

EH&S Policies & Manual Group Highlights

March 2004

► Policies & Manual Group Initiatives

- ✓ The PMG core staff developed the first draft of a standard operating procedure on EH&S Manual Tracking & Reporting. The procedure defines the step-by-step process used to integrate the Accelerator Division's EH&S Tracking System functions (tracking and auto email notification) with the PMG chapter/appendix development process. Using the tracking system to manage the PMG documents has had a significant impact on reducing the number of overdue chapters to less than 2% of all chapters/appendices.
- ✓ The PMG Manager hired a student intern, Wesley Ishom, to provide web development and database programming support to both the PMG and the Accelerator Division EH&S T3 Group. Wesley is in his Junior year of study at Old Dominion University and is majoring in Computer Science. Wesley will be formally introduced to the PMG staff at the upcoming PMG meeting in April.
- ✓ The PMG core staff started development of a PMG interface design for use with the EH&S Tracking System. Wesley is working on a rough draft of the design layout and functions. The Accelerator Operations Software Group has given Wesley development space on their server. The MIS Group is providing Wesley technical consult and support. We envision developing a PMG module that is compatible with the EH&S Tracking System design and can be added on to the overall system. The PMG design will include a change request layout that facilitates author feedback to requestors on the merit of their request and follow up actions that will be taken. The design will also incorporate interface with the Work Smart Standards change control process.
- ✓ Physics Division EH&S staff noted that an all staff email on tornado preparedness included directions to links in the EH&S Manual that appeared to be incorrect. The PMG Manager verified that the links were functioning correctly. Further follow up indicates that the error may have occurred while transcribing the link address to the web location window by the user. To prevent this, the PMG staff identified a means to activate links cited in chapter/appendix text. We will convert cited links to active links in text as each chapter/appendix comes up for review.
- ✓ We corrected the problem with the external link to the Building Managers web page in Appendix 2200-R1. We are still working on creating internal links within the appendix in the pdf version.

► EH&S Manual Authors - Non-EH&S Subject Matter Experts

- ✓ Concerns were voiced by the Accelerator Division Engineering Department management about the selection of a non-EH&S subject matter expert (SME) selected from the department to serve as author of Chapter 6140, *Cranes and Hoists*. The reason for this change was two-fold: 1) the SME initiated contact with the PMG to request the change, and 2) the Office of Assessment December 2003 Independent Assessment report on the Accelerator Division EH&S

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Department recommended that more non-EH&S SMEs be appointed to author EH&S Manual chapters/appendices. The Policies & Manual Group (PMG) Manager addressed the concerns with the dept manager and was given approval to retain the SME as author. The chapter and its appendices were forwarded to D. Magaldi for technical editing at the end of March and should be circulated for Level 3 review sometime in April. The chapter author, N. Wilson, has done an outstanding job of pulling together the material handling functions and lessons learned into a process that focuses on practical application of material handling practices at JLab.

► EH&S Manual Updates

- ✓ The RadCon Manual conversion to FrameMaker is progressing slowly. There are approximately 150 pages to be input into FrameMaker. We have extended the deadline for completion to mid-April.
- ✓ There were no Level 4 approval packets for submission to the Director's Council during March. There are 46 chapters/appendices currently undergoing review. We anticipate that a few of these may be ready for submission near the end of April.
- ✓ Chapter 2210, *EH&S Responsibilities of Individuals*, was undergoing minor edits by the Emergency Management (EM) Manager in concert with EM appendices changes that affected its content. Comments from Level 2 reviewers, to include a recommendation for a new section on the Medical Services Director, were substantive and will require a major revision to the chapter, placing it back into the Level 3 review process. The chapter will be returned to PMG Manager for processing and a new author assignment.
- ✓ Minor editorial changes were made to Appendix 5300-T4 as a result of related changes to Chapter 5300. The author felt that the changes were editorial and therefore did not require review.
- ✓ Minor editorial edits be made to Chapter 5100 at the author's request.
- ✓ Minor edits were made to Chapter 6210 and Technical Appendix 6210-T1 at direction from ESS Chair, Ed Martin. These two documents were recently updated and approved by the Director's Council (DC) in December 2003. The ESS identified some enhancements after DC approval, primarily graphics, that they felt would help to strengthen recent lessons learned messages. Ed felt the changes were minor and could be made without further review.
- ✓ PPE Chapter clarification (6610-T7) on eyewash inspection submitted in response to staff observation. PMG Manager is reviewing changes. Refer to PMG-2003-17-01

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✓ **Other review/revision activity:**

• **Level 1**

- Chapter 6681
- Chapter 6680
- Chapter 2410
- Chapter 3210
- Chapter 3220
- Chapter 6120
- Chapter 6630
- Chapter 6730-T2
- Chapter 6230 – ESS Chair is convening a review committee
- Chapter 6240 – next in queue after Chapter 6230
- Chapter 6750-extractin EP Supplement info from chapter
- Chapter 6761-extracting EP Supplement info from chapter

• **Level 2**

- Chapter 6733
- Technical Appendix 6210-T2
- Chapter 6732
- Chapter 6733
- Chapter 1200
- Chapter 6220-awaiting development of graphic
- Chapter 6760
- Chapter 6850
- Chapter 3310
- Chapter 6711
- Chapter 6760-extracting EP Supplement info from chapter

• **Level 3**

- Technical Appendix 6210-T3
- Chapter 5200
- Chapter 5300
- Chapter 6720-extracting EP Supplement info from chapter
- Chapter 6731-extracting EP Supplement info from chapter

• **Level 4**

- Chapter 6420 will be ready for Director's Council within 3 weeks
- Chapter 6145 - Director's Council comments from November 2003 still need to be resolved by author

• **Review Completed**

- Chapter 2420 review completed no formal review needed
- Minor changes made to Reference Appendix 2200-R1.

➤ **EH&S Manual Revision Status – Color Coded Table**

- ✓ The current color coded table of EH&S Manual chapters and appendices can be viewed at: http://docushare.jlab.org/Get/File-8112/Color_coded_table.xls

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➤ Issues/Concerns

- ✓ We continued to experience problems developing active links in the pdf version of the EH&S Manual. Christina, in coordination with Wesley, has identified a means to accomplish this however the solution is less than ideal. We will continue to investigate other means.
- ✓ Budget provisions for PMG needs/support at the time the function was transferred for operational control to the Acc Div EH&S Dept. have not been clearly established. Current funding for PMG equipment, training, software upgrades, and student hires are paid for out of the Acc Div EH&S Department's operating budget although PMG activities are a Director's Office activity. The PMG Manager reviewed the issue with the Chair, JLab EH&S Committee and both agreed that the issue needs clarification/resolution during the next budget cycle. Establishing a separate budget code to track PMG activities and equipment/supply expenses was considered. A separate budget request submitted through the Office of Assessment was also discussed.
- ✓ ESS Chair, Ed Martin, expressed collective concern from the ESS that policy guidance and review tasks have increased since the 2001 welding machine electrical shock event such that work is overwhelming the subcommittee members. As a result, the ESS is having difficulty finding a nominee for Chair once Ed retires this fall. Ed feels that Electrical Engineering staff has been on a critical decline over the past 10 years and that more are needed. This concern was passed on to the Electrical Safety Review Team.

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External Regulations

ASSE teleconference on ANSI Z244.1 is scheduled during the week of Spring Break for many potential participants. J. Murphy concurrence on Site Office participation. Carolyn Camp will circulate info and coordinate the room location.

Training

Respirator, Laser, Lead Worker, Forklift, and Crane Training, LTT, Safety Warden training conducted throughout the month. Some changes to the supervisor requirements from LTT resulted in confusion because implementation preceded the policy/guidance update and EH&S Manual changes. Request was made of 6110 chapter author to incorporate the changes and supplemental guidance into the EH&S chapter.

JLab EH&S Tracking System

CIO Roy Whitney has asked all system owners of major applications to complete a form to assist in Tracking System Development. It will be used to brief the Director's Council on the benefits of the new system.

Task Hazard Analysis and Technical Work Documents, Hazard Mitigation (IS/IH/RAD)

TEST LAB

The cave LSOP will be partitioned into two LSOPs. Joe will take over the LSOP for the south cave. Interesting note: LOTO issues for the caves were discussed for the two caves: they mimic the LOTO issues for the tunnel. Joe and Maud will incorporate LOTO into the LSOPs.

CEBAF

Safety Systems Group completed stray field magnet measurement test procedure which included access to the tunnel while the PSS was in power permit. Personnel were in the tunnel in Power Permit. Similar to OSP for magnet temperature measurements.

FEL

Ned Walker assigned as FEL Interim Safety Warden during Deborah's absence and will be working daily to resolve open items from the quarterly inspections.

GENERAL

- Tracking, Trending, Training group resolving some serial number discrepancies and a change in Arcet staff requiring new training to conduct welding machine inspections. The equalization valve was installed on expander 1. The LOTO procedure for expanders 1 and 2B now contains the latest information on the use of this valve. The remaining valve for expander 2A will be installed once it arrives at JLAB and the procedure will be updated.
- Industrial Hygiene staff met with John Mammosser to discuss upgrade to the rinse water systems for Production Chemistry: introduction of hot water rinse (160 F). In tandem, the Chemical Safety subcommittee that John convened for the first chemistry SOPs will be reconvened in April to review hot water rinse and update the Closed Cabinet SOP.

Sampling, Surveys, and Support (IS/IH/RAD)

TEST LAB

- Configuration and reliability issues resolved for VTA CARMs. Initial tests of proposed shadow shielding on cavity stands in VTA indicates dose in area of interest may be decreased by a factor of 4 to 5.

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- Minor problems with chemical storage in the Test Lab basement: the old freon that was removed from the chiller system is being stored in the basement. Industrial Hygiene is looking for a home or disposal alternative.
- Mold sampling conducted in the Accelerator Tunnel in areas where moisture collects. Results indicate that there is no significant mold problem in the tunnel.
- Water leak from the 1 MW klystron last Friday: about 15 gallons were lost. Building Manager was not sure if the spill was water, and contacted IH group. Water turned out to be lead contaminated. The spill was cleaned up and the floor decontaminated by IH group.
- Water backup in the R&D Chemroom neutralization system due to airlock resulting from blockage of vent holes. The problem has occurred twice this year, most likely exacerbated by a repair to the floor drain. Industrial Hygiene ensured safety of the cleanup, with repairs performed by Facilities Maintenance Carroll Jones. Facilities will have to improve on the venting system, action to be taken by Carroll Jones.

CEBAF

- Meeting on HKS experiment. Cautiously optimistic that photon beam can be directed to the beam dump.
- Safety Systems Group installed Sierra Monitor (digital) ODH monitor electronics in the MCC in anticipation of receipt of new transmitters.

EEL

- RadCon is configuring Key-master set-up for sealed source control. Semiannual inventory begun – source custodians notified to bring in sources for inventory and leak test. Steve Christo turned in all sources (none currently needed for any use). 31 sealed sources remaining on semi-annual inventory.
- Industrial Hygiene researched local exhaust system for misting units for the milling machines and lathes in the EEL Machine Shop. Ordered a small portable unit for Dave McCay
- Two manlifts are out of service affecting Facilities Management's planned work on top of the EEL building. We are working very hard to get one repaired and feel one of them should be fixed today (3/9/04).

GENERAL

- RadCon sent Hall A and C Beam Dump water sampled and sent to BWXT for metals analysis. Also no leaks detected between Hall A floor drain piping and Hall A dewatering system, Hall C to be checked next. Also, Facilities Management capped 4 drains in Halls A and C that led directly to groundwater (i.e., not part of the floor drain system) thus minimizing the potential for excess tritium levels in the groundwater
- Battery recycling: 4 pallets of lead acid batteries were picked up by Battery Outlet. These batteries were removed from the Computer Center by a subcontractor. The terminals were not covered, based on Eric Hanson's hazard assessment, the terminals were covered prior to being taken off site. (12 volt batteries).
- Information concerning wall colors etc. for the laser enclosure construction planning was requested by John Kelly. Followed up with consultant: for the wavelength specified, finding that color was not as important as was ensuring a matte finish. Supplied that information and all laser enclosure locations to John and JT Kelley.
- Hall A: 300 lead bricks will have to be placed in a steel container, which will then be bolted shut. Discussed the job with Doug Higgenboth. IH group will assist in the task. IS group Manny Nevarez will review the material handling safety, since forklift and crane will be used to maneuver the 9000 lb load into Hall A.
- GPR25 Barometrically compensated monitors undergoing software revisions at factory. Found source of instability of prototype head with 50 foot cable. Safety Systems Group investigating.
- A draft award nomination for HRSD's pollution prevention P2 annual award was prepared for Linda Even.



EH&S Reporting Activities for March 2004

➤ Key Activities

- As of March 31st, there have been 5 days without a lost-time injury. There was one recordable injury in March. A Facilities Management Dept. subcontractor (Hiller Systems) had a March 26th knee injury that has resulted in lost workdays. The worker was loading fire extinguishers into a company van at the VARC loading lock when he struck his knee.
- The March 26th subcontractor injury was determined to qualify under the DOE occurrence reporting (ORPS) definition of a "serious occupational injury" on March 30th. This injury was reported to the ORPS system as a Significance Category 3 occurrence (this level is the fifth lowest of six ORPS reporting levels).
- EH&S Reporting prepared the annual JLab response to the DOE Environmental Liability data call. The previously identified accelerator tunnel and end station areas were reviewed and found to still be appropriate for the 2004 response.

➤ Other Activities

- Carter Ficklen attended the March 17-18 DOE ORPS Feedback & Improvement Workshop in Atlanta, GA. This DOE-wide meeting was being held to evaluate the new ORPS system, after several months of use in the DOE complex. Concurrent sessions were held on the topics of reporting criteria, causal analysis, computer software, and performance analysis. A number of ORPS reporting thresholds, especially in the environmental area, were recommended for relaxation as a result of this meeting.
- Two Jefferson Lab March events were screened for ORPS reporting. The events involved a forklift damaging the EEL Machine Shop rollup door, and a loss of containment for low conductivity water (with low levels of lead oxide) at the 1 MW Test Stand in the Test Lab. The events did not rise to ORPS reporting levels; however, they have been internally logged for tracking as repetitive ORPS events.
- Carter Ficklen was one of the speakers at the March 16th Tidewater Section, American Industrial Hygiene Association (TAIHA) Professional Development Conference (PDC). This PDC is held semi-annually by the TAIHA. His topic was "Everything That You Always Wanted to Know About OSHA Injury Recordkeeping But Were Afraid To Ask".

- EH&S Reporting compiled several EH&S-related articles for possible use in the JLab weekly electronic newsletter, “On Target Briefs”.

- **Work Smart Standards (WSS) Set**
 - EH&S Reporting met with the Policy and Manuals Group to incorporate a review of WSS Set items along with EH&S Manual updates.
 - Proposed changes to EH&S Manual Chapter 2420 are being processed.
 - A new Lockout Tagout ANSI Standard is being considered for addition to the Set.

- **National Environmental Policy Act (NEPA)**
 - CEBAF and FEL Upgrade Environmental Assessment (EA)
 - EH&S Reporting continued to work on the checklists for the activities planned for inclusion in the proposed 16 GeV EA.
 - CD-Ø for the 12 GeV project was signed on April 1st.
 - EH&S Reporting is working with other laboratory staff to address other NEPA items, including actions related to the planned retention pond project.

- **Storm Water Permit Items**
 - Construction Activity under VAR 103277
 - The Permit and Working Draft of the Storm Water Pollution Prevention Plan (SWP3) are accessible on the jlab.org/ehs web page.
 - The subcontractor for the North Connector Road project maintains a copy of the permit documents on site.
 - Best Management Practices under VAR 040079
 - EH&S Manual Chapter 6733 is being revised to document a site Storm Water Management Program, which will address permit and regulatory requirements.
 - A tracking system to document instances that could affect surface water quality is being developed by Facilities Management.
 - The CIO’s MIS Group worked up a draft web system to track the performance status of JLab’s permit commitments.