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## NSLS-II Project – FY09 ESH Improvement Plan

Prepared by Steve Hoey

This ESH improvement plan is established to define the actions planned for FY 2009 directed towards continuous improvement of the NSLS-II ESH Program.

The following 6 items have been selected for FY 2009. Progress on each item is tracked in the Project monthly status reports or Family ATS as appropriate.

### **OHSAS/EMS Objectives and Targets for FY-09**

#### **1. Implement Human Performance techniques for the NSLS-II Project.**

**Background:** BNL management and the NSLS Directorate strongly supports and encourage application of Human Performance Principles to work planning and integrated safety management. An HPI training initiative was begun in FY08 and is planned to encompass the remaining staff in FY09. Mechanisms to assure implementation beyond initial training need to be identified to realize the full benefit of HPI techniques.

- a. Complete training of 90% of managers and staff by 1/31/09  
*Responsibility: Casey*
- b. Develop a path forward report by 2/28/09  
*Responsibility: Casey*
- c. Track path forward milestones and provide monthly status to management.  
*Responsibility: Casey*
- d. Establish a Management Observation program including frequency and recording mechanisms by 2/28/09  
*Responsibility: Hoey*

#### **2. Develop a world class construction ESH management program to assure that the construction of the NSLS-II Ring Building is built to best in class criteria and work is performed with a zero injury goal.**

**Background:** The conventional construction of the ring building is a high risk to the project. Potential for minor or major injuries or occurrences exist due to the inherent hazards associated with heavy construction. Expectations for a superior construction safety program are high. BNL and NSLS-II management have made ESH a top priority and provided the resources to implement necessary programs to assure success.

- a. Establish robust contractor and sub-contractor selection criteria to assure best in class measures. *Responsibility: Hoey*
- b. Involve ESH in the selection of all contractors and sub contractors. *Responsibility: Hoey*
- c. Establish an effective safety incentive for the Ring Building contract to motivate high performing contractors and provide a fine mechanism for safety or environmental violations. By 12/30/08 *Responsibility: Hoey*
- d. Develop an enhanced ESH Plan to assure contractor expectations are clearly defined. By 12/30/08. *Responsibility: Krasner*
- e. Develop an ESH Construction Management Plan to assure all roles and responsibilities are clearly identified. By 3/1/09. *Responsibility: Hoey/Krasner*
- f. With a goal of achieving LEED rating for the Ring Building. Maximize the amount of recycled material used for the construction project (e.g., RCA) and document to assure that LEED requirements are being met during the construction of the ring building. *Responsibility: Krasner/Anschutz*

### 3. Improve Energy Conservation at NSLS-II

**Background:** BNL management supports and encourages energy conservation measures. This goal is in support of that emphasis.

- a. Evaluate the conclusions and observations included in the “E-star EMS Project Report” (submitted by D. Bauer on 10/7/08) for the NSLS and determine applicability to NSLS-II facilities. *Responsibility: Bauer*
- b. Update the E-star report or develop a NSLS-II specific report to include NSLS-II facilities/operations and formulate energy saving goals/techniques to be included in the FY10 Goals and Targets. *Responsibility: Bauer*

### **Other FY09 Department Targets**

#### **4. Increase NSLS-II personnel awareness to accidents, injuries and traffic violations and maintain a “zero” injury policy for the Project.**

**Background:** The laboratory accident and injury rates have consistently exceeded established targets. The NSLS-II Project has establishing a “zero” injury policy for the project and with over 375,000 cumulative hours worked to date has been successful in achieving a record of zero DART’s and TRC’s and one first aid case. Keeping the staff and contractor awareness to accidents and injuries is especially important as R&D and construction activities increase.

- a. Investigate all injuries and incidents in accordance with the laboratory SBMS and follow up on all corrective actions. *Responsibility: Hoey*
- b. Maintain a minimum of two trained and qualified accident investigators. *Responsibility: Gmur/Krasner*
- c. Track all accident and injuries and periodically report to management the status. *Responsibility: Hoey*

#### **5. Develop Project Safety Review Forms and complete safety reviews for all R&D projects that begin work in FY09.**

**Background:** The PSRF process is the mechanism that the project institutes to assure that adequate work planning and control is conducted for all R&D operations. The PSRF’s underpin the projects Integrated Safety Management System and are critical in the identification of hazards, controls and providing communication of such to the workers.

- a. Prepare a list of R&D activities subject to review and establish schedule for review by 2/25/09. *Responsibility: Gmur*
- b. When developing the PSRF’s consider the following;
  - i. minimize storage of hazardous materials that have a NFPA rating of 3 or 4
  - ii. minimize/reduce the use of hazardous materials via substitution/elimination
  - iii. minimize the generation of waste materials
  - iv. recycle materials used in the PSRF

- c. Complete all reviews as scheduled. *Responsibility: Gmur*

**6. Evaluate the NLSL-II training program to identify additional metrics to measure for improved performance.**

**Background:** Training is a key aspect in assuring that staff is qualified and competent to perform their duties safely. The laboratory measures each department on a monthly basis the percent of training complete against the number of requirements. NLSL-II training percentages are less than the laboratory average of 97% and are currently at 94% for staff and 91% (average since project start) for contractors. Given the large influx of new employees to the project, monthly completion percentages may not be the best measure for the project. An analysis will be conducted to determine the mechanisms impeding training completion and identify appropriate metrics and measures to improve completion performance.

- a. Conduct and analysis to Identify mechanisms impeding training completion. *Responsibility: Corwin*
- b. Identify metrics and measures to improve completion performance.  
*Responsibility: Hoey*