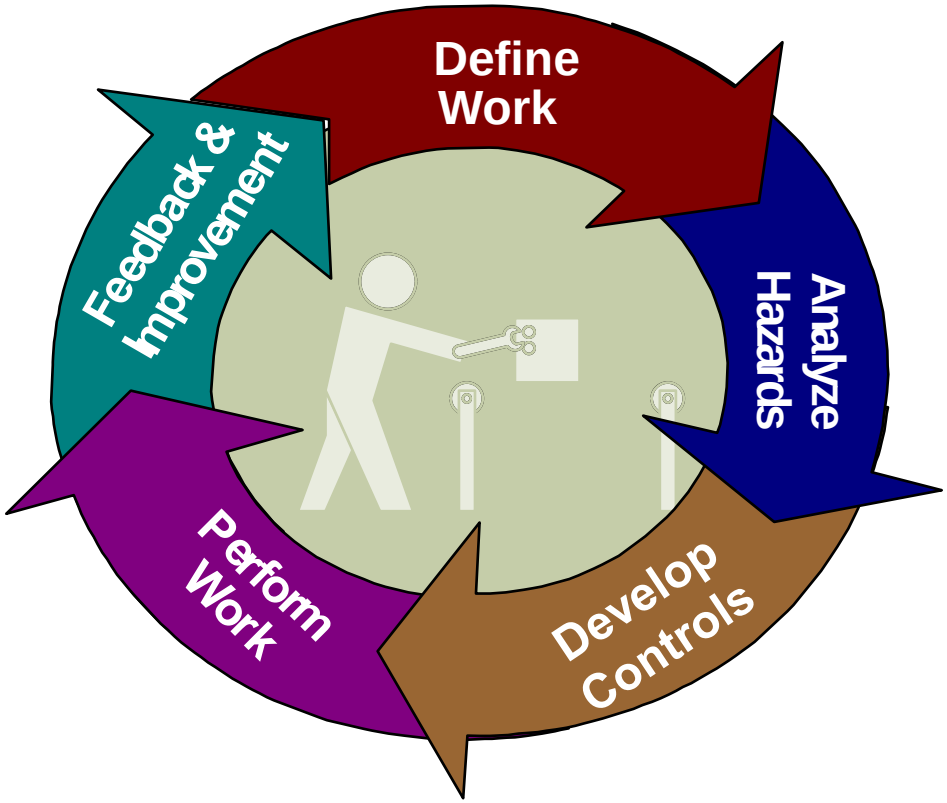
Integrated Safety Management Awareness Training



OUTLINE

- UNDERSTAND
  - What ISM/ISMS means
  - What the DOE Inspectors will be looking at
  - The few, key concepts we may be tested on
  - JLab ISM resources

What is Integrated Safety Management?

- DOE safety program – requires safety and environmental protection is “planned in” to every activity

- DOE standard since 1995
  - JLab “grandfathered” into program during initial startup review
  - JLab and Site Office ISM assessment required annually
  - Expect 3-4 year DOE HQ assessment cycle

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 always involved in work planning

How Do We Define the Scope of Work?

- Current Processes
  - Experimental review processes and schedule
  - Electronic work planning tools (ATLis, FEList, TATLs, Hall Lists)
  - Plan of the day, week meetings
  - Job walk downs
  - Subcontractor work orders, contract specifications
- Future Upgrades
  - Clarify and communicate use of work planning tools (ATLis, FEList, etc.) and create active links
  - Provide a search function to identify relevant LL during *Scope of Work* development

CF#2 Identify and Analyze the Hazards

- Identify work related hazards
- Analyze identified hazards

How Do We Identify and Analyze the Hazards?

- Current Processes
  - FSAD/ASE
  - Experiment safety approval document
  - Electronic work planning tool Task Hazard Analysis
  - ES&H 3210 – Hazard ID and Characterization
  - Workspace and equipment specific training
- Future Upgrades
  - Clarify the entire work planning process
  - Clarify when an informal vs. formal THA must be conducted
  - Communicate and train on hazard ID and analysis process in ES&H Manual
  - Improve ITP process to capture all training

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

How Do We Develop and Implement Controls?

- Current Processes
  - Accelerator/FEL Ops Directive
  - Conduct of Operations Documents
  - Experimental Readiness Review
  - SOPs, OSPs, TOSPs
  - Subcontractor Safety Plan
  - Pre-job walk downs
  - User training
- Future Upgrades
  - Assure that existing procedures are current
  - Assure that all training requirements are being tracked in ITPs
  - Make searching for lessons learned during control planning easier

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

How Do We Perform Work Within Controls?

- Current Processes
  - Electronic work planning tool authorization
  - Shift plan approval
  - Experimental readiness approval
  - Daily, pre-job meetings
  - Work Orders
  - Training & Certification Requirements
- Future Upgrades
  - Improve tracking of staffs' qualifications (Qual Cards)
  - Clarify when/how authorization needs to be formal and documented
  - Assure current documents reflect accurate controls
  - Improve work space postings

CF#5 Feedback and Continuous Improvement

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

How Do We Solicit Feedback and Assure Continuous Improvement?

- Current Processes
  - Safety Wardens
  - Workers Safety Committee
  - Daily, post job meetings
  - Lessons Learned Database
  - **C**orrective **A**ction **T**racking **S**ystem
  - E-logs
  - Routine procedure review
- Future Upgrades
  - Improve understanding of existing LL systems
  - Document and review lessons learned in electronic work planning tools
  - Establish LL Coordinators in each Division
  - Share LL between orgs.
  - Assure that all feedback is acknowledged

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

JLab ISM Weaknesses

- General knowledge of concepts and terms
  - Website
  - Training
  - Safety Toolbox

- Uneven application of work planning & control process (THA process, work package development, skill of craft evaluation)

JLab ISM Weaknesses

- Feedback & Continuous Improvement
  - Need better processes for collecting, analyzing and sharing lessons learned (enter LL into electronic work planning tools, establish LL Coordinators in each Division, share LL between organizations)

- Work Control Documents
  - Inconsistent format, content and control

What Does This Mean to Me?

- The inspectors will be walking the floors for 2 weeks talking to staff and users
- We will escort each HSS team member and communicate issues as they arise
- You are not expected to stop activities immediately to interact with an inspector
- You are not expected 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 my 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?

Example Q&A

Q: Are work efforts always described in some sort of work package, procedure or permit?

A: Other than the most simple tasks, yes. Routine tasks may be described in an electronic log entry and it can get as detailed as an experimental plan or a subcontractor specification.

Q: If you had a question or concern about safety or environmental protection during a work planning activity how would you raise the issue?

A: I would raise the issue with my supervisor. If the question is not resolved, I would continue to raise it through the JSA organization, all the way to DOE. (ES&H Manual Chapter 2310)

Q: What type of documents are provided to you that outline your jobs' hazards and control?

A: Depending upon the risk code assigned, various documents are developed including a Task Hazard Analysis checklist, a SOP, OSP, TOSP and/or a temporary work permit. The procedures for making these decisions are contained in the ES&H Manual.

Example Q&A

Q: Do your hazard controls ever include specialized training? If so, how is this implemented?

A: Sometimes. This would be called out in the Task Hazard Analysis or as a note associated with the activity authorization record.

Q: Are the results of the lessons learned reviewed by management?

A: Yes, in fact we have a new procedure that governs how this system works. Both internal and external lessons learned are collected and shared throughout the lab.

More Q&A can be found on the ISM Website

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 all work activities
- 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
  - How we identify, track and correct issues

Key Dates

1 May – Program Material Due to HSS

19-23 May – Initial HSS Visit

2-13 June - HSS Inspection

8-10 July – Follow-up Visit