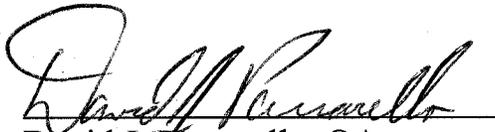


Collider-Accelerator Department

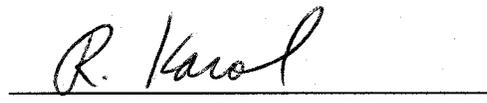
FY 2004 Self-Assessment Program

Prepared by:

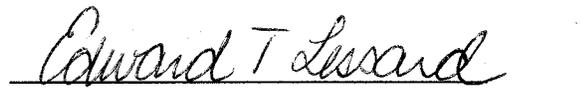

David J. Passarello, QA

5/20/04
Date

Approved by:


R. Karol, Division Head, ESHQ

5/20/04
Date


E. Lessard, Associate Chair for ESHQ

5-20-04
Date


D. Lowenstein, Department Chairman

5/20/04
Date

I. Collider-Accelerator (C-A) Department Mission

In support of Brookhaven National Laboratory's broad mission of providing excellent science and advanced technology in a safe, environmentally responsible manner the Collider Accelerator Department is committed to the following:

- ❖ Excellence in environmental responsibility and safety in all C-A Department operations.
- ❖ Develop, improve, and operate the suite of proton/heavy ion accelerators used to carry out the program of accelerator-based experiments at BNL.
- ❖ Support the experimental program including design, construction, and operation of the beam transports to the experiments and partial support of detector and research needs of the experiments.
- ❖ Design and construct new accelerator facilities in support of the BNL and National Missions.

II. Self-Assessment Program

The objective of the C-A self-assessment program is to provide a systematic approach to performance management. That is, to provide C-A management with information needed to ensure organizational performance objectives are being met and appropriate improvement actions are identified and implemented.

Supporting information for the objectives of Critical Outcome 1.0, Basic Science & Technology, are reported in the BNL Integrated Information Management System. This system provides the data required for the preparation of BNL Appendix B Self Evaluation Reports.

C-A Self-Assessment supporting documentation; e.g., [Program and Facility](#), [Organization](#), [ESHQ Division](#), [Assessment and Inspection Programs](#), [C-A Environmental Management Program](#), [Authorization Basis Documents](#), [Operations and Procedures Manual](#), [Conduct of Operations Agreement](#), [Training Programs and Associated Records](#) and [Tier 1 Safety Inspections](#), are maintained on the Collider-Accelerator web site.

The C-A Department has adopted a self-assessment framework primarily based on the Malcolm Baldrige National Quality Award Criteria, which are as follows:

- Leadership Commitment and Involvement
- Human Resource Development and Management
- Customer Focus and Satisfaction (Customer Value)
- Process Management
- Business and Operational Results
- Compliance with Laws Regulations and Contractual Requirements

1. Evaluation of Objectives and Measures

For each of the assessment criteria stated above, C-AD has established objectives, strategies, performance measures and indicators where appropriate. Refer to the matrix within this document. In addition to those items outlined in the attached matrix, the implementation of the following improvement actions from the C-A FY 2003 Self Assessment Report shall be assessed and tracked to closure.

- a. Whereas accidents or near misses occur outside of C-A, lessons learned should be carried down to the workers in order to make C-AD personnel aware of these outside issues and trends. C-AD should integrate outside lessons-learned information into a regular forum that involves interaction with workers. (1887.1.1)
- b. Based on C-A trending analysis, outdoor-grounds hazards were identified as the major cause for worker lost time and first aid cases in 2003. To prevent slips and falls, an improved response to snowstorms is required. Repairing leaks in the roof of B912 and fixing the potholes in parking lots and walkways is also required. In addition to bringing these issues forward to upper management, the Department should ensure that sand barrels with shovels and other slip prevention initiatives are in-place prior to the winter season. (1887.1.2)
- c. The Department should continue to conduct quarterly safety awareness events for the staff. Videos similar to "Remember Charlie," town safety-meetings and a question and answer forum for lessons learned should be supported. (1887.1.3)
- d. Continue to streamline and integrate the OSH/EMS/SA management systems. (1887.1.4)
- e. Place water-impermeable membranes over activated soil areas at the Linac. (1887.1.5)
- f. Establish good housekeeping as a condition of employment in C-A. Establish the practice in each C-A Group such that they set aside time each Friday afternoon, before leaving for the weekend, to clean up their work areas and office areas. (1887.1.6)
- g. For the FY04 waste clean-up strategy, clean up the steel and other debris on Railroad Avenue, concentrate on cleaning up "Inner Mongolia," and begin to remove/replace PCB capacitors at Linac. (1887.1.7)
- h. Make personnel who are responsible for facility-altering activities at RHIC aware of NYS Department of Environmental Conservation requirements for a permit under the Wild, Scenic and Recreational River Systems Act. (1887.1.8)
- i. Include information on lost-work related statistics and lessons learned in each monthly issue of the Particle Post. (1887.1.9)
- j. There should be renewed emphasis on fire protection since it impacts safety and routine operations. For example, the aging fire-alarm system is a major concern. Because some fire protection upgrades have started but are proceeding slowly, the Department should encourage Plant Engineering to use an outside supplier to install the new fire alarm system components. (1887.1.10)

2. Institutional Improvement Recommendations

The following lab-wide issues were documented in the C-A 2003 Environmental Management Review Record of Decision. The C-A Family ATS will be used to document the status of each recommendation.

- a. Encourage the laboratory to focus on improving the lessons learned process Lab-wide in order to alert personnel to trends or issues that have the potential of creating severe hazards in the workplace. (1887.2.1)
- b. Encourage BNL to standardize the OSH management system lab-wide. Encourage the laboratory to develop a system similar to EMS. (1887.2.2)
- c. Encourage the Laboratory to set high-level objectives for OSH-related facility changes and improvement programs. (1887.2.3)
- d. Encourage the Laboratory to identify an individual responsible for leading the effort on external regulation. (1887.2.4)
- e. Encourage the Laboratory to develop a strategy for preparing technical justifications that demonstrate an equivalent level of safety for facilities that cannot be changed to meet new regulations. This should be done if OSHA and NRC requirements are added to or replace DOE requirements. (1887.2.5)

ASSESSMENT CRITERIA 1: Leadership Commitment and Involvement

OBJECTIVE:

Excellence in environmental responsibility and safety in all Department operations.

APPROACH:

ES&H

- a) Implement formal OSH Management system
 - 1. An injury free workplace
 - 2. Compliance with OSH requirements in SBMS
 - 3. Workers consulted and encouraged to participate in OSH Management System
 - 4. Improved performance of OSH Management System
 - 5. OSH Management System is integrated with the EMS Management System
 - 6. Closeout WOSH Committee issues in a timely manner consistent with issue's risk
 - 7. Close out Tier 1 findings in a timely manner consistent with the finding's risk
 - 8. Meet BNL requirements on closure of OSHA findings
- b) Conduct a management review to discuss significant EMS, OSH and Self Assessment issues to ensure the continuing suitability, adequacy and effectiveness of the three programs.
- c) Successfully undergo the ISO 14001 surveillance audit.
- d) Successfully undergo the ISO 18001 surveillance audit.

Measures	Indicators	Responsibility	Schedule/Due Date
Implement a formal OSH Management System for accelerators, experimental areas, offices and shops at C-A		Associate Chair for ESHQ	September 2004

Results:

Action Items:

Measure 3.4.4.2 - OSHA Reportable Injury Management (Revised) For the second half of FY 04, April 1 through September 30, 2004 the Lost Workday Case Rate (LWCR) [or Days Away, Restricted, or Transferred (DART) rate = .50		Associate Chair for ESHQ	Quarterly (Performance Indicator)
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Results:

Action Items:

Reduce number of first aid cases by 10% from FY03 number.		Associate Chair for ESHQ	September 2004
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<u>Results:</u>		
<u>Action Items:</u>		
Minimize findings in QA Assessments of OSH topics	Associate Chair for ESHQ	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Define OSH requirements for procured items	Associate Chair for ESHQ	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Coach F&O Directorate in their roll-out of 18001 type OSH Management System	Associate Chair for ESHQ	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Complete 15 Job Safety Risk Analyses (JRA) for the C-AD JRA Bank.	Associate Chair for ESHQ	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Get Tier 1 Committee trained on OSHA regulations	Tier 1 Manager	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Close out WOSH issues within 90 days, track in family ATS	Tier 1 manager	September 2004

<u>Results:</u>		
<u>Action Items:</u>		
Close out Tier 1 issues within designated times, track in family ATS	Tier 1 Manager	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Meet BNL deadlines for handling OSHA findings	QA	On going
<u>Results:</u>		
<u>Action Items:</u>		
Implement corrective actions in the report of the Electrical Ad Hoc Committee, see ATS 1425	Associate Chair for ESHQ	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Implement corrective actions in the report Improving the Quality of Tier 1 Reviews at C-A, see ATS 2015	Associate Chair for ESHQ	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Implement corrective actions in the report Enhancing Electrical Work Practices at C-AD, see ATS 2016	Associate Chair for ESHQ	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Complete the OSH Team task list	Associate Chair for ESHQ	September 2004
<u>Results:</u>		
<u>Action Items:</u>		

Establish a functioning WOSH Committee	Associate Chair for ESHQ	January 2004
<u>Results:</u>		
<u>Action Items:</u>		
Management Review completed and “Record of Decision” issued.	EMS Representative	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Maintain ISO 14001 Registration ISO 14001 surveillance audit performed by third party, ISO 14001 registration maintained.	Associate Chair for ESHQ	June 2004
<u>Results:</u>		
<u>Action Items:</u>		
Measure 3.4.4.1 – Safety Improvement Path Forward (Revised) OHSAS 18001 surveillance audit performed by third party. Registration obtained.	Associate Chair for ESHQ	September 2004
<u>Results:</u>		
<u>Action Items:</u>		

ASSESSMENT CRITERIA 2: Human Resource Development and Management

OBJECTIVE:

- 1 Create a pool of talented, empowered, motivated, and goal oriented leaders/managers/workers to support and enhance the C-A competitive position within the DOE laboratory complex.
- 2 Provide a high quality work environment that enhances C-A's ability to retain and attract an excellent workforce.
- 3 Maintain staff training > 95% complete

APPROACH:

- 1 Training is promoted via the C-A Training Plan as described in OPM 1.12, Conduct of Training Policy (Training Plan).
- 2 The overall training strategy is found in two documents:
 - a) [Training Plan Agreement](http://www.rhichome.bnl.gov/AGS/Accel/SND/Training/trainplan.pdf) (<http://www.rhichome.bnl.gov/AGS/Accel/SND/Training/trainplan.pdf>)
 - b) [Training Plan](http://www.rhichome.bnl.gov/AGS/Accel/SND/OPM/Ch01/01-12.PDF) (<http://www.rhichome.bnl.gov/AGS/Accel/SND/OPM/Ch01/01-12.PDF>)
4. Environmental training, which is process specific, may be found at: [Process Specific Training](http://www.rhichome.bnl.gov/AGS/Accel/SND/process_specific_ems_training.htm) (http://www.rhichome.bnl.gov/AGS/Accel/SND/process_specific_ems_training.htm)
5. OSH training, which is area specific, may be found at [Facility Specific OSH Training](http://www.agsrhichome.bnl.gov/AGS/Accel/SND/facility_specific_osh_training.htm) (http://www.agsrhichome.bnl.gov/AGS/Accel/SND/facility_specific_osh_training.htm)
6. Via C-A OPM 9.4.2, Self Evaluations, a self-critical attitude is fostered throughout the department from workers to senior management; this provides the basis for correcting weaknesses as well as promoting best practices. A self-assessment database for action required/completed is maintained by the C-A ES&H/Q Division.
7. Perform periodic assessments to determine adequacy and effectiveness of listed strategies to achieve objective.

Measures	Responsibility	Schedule/Due Date
Assess implementation of C-A OPM 9.4.2, C-A Self-Evaluation	QA	September 2004

Results:

Action Items:

Increase employee awareness of safety through participation in multiple (~4) safety awareness activities; e.g. show the film remember Charlie	ESHQ Division Head	September 2004
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Results:

Action Items:

<p>Training and Qualification (T&Q) Performance</p> <p>Permanent Employees</p> <ol style="list-style-type: none"> 1. % of C-A staff linked to job specific training assessments. 2. % of T&Q requirements completed by C-A staff <p>Transient Staff</p> <ol style="list-style-type: none"> 1. % of staff linked to job specific training assessments. 2. % of T&Q requirements completed by staff 	<p>Training Manager</p>	<p>September 2004</p>
<p><u>Results:</u></p> <p><u>Action Items:</u></p>		

ASSESSMENT CRITERIA 3: Customer Focus and Satisfaction (Customer Value)

OBJECTIVE: Operate the C-A facility in a manner that is responsive to C-A internal and external customer expectations.

APPROACH:

1. Stakeholders inquiries related to the operation of the C-A are recorded in the BNL Correspondence and Commitment Tracking System maintained by the Collider-Accelerator Department.
2. Support BNL's initiative regarding the BNL Communication and Trust objective.
3. The AGS/RHIC Users Committee is a committee that represents the user community in various matters, such as programmatic satisfaction and dissatisfaction, quality of life matters, etc. They communicate both verbally and in writing to the directorate as well as line managers.
4. During operations, the weekly Time Meetings allow experimenters to discuss status, identify scheduling priorities, identify user requirements for the up coming week, voice complaints and at the same time, provide easy immediate access to all the C-A resources and staff.
5. Perform periodic assessments to determine adequacy and effectiveness of listed strategies to achieve objective.

Measures	Responsibility	Schedule/Due Date
Review current interface process between the AGS/RHIC Users Center and the C-A Training Office. Determine if there are any opportunities for improvement.	C-A Training Manager	September 2004

Results:

Action Items:

ASSESSMENT CRITERIA 4: Process Management

OBJECTIVE:
 Establish, maintain and improve C-A processes/procedures for implementing Laboratory and organizational expectations.

APPROACH:

- 1 Implement the requirements of BNL SBMS Subject Area Work Planning and Control for Experiments and Operation. C-A OPM 9.2.1, Procedure For Reviewing Environmental, Health and Safety Aspects Of An Experiment ensures C-A complies with BNL requirements for the planning and control of experiments. C-A OPM 2.28, C-A Procedure For Enhanced Work Planning (which includes Stop Work policy) ensures C-A complies with BNL requirements for work planning and control systems as defined in BNL SBMS Subject Area Work Planning and Control for Experiments and Operations. Assessment of the implementation of the C-A work planning process is performed. All EWP systems within C-A shall be reviewed at a frequency specified by the C-A Work Control Manager.
- 2 Implementation of the BNL ES&H programs, including the EMS, OSH and Conduct of Operations is verified via scheduled inspections, audits and C-A management, independent and self-assessments. These programs are documented in OPM Chapter 9 procedures (e.g. Tier I and Self-Evaluations), C-A OPM 13.10.1, Independent Assessments and applicable subject areas. Reports are documented and include a description of the findings, corrective action(s), and identification of responsible individual(s).
- 3 Periodically assess C-A performance for implementation of Laboratory SBMS and internal process. The scope and frequency of assessment areas is based on
 - Importance, status, risk, and complexity of the activity, item or process;
 - Problems encountered with the activity, or item;
 - Scheduling of specific activities;
 - Availability of qualified personnel;
 - A review of findings reported in previous assessments.
 This objective supports those assessments performed in compliance objective.
 Assessment to be performed in accordance with the “Environmental Assessment” Subject Area and C-A OPM 13.10.1, Independent Assessment.

Measures	Responsibility	Schedule/Due Date
Perform assessment on the C-A implementation of the BNL Management System - Emergency Preparedness and Off-Normal Event Reporting <ul style="list-style-type: none"> • Fire Safety 	Q Group	Annual 3 rd quarter

Results:

Action Items:

Perform assessment on the C-A implementation of the BNL Management System - Environmental Management <ul style="list-style-type: none"> • Regulatory Compliance • EMS Assessments • Management Review 	Q Group	Annual 3 rd quarter
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<u>Results:</u>		
<u>Action Items:</u>		
Perform assessment on the C-A implementation of the BNL Management System - Life Cycle Asset Management <ul style="list-style-type: none"> • Maintenance Management • Energy Management Awareness 	Q Group	3 rd quarter
<u>Results:</u>		
<u>Action Items:</u>		
Perform assessment on the C-A implementation of the BNL Management System – Records Management <ul style="list-style-type: none"> • Level 2 Managers Self-assessment of Records management System Maintenance Management 	Q Group	3 rd quarter
<u>Results:</u>		
<u>Action Items:</u>		
Perform assessment on the C-A implementation of the BNL Management System – Safeguards and Security <ul style="list-style-type: none"> • Foreign Visits and Assignments 	Q Group	3 rd quarter
<u>Results:</u>		
<u>Action Items:</u>		
Perform assessment on the C-A implementation of the BNL Management System – Work Planning and Control <ul style="list-style-type: none"> • Compare Department–level Work Planning and Control (WP&C) procedures to Work Planning and Control for Experiments and Operations Subject Area to ensure consistency and compliance. • Evaluate feedback received on FY04 Work permits 	Q Group	3 rd quarter
<u>Results:</u>		
<u>Action Items:</u>		
Perform assessment on the C-A implementation of the BNL Management System -Worker Safety and Health <ul style="list-style-type: none"> • Department ESH Inspections (Tier 1s) • OSHA Roll-Up/Chemical Management • Occupational Injury Management • Lockout/Tagout 	Q Group	3 rd quarter
<u>Results:</u>		
<u>Action Items:</u>		

<p>Implement corrective actions in the report of the Electrical Ad Hoc Committee (Reference ATS 1425)</p> <ul style="list-style-type: none"> 1425.1 - Committee Recommendations <ul style="list-style-type: none"> 1425.1.1 - Memorandum style training records <i>(Closed)</i> 1425.1.2 - Use of the term 'authorized' <i>(Closed)</i> 1425.1.3 - Revise OPM 2.13 <i>(Closed)</i> 1425.1.4 - Retrain staff in implementing OPM 2.13 <i>(Open)</i> 1425.1.5 - LOTO logbook retraining during C-A Access Train <i>(Open)</i> 1425.1.6 - Disposition of LOTO tags and stubs <i>(Open)</i> 1425.1.7 - Update elect distribution one-line drawings <i>(Open)</i> 1425.1.8 - Develop Web based LOTO data entry/tag system <i>(Closed)</i> 1425.1.9 - Revision of procedures in Chapter 2 of OPM <i>(Closed)</i> 1425.1.10 - Review hazards associated with test meters <i>(Closed)</i> 1425.1.11 - Prepare an Orange tag procedure <i>(Open)</i> 1425.1.12 - Prepare procedure for disconnected cable tag <i>(Closed)</i> 1425.1.13 - Prepare C-AD Grounding Plan <i>(Closed)</i> 1425.1.14 - OPM 2.6 series to be reviewed/made concise <i>(Open)</i> 1425.1.15 - Implement the web based LOTO data entry/tag system <i>(Open)</i> 	<p>ESHQ Division head</p>	<p>September 2004</p>
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Results:

Action Items:

<p>Review and implement appropriate corrective actions recommended by Office of Independent Oversight during an Electrical Safety Review at C-AD</p> <ul style="list-style-type: none"> 1425.2 - Office Ind Oversight corrective actions <i>(Closed)</i> <ul style="list-style-type: none"> 1425.2.1 - Plan to address unknown loads <i>(Closed)</i> 1425.2.2 - revise OPM 2.14 - describe committee responsibilities <i>(Closed)</i> 1425.2.3 - Link TQ-OJT1 to instructor JTA's <i>(Closed)</i> 1425.2.4 - Review RMA at Linac <i>(Closed)</i> 1425.2.5 - Ensure individual's JTA has appropriate link <i>(Closed)</i> 1425.2.6 - Use of grounding sticks <i>(Closed)</i> 1425.2.7 - Observation of LOTO & electrical safety practices <i>(Closed)</i> 	<p>ESHQ Division Head</p>	<p>September 2004</p>
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Results:

Action Items:

Perform annual management review of hazardous toxic material hazards	Associate Chair for ESHQ	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Ensure the NSRL facility is designed and constructed to meet OSH requirements	ESHQ Division Head	June 1, 2004
<u>Results:</u>		
<u>Action Items:</u>		
Review the PHENIX, PHOBOS, STAR, PP2PP and BRAHMS experiments at RHIC for conventional safety issues	ESHQ Division Head	June 1, 2004
<u>Results:</u>		
<u>Action Items:</u>		
Review the NSRL experiments for conventional safety issues	ESHQ Division Head	June 1, 2004
<u>Results:</u>		
<u>Action Items:</u>		
Complete the work plans for NSRL, RHIC and AGS experiments	ESHQ Division Head	June 1, 2004
<u>Results:</u>		
<u>Action Items:</u>		

ASSESSMENT CRITERIA 5: Business and Operational Results

OBJECTIVE:
 1 Design and construct new accelerator facilities in support of the BNL and national missions.
 2 Operational
 a) Operate and improve the suite of proton/heavy ion accelerators and beam transports used to carry out the program of accelerator-based experiments at BNL thus supporting the research mission of the laboratory's user population.
 b) Support the experimental program including design, construction, and operation of the beam transports to the experiments plus partial support of detector and research needs of the experiments.

APPROACH:
 1 Report construction and operational progress/status to senior management at a frequency established by department/project management.
 2 Operational:
 a) The C-A mission is defined in Field Work Proposals (FWP), Conceptual Design Reports and Project Management Plans.
 b) Changes and upgrades to the accelerators are described in the Accelerator Improvement Projects.

Measures	Responsibility	Schedule/Due Date
Critical Outcome 1.0 Basic Science & Technology: Objective 1.3 Success in Constructing and Operating Research Facilities 1. C-A Operations per FY04 Schedule and the accelerator performance meets the operational goals as specified in the FY 2004 Field Work Proposal. 2. Meet critical milestones of the Spallation Neutron Source (SNS) as defined in SNS Project Plan.	1. Associate Chair, Accelerators 2. SNS Project Manager	September 2004

Results:

Action Items:

<i>ASSESSMENT CRITERIA 6: Compliance with Laws Regulations and Contractual Requirements</i>		
<i>OBJECTIVE:</i> Maintain compliance with applicable BNL regulations and contractual expectations.		
<i>APPROACH</i> 1 Compliance requirements are communicated to C-A staff through participation on Laboratory committees, Laboratory Work Groups and through the SBMS. Senior C-A Electrical Engineers and senior C-A staff participate on the Laboratory Electrical Planning Committee, Laboratory Environmental, Health and Safety Committee, Radiation Protection Working Group, Environmental Management System Implementation Group, and Laboratory Electrical Safety Committee, all of which meet regularly. 2 In accordance with the BNL EMS, a regulatory compliance assessment, environmental management review, and EMS assessment shall be performed annually. a) Ensuring compliance to applicable requirements is addressed via scheduled inspections, audits and C-A management, independent and self-assessments. These programs are documented in the C-A OPM, and applicable subject areas. Reports are documented and include a description of the findings, corrective action(s), and identification of responsible individual(s). A general index of C-A ESHQ programs can be found at http://server.rhichome.bnl.gov/SND/indexoftopics.htm . 3 Perform periodic assessments to determine adequacy and effectiveness of listed strategies to achieve objective.		
Measures	Responsibility	Schedule/Due Date
Implement all FY'03 corrective actions from the Storage and Transfer of Hazardous and Non-hazardous Materials SA assessment and maintain SA tank posting requirements	C-A ECR & Environmental Coordinator	July 2004
<u>Results:</u>		
<u>Action Items:</u>		
Review all emission points for compliance, documentation, and forward any updates to the EWMSD Subject Matter Expert	C-A ECR	March 2004
<u>Results:</u>		
<u>Action Items:</u>		
Facilitate and participate in applicable assessments (Liquid Effluents, RCRA, & Document Control) and complete Compliance Assessment Cards in accordance with the Environmental Assessments SA	C-A ECR – Liquid Effluents RCRA C-A QA – Document Control	March 2004 September 2004 February 2004
<u>Results:</u>		
<u>Action Items:</u>		
Maintain records and report progress against waste goals and, where appropriate, suggest P2 opportunities	C-A Environmental Coordinator	On Going

<u>Results:</u>		
<u>Action Items:</u>		
Review all experiments and routine operations, as a member of the ESRC and ASSRC, to recommend pollution prevention opportunities/alternate waste disposal paths	C-A ECR	Ongoing
<u>Results:</u>		
<u>Action Items:</u>		
Facilitate the submission of a P2 proposal for the NSRL digital camera	C-A ECR	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Facilitate the submission of a P2 success story for the reduction of 2 MW power by tuning of the RHIC refrigeration system (save \$2400/day or 48 MW-hr/day)	C-A ECR	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Facilitate the submission of a P2 success story for the reduction of 2 MW power in ATR while RHIC is on store (assume off for 2/3/ of a day saves \$1600/day or 32 MW-hr/day)	C-A ECR	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Distribute information on spill kits/materials and subject area requirements on spill clean up and reportability. Track and report on C-A Spill costs	C-A ECR	Semi-annually
<u>Results:</u>		
<u>Action Items:</u>		
Submit ADS funding request for PCB's and track request through to the final disposition	ESHQ Division Head	June 2004
<u>Results:</u>		
<u>Action Items:</u>		

Prepare and submit quarterly reports that track non-routine waste amounts and costs for disposal	C-A Environmental Coordinator	Quarterly
<u>Results:</u>		
<u>Action Items:</u>		
Track the number of unusual or off normal events associated with groundwater impacts in current operations	C-A ESHQ Division Head	On going
<u>Results:</u>		
<u>Action Items:</u>		
Submit a Field Work Proposal to address the clean-up of legacy materials due to prior High Energy Physics operations.	C-A Associate Chair for ESHQ	February 2004
<u>Results:</u>		
<u>Action Items:</u>		
Prepare and submit an updated listing of Satellite Accumulation Areas	C-A Environmental Coordinator	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Track and report the number of Satellite Accumulation Areas and Radioactive Accumulation Area noncompliance's	C-A Environmental Coordinator	Quarterly
<u>Results:</u>		
<u>Action Items:</u>		
Prepare and submit the waste generation forecast for FY05 report progress against waste goals and, where appropriate, suggest P2 opportunities	C-A Environmental Coordinator	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Pursue High Return on Investment (ROI) P2 funding from DOE for installation of additional ozone water treatment system for RHIC STAR cooling tower.	ESHQ Division Head/ C-A Environmental Compliance Representative	Not funded

<u>Results:</u>		
<u>Action Items:</u>		
Proceed with connection of RHIC tower blow-down to storm water system and control blow-down to minimize local erosion	Water System Group Leader	In Progress
<u>Results:</u>		
<u>Action Items:</u>		
Perform planned upgrades to C-A water systems in accordance with ADS # 0007 and track progress.	Water System Group Leader	In Progress
<u>Results:</u>		
<u>Action Items:</u>		
Ensure that operational procedures are in place to respond to spills and that the procedures are in accordance to applicable subject areas.	C-A ESHQ Division Head	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Set a goal of zero reportable spills and track performance and report performance via the EMS management review.	C-A ESHQ Division Head	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Collection and analysis of tunnel air samples	C-A RCD Facility Representative/ECR	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Annual reporting of air sampling results to EPA Region II	EWMSD Radiological Subject Matter Expert	September 2004
<u>Results:</u>		
<u>Action Items:</u>		

Periodically measure all radionuclides that could contribute at least 10% of the potential effective dose equivalent for the effluent source.	C-A Radiation Control	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Ensure that groundwater samples are collected and analyzed, documented and results are reported in a timely fashion back to C-A, results are reviewed to ensure that they meet expected trends.	C-A Environmental Compliance Representative and C-A ESHQ Division Head	On going
<u>Results:</u>		
<u>Action Items:</u>		
Prepare and submit an updated listing of Satellite Accumulation Areas and communicate to Waste Management Division. Inspect and maintain any necessary records of Satellite Accumulation Areas.	C-A Environmental Coordinator	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Soil caps maintained and inspected as required.	ES&F Division	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Work with ERD to review and determine best method to deal with g-2 tritiated plume (EE/CA).	C-A ESHQ Division Head	September 2004
<u>Results:</u>		
<u>Action Items:</u>		
Verify transfer of FRDP issues as determined by SME report due by the end of first quarter	C-A ECR	September 2004
<u>Results:</u>		
<u>Action Items:</u>		

Track the number legacy items disposed of and track the funding requests through to final disposition of the request	C-A Environmental Coordinator	Ongoing
<u>Results:</u>		
<u>Action Items:</u>		
Inspect, maintain and store orphaned materials in an appropriate area until disposition and funding is available for reuse or disposal	C-A Environmental Coordinator and FES Group Leader	August 2004
<u>Results:</u>		
<u>Action Items:</u>		
Evaluate the potential for soil activation and rainwater infiltration to cause groundwater contamination greater than 5% of DWS at the Linac Beam Stops (4), Blip-Y, and AGS H-Areas. Develop plan for engineering controls, as needed.	C-A ESHQ Division Head	July 2004
<u>Results:</u>		
<u>Action Items:</u>		
Measure 3.4.3 Pollution Prevention Verify that C-A is actively involved in the BNL Pollution Prevention Program. i.e. by submitting at least two pollution prevention project proposals to the P2 Council and/or two success stories and/or lesson learned stories	Associate Chair for ESHQ and C-A Environmental Compliance Representative	September 2004
<u>Results:</u>		
<u>Action Items:</u>		