td> <td>Safeguards &amp; Security</td> </tr> <tr> <td>SBMS</td> <td>Training and Qualifications</td> <td>Work for Others</td> </tr> <tr> <td>Work Planning &amp; Control</td> <td>Worker Safety and Health</td> <td></td> </tr> </table> <p>3.3.2...Complete formal consensus based user/peer reviewer Maturity Determinations for:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Emergency Preparedness</td> <td style="width: 33%;">Intellectual Property</td> <td style="width: 33%;">Property Management</td> </tr> <tr> <td>SBMS</td> <td></td> <td></td> </tr> </table> <p>3.3.3...Evaluate the management systems planning and assessment activities in FY'04 based on the results of the independent third-party review which took place in FY'03</p>	Acquisition Mgmt,	Emergency Preparedness,	Environmental Mgmt.	Facility Safety,	Financial Mgmt.	Hazardous Material Transportation	Integrated Planning	Intellectual Property	Legal	LCAM	Property Management	Quality Management	Radiological Control	Records Management	Safeguards & Security	SBMS	Training and Qualifications	Work for Others	Work Planning & Control	Worker Safety and Health		Emergency Preparedness	Intellectual Property	Property Management	SBMS			<p>Number of Management System Assessment Plans developed (schedules to be developed within 3 month of Appendix-B approval</p> <p>Number of Maturity Determinations Completed by end of FY04</p> <p>To be determined by the criteria and the Third Party evaluation</p>	
Acquisition Mgmt,	Emergency Preparedness,	Environmental Mgmt.																												
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<p>Improving the effectiveness and value of the Laboratory's ongoing ESH&amp;Q operations in the area of "Legacy Risk Management" REF: App-B, 3.4.1</p>	<p>3.4.1.1 Effectively plan for and implement programs that address the regulatory, environmental, and social risks posed by the list of "Unfunded Environmental Liabilities" by addressing the FY'04 contractual milestones contained in Appendix-B of the contract.</p> <p>3.4.1.2 Implement a site-wide rollout and upgrade of the existing radiological source database to provide a web based interface and a sort capability</p>	<p>Milestones as described in Appendix- B page CO3-11</p> <p>Based upon database functionality as described in Appendix-B page CO3-12</p>																												
<p>Improving the effectiveness and value of the Laboratory's ongoing ESH&amp;Q operations in the area of "Nuclear and Radiological Facilities Operations"...</p> <p>REF: App-B, 3.4.2</p>	<p>3.4.2.1 Develop and inventory report of Laboratory radiological materials</p> <p>3.4.2.2 Develop an orphan radiological and nuclear materials management and disposition plan</p> <p>3.4.2.3 Develop a plan to include "Storage" into the mission of the Waste Management Facility</p> <p>3.4.2.4 Develop a Deactivation and Decommissioning Plan for the Building 490 PuBe sources.</p> <p>3.4.2.5 Evaluate the efficiency and cost savings of implementing a commercially available radiological work controls system in the Collider-Accelerator division.</p>	<p>Based upon the 12/21/03 milestone</p> <p>Based upon the 3/31/04 milestone</p> <p>Based upon the 8/30/04 milestone</p> <p>Based upon the 8/30/04 milestone</p> <p>"Subjective" based upon the thoroughness and quality of the report.</p>																												

<p>Continue to develop and promote programs that improve environmental performance, effectively and efficiently managing and/or reducing environmental risks REF: App-B, 3.4.3</p>	<ol style="list-style-type: none"> <li>1. Selected organizational units must demonstrate active involvement in the BNL Pollution Prevention Program by Submitting P2 project proposals to the P2 council.</li> <li>2. Selected and funded proposals shall be implemented in a timely manner</li> </ol>	<p>Based upon the number of organizational units involved in P2 and the number of funded projects that are fully implemented.</p>	
<p>Address improvements against the DuPont Safety Management Elements REF: App-B, 3.4.4.1</p>	<p>The Laboratory is committed to improving its performance levels in all 12 elements of the DuPont system within 2 years. This increase in performance will be documented via a "Director's Safety Committee" review in beginning in FY04.</p>	<p>Based upon the number of "Safety Steps" improvement</p>	
<p>BSA will seek to achieve excellence in worker safety and health protection. REF: App-B, 3.4.4.2</p>	<p>BSA will work to maximize improvement in the "Days Away, Restricted, or Transferred Rate (DART)"</p>	<p>Based upon the numerical calculation of "Days Away, Restricted, or Transferred (DART) rate</p>	