

NLS FY 07 ESH&Q Improvement Plan

This ESH&Q improvement plan is established to define the principal targets and their associated actions that will be addressed during FY 2007. The purpose of this list is to provide focus for the most important issues in the year to improve the NLS ESH Program.

The following twelve items have been selected for FY 2007. The dates included below are for planning and may change. Progress on each item is tracked in the NLS Family ATS database.

OHSAS/EMS TARGETS

1) Establish one meaningful and cost-effective proposal for pollution prevention (P2) at the NLS and seek to secure funding for implementation.

Background: The Laboratory pollution prevention program can provide funding for projects that can reduce waste generation. The departments are expected to evaluate their waste streams each year and generate a proposal for consideration by the P2 council for funding.

- a. Evaluate the department waste stream and determine what significant component can be reduced by 25% or more.

Responsibility: Aloï

Due date: 12/31/2006

- b. Submit a proposal to the Laboratory pollution prevention council and seek funding for implementation.

Responsibility: Aloï

Due date: 12/31/2006

2) Evaluate potential for solvent and noise exposure at the NLS and revise policies and practices as needed.

Background: 29 CFR 851 requires assessment of personnel exposures through industrial hygiene monitoring. Noise and solvent exposure have been identified as potential risks to personnel or facility users. Initial monitoring of exposure is necessary to characterize that risk.

- a. Complete representative, full-shift noise dosimetry for the NLS Utilities Group and Machinists.

Prepared by Andrew Ackerman
01/26/2007

Responsibility: Weilandics
Due date: 05/01/2007

- b. Complete representative solvent exposure IH sampling for three separate solvent uses.

Responsibility: Weilandics
Due date: 05/01/2007

- c. Issue noise and solvent exposure risk assessment reports that include the type of monitoring conducted, monitoring results, and recommendations for needed policy and practice changes.

Responsibility: Weilandics
Due date: 06/01/2007

- d. Revise NSLS policies for working with solvents and in noise areas to address any recommendations that arise from exposure risk assessment reports.

Responsibility: Gmur
Due date: 08/01/2007

3) Accelerate implementation of NRTL program and complete inspection of 30 % of the current equipment inventory.

Background: Progress continues with inspection of electrical equipment at the NSLS for compliance with NRTL certification or EEI inspection. This target is aimed at keeping focus on that program and to assure that 30% of the department equipment is inspected by the end of FY 07.

- a. Track inspection progress and provide quarterly reports on that progress.

Responsibility: Aloï
Due date: Quarterly (starting 01/2007)

4) Implement a safety observation process for NSLS managers through the section head level.

Background: An important Laboratory initiative is to implement a safety observation program for all Level 1 and Level 2 managers. The NSLS has chosen to extend this requirement to the department section head level.

- a. Conduct training for NSLS management to the section head level in how to conduct and record observations.

Responsibility: Ackerman
Due date: 02/28/2007

Prepared by Andrew Ackerman
01/26/2007

- b. Assure completion and documentation of at least one hour of observation time each month for all personnel in the program. Report quarterly to the NSLS Operations Council.

Responsibility: Ackerman

Due date: ongoing and ending on 09/28/2007

OTHER DEPARTMENT TARGETS FOR 2007

1) Evaluate the NSLS Lab Steward program for wet chemistry labs and revise responsibilities and authorities as needed.

Background: Management of the NSLS set-up laboratories is variable and expectations are not well defined. Review and revision of the set-up laboratory steward R2A2's is needed to define what is expected from personnel with that title. Emphasis on set-up laboratory work planning, housekeeping, and organized use through improvement of the laboratory steward program will reduce the risks associated with work in these locations.

- a. Revise the R2A2 for NSLS Laboratory Stewards.

Responsibility: Ackerman

Due date: 02/09/2007

- b. Generate a list of the existing NSLS Laboratory Stewards with identification of assigned laboratory and email address.

Responsibility: Chmiel

Due date: 02/09/2007

- c. Meet with the Laboratory Stewards at least four times throughout the year to discuss and emphasize requirements.

Responsibility: Chmiel

Due date: 09/28/2007

- d. Evaluate and report on compliance with the expectations defined in the revised Laboratory Steward R2A2's.

Responsibility: Chmiel

Due date: 06/01/2007

2) Evaluate the BNL Interim Procedure for handling nano-materials and bring the NSLS into compliance with the rules determined applicable.

Background: Work with nano-materials is progressing at the NSLS. The risks associated with these materials are not well defined. BNL, along with personnel from the other four national laboratories that are building nano-science centers, has issued an interim

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01/26/2007

standard aimed at control of work that involves nano-scale materials. The NSLS must comply with this new rule or, where circumstances preclude compliance, must seek approval from the Institutional Nano-science Safety Advisory Committee (INSAC) for alternate measures proposed.

- a. Evaluate and report on existing NSLS nano-material handling practices.
Responsibility: Ackerman
Due date: 02/09/2007
- b. Present NSLS concerns for compliance with the interim standard to the BNL INSAC and seek resolution.
Responsibility: Ackerman
Due date: 02/28/2007
- c. Define and implement NSLS requirements for full compliance with the BNL interim standard and any decisions made by the INSAC.
Responsibility: Aloï
Due date: 04/20/2007

3) Prepare for and achieve success in the DOE Integrated Safety Management (ISM) assessment scheduled for CY 07.

Background: A comprehensive assessment of ISM implementation at BNL will be conducted by the DOE Office of Assessment sometime in 2007. This assessment is very important to the department and the laboratory. This target is to define the steps that will be taken to ensure that the NSLS is prepared for the assessment.

- a. Prepare a document that maps the ISM Core Functions and Guiding Principles to NSLS programs.
Responsibility: Ackerman
Due date: 03/30/2007
- b. Communicate ISM policies and provide training to NSLS staff and users regarding key ISM issues.
Responsibility: Ackerman
Due date: 06/29/2007
- c. Complete the DOE audit with no significant findings.
Responsibility: Ackerman
Due date: TBD

4) Complete review of the implications of Part 851 to the NSLS and establish a course of action for bringing the department into compliance with that rule.

Prepared by Andrew Ackerman
01/26/2007

Background: Implementation of 29 CFR Part 851 is expected to have significant impact on operations throughout the Laboratory. NSLS programs are expected to meet these new requirements and where significant resources or time are needed, a plan for achieving final compliance must be established.

- a. Complete analysis of the department programs and determine the existing gaps between NSLS procedures and requirements, and that required in 29 CFR Part 851.

Responsibility: Ackerman
Due date: 01/31/2007

- b. Assign responsibility for addressing identified gaps.

Responsibility: Ackerman
Due date: 02/09/2007

- c. Develop and submit a plan for compliance for those gaps that require more time and resources than available to resolve this fiscal year.

Responsibility: Ackerman
Due date: 02/28/2007

5) Evaluate beam-loss mechanisms in the booster extraction process and determine if improved extraction efficiencies are achievable.

Background: Booster operation contributes to the accumulated radiation levels in several NSLS locations. Improving electron extraction efficiency will reduce Bremsstrahlung generation and is expected to lower those levels.

- a. Establish a studies plan to measure extraction efficiency. Develop a plan for improvement of extraction efficiency.

Responsibility: Shaftan
Due date: 02/28/2007

- b. Submit a final report outlining the extraction studies that includes the methods used to improve extraction efficiency, a data summary with conclusions and recommendations for further minimizing radiation levels generated by booster operation.

Responsibility: Casey
Due date: 08/31/2007

6) Continue development of web-based JTA questionnaire as a training needs assessment tool by incorporating Chemical/Hazardous Materials, Materials Handling, and Machine Shop and Construction Hazards.

Prepared by Andrew Ackerman
01/26/2007

Background: Assignment of pertinent training requirements is an important aspect of the department program. Training is best accepted when it is applicable and useful. Assuring that assigned training is only that which is required is challenging. Use of a well designed questionnaire to collect information about personnel job tasks can help with that assignment. This approach has been very successful with assignment of electrical safety training and will be expanded to include other topics.

- a. Develop a set of questions to collect information about the tasks completed by staff and users for the following topics:
 - Chemical/Hazardous materials use
 - Material handling
 - Machine shop use
 - Construction hazards

Responsibility: Corwin
Due date: 04/27/2007

- b. Configure and implement a web page to use the question sets and collect information from staff and users.

Responsibility: Corwin
Due date: 05/31/2007

- c. Collate and analyze the data collected to determine appropriate JTA assignments.

Responsibility: Corwin
Due date: 06/29/2007

- d. Implement defined JTA assignments.

Responsibility: Corwin
Due date: 07/31/2007

7) Capture EMS and OHSAS support documents that require revision control within the NSLS controlled document system.

Background: Documents that support the NSLS EMS and OHSAS programs are to be controlled to assure adequate revision and review on a regular schedule.

- a. Identify the EMS/OHSAS support documents.

Responsibility: Buckley
Due date: 01/31/2007

- b. Determine the appropriate document control system and review frequency for each document.

Responsibility: Buckley
Due date: 02/28/2007

Prepared by Andrew Ackerman
01/26/2007

- c. Implement control of the support documents and assure proper review responsibility assignment.

Responsibility: Buckley

Due date: 02/28/2007

8) Combine the EMS and OHSAS documentation into a single manual.

Background: The EMS and OHSAS programs were developed at different times and that has resulted in two separate sets of documentation. These two programs are complimentary and share many components. Combining the two sets of documentation will result in a more efficient set of program documents.

- a. Identify the common elements of the two program manuals and the common support documents.

Responsibility: Gmur

Due date: 02/28/2007

- b. Prepare a draft, combined web manual for review by the NSLS OHSAS/EMS committee.

Responsibility: Gmur

Due date: 06/29/2007

- c. Implement the combined web manual and support documents.

Responsibility: Gmur

Due date: 08/31/2007