Integrated Safety Management Awareness Training For Lab Users



What is Integrated Safety Management?

- DOE approach for incorporating safety awareness and good practices into all activities.
- Systematic method to integrate safety into management and work practices at all levels

Protects the public, the worker, and the environment

How is ISM Implemented at JLab?



What are the 5 ISM Core Functions?

- These five core safety management functions provide the necessary structure for the conduct of any work activity
 - 1. Define the Scope of Work
 - 2. Analyze the Hazards
 - 3. Develop and Implement Hazard Controls
 - 4. Perform Work Within Controls
 - 5. Provide Feedback and Continuous Improvement
- WHY IS THIS SO IMPORTANT? DOE assesses the "health" of a program by looking for proof of these 5 functions



CF#1 Define the Scope of Work

- Identify the nature of the required work
- Identify the schedule
- Determine the cost
- Review associated lessons learned
- Workers/users always involved in work planning

CF#1 – How do we define SOW?

- You, the users, conceive the experiment and prepare a proposal
- Review of the proposal by:
 - TAC and PAC
 - Nuclear Physics Experimental Schedule Committee
 - Experiment Collaborations meetings
- Review and approval for beam time by Lab Director
- The Lab plans to support your experiment in its Annual Work Plan

CF#2 Identify and Analyze the Hazards

- Identify work related hazards
- Analyze identified hazards



CF#2 How do we Identify and Analyze the Hazards Associated with Your Experiment?

- During the Experiment Review Process we:
 - Use Appendix 3120-H Checklists for Experiment Preparation
 - Prepare the Experiment Operations Envelope
 - Prepare the Experiment Safety Assessment Document and Form (ESAD and ESAF)
 - Prepare the Radiation Safety Assessment Document (RSAD)
- Subject matter experts (radiation safety, ODH, laser safety, industrial safety) are consulted througout the process

CF#3 Develop and Implement Hazard Controls

- Select/design engineering & administrative controls
- Select/design pollution prevention/waste minimization controls
- Identify appropriate personal protective equipment
- Apply associated lessons learned into controls
- Implement controls

CF#3 How do we Develop and Implement Hazard Controls for your Experiments?

- The final ESAD stipulates all controls that must be in place to mitigate identified hazards
- The final RSAD specifically addresses the safety issues associated with any radiation exposure potentially associated with the experiment.
- New or revised Laser Standard Operating Procedures (if necessary)
- The Conduct of Operations and Hall Operations Manual contain standard procedures and instructions that also ensure safe operations.



CF#4 Perform Work Within Controls

- Obtain authorization
- Ensure personnel have appropriate qualifications/training as identified in work control documents
- Conduct pre-job briefing
- Perform work and follow controls as identified in the appropriate work control document

CF#4 - How Do We Perform Your Experiment Within Controls?

 We follow the controls as established in the FSAD, RSAD, the COO, and specific procedures and instructions

• We ensure that operations are authorized during daily planning meetings



CF#5 Feedback and Continuous Improvement

- Conduct post job reviews (worker feedback)
- Collect and distribute lessons learned
- Conduct independent, management, and self-assessments

CF#5 – How do we collect and evaluate lessons learned from the experiments?

• Post experimental feedback

Online forum

- E-Log
- Experiment collaboration meetings

ISM Resources

- Website
 - ISM basics, jargon, Tip of the Day, example inspection questions & answers
- ISM Program Description
- JLab Safety Toolbox
- Core Function Team Members
- Workers Safety Committee
- Managers and Supervisors
- Daily Planning Meetings
- ISM@jlab.org

What Does This Mean to Me?

- The inspectors will be walking the floors June 2-12 talking to staff and users
- We will escort each HSS team member and communicate issues as they arise
- You <u>are not expected</u> to stop activities immediately to interact with an inspector
- You <u>are not expected</u> to know everything about ISM or how work is planned and executed outside your organization
 - OK to say "I don't know" or "I don't understand the ?"
 - OK to say "that's not within my job responsibilities"
 - OK to say "lets go talk to the supervisor"

Answering Inspector's Questions

- Be honest, open, and professional
 - Answer their questions if possible
 - OK to use tools to answer questions (Safety Toolbox, ISM Cards, posters)
 - OK to ask them to restate a question if its unclear
- Questions will likely be focused on:
 - Are you trained & qualified to do this task?
 - Are you authorized to do this task?
 - What procedures are you following?

Summary

- What ISM/ISMS means
 - ISM is a philosophy on how to best integrate ESH&Q into work
 - ISMS consists of the policies, procedures, and mechanisms that make it happen
- What the DOE Inspectors will be looking at
 - How the 5 core functions are implemented during the planning and execution of your experiment
- The few, key concepts we may be tested on
 - How we plan work and control hazards
 - How we know we are qualified & authorized to do a task
 - How we collect, share and use LL for improvement

 Continue with SAF600U for users who have not previously completed the training

