Superconducting Magnet Division

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Memo

date: *February 22, 2006*

to: *Distribution*

from: *C. Porretto*

subject: *Minutes – SMD Self-Assessment – February 8, 2006*

Meeting Agenda (See Attachment)

Attendees (See Attachment) – *Attendees are SMD unless otherwise noted*

M. Harrison, M. Anerella, C. Cintorino, J. D'Ambra, J. Durnan (HP), G. Ganetis, G. Goode (ES), E. Lessard (AD), C. Porretto, P. Ribaudo, J. Selva (ES), M. VanEssendelft (ES), P. Wanderer, P. Williams (HP)

Meeting Purpose

The Superconducting Magnet Division's Annual Self-Assessment Review was held on February 8, 2006. The format of the meeting was a series of presentations given by Division members and an invited speaker. Presentations by Division members were structured as a review and critique of an individual element of the program as it is implemented within the Superconducting Magnet Division. The invited speaker gave a presentation on Integrating ISM, OSHA, OSH, and EMS, a topical area of interest. The feedback of strengths and opportunities for improvement is an integral part of the continuous improvement cycle.

Topics Discussed

- Division Overview
- Objectives and Targets
- ES&H/OSHMS Management Review
- EMS Management Review
- Training Review
- Integrating ISM, OSHA, OSH, EMS
- SMD Implementation of ISM
- Conclusion

Presentations and Discussions

(Comments by presenters are bulleted. Participants' comments are italicized.)

- **Division Overview** – Mike Harrison

  Overview Presentation

  - Tom Kirk is away on travel; Mike Harrison will give the overview presentation for him.
  - We have increased the complexity of management systems over the past years. SBMS is scary; there is a great deal of complexity. Concern about not being in compliance with one's own procedures.
  - Of the BNL-wide systems, SMD focuses on Work Planning and Control – that's where "the rubber meets the road".
  - For the activity areas assessed under the self assessment plan, SMD stresses ownership.
  - Management attendance in Tier I inspections is a problem. Would like to attend more.
  - ESH topics are discussed at weekly meetings held by Mike Anerella and George Ganetis. Technicians are kept in the loop.
  - FUAs haven't changed much, so there is not urgency to update, but we could do a little better.
  - The SMD will continue to move away from production and do more R&D.

- **Objectives and Targets** – Ed Lessard

  Objectives and Targets Presentation

  - The objectives and targets are from the C-AD Management Review. Some apply to the SMD, and some don't.
  - Some of the objectives and targets relate more to management commitments. These must be made overarching commitments (i.e., safety has to be an overarching commitment).
  - Having supervisors go to the clinic with workers may inhibit workers from reporting injuries.

    But upside is if discussion at OMC includes worker restriction.

  - 10CFR851: we are nominally in compliance, but there are legacy issues; meeting pressure vessel code could be a problem. We have one year to implement it, it gets signed tomorrow. We can be fined for non-compliance.

In the past, we tried to meet the intent of routine things. Now, we have to meet the letter. The DOE is not open to grandfathering. There is a procedure for a waiver, but one must go to the Undersecretary of Energy.

We must know the effect of implementation for cost reasons for future programs. We as a Lab have to develop a plan, or we must shut down the Lab.

- Only about 1 in 50 persons use SBMS.
- Managers buy in to the concept of reducing injuries toward zero, but some supervisors do not. Attempts to make supervisors more accountable at C-AD include the use of performance appraisals.
- Post job reviews are an important means to get feedback.

  Are you documenting post job reviews? Per Ken Brog, we should perform verbally, then occasionally document, say once per month, so we have examples for ISM audit.
  Green sheets are reviewed at the end of the weekly meetings.
  Do you find that you would do things differently if done again? Sometimes.
- Per Joe Leveque, about $10 – 20M is required to make fire protection improvements.
- SBMS documents are too wordy – it's hard to find the meat of what we're looking for.
- We must be careful that we don't downgrade jobs during work planning reviews just to avoid paperwork.

- **ES&H/OSHMS Management Review** – Jim Durnan

  ES&H/OSHMS Presentation

  - Tier I findings have come way down from last year. One of the categories has been eliminated.
  - "Elect. OSHA" finding is putting trash cans in front of electrical panels. These are easy to correct on the spot, but we didn't resolve that it was there in the first place. This will result in a fine in the future.
  - A toolbox talk was given on ownership of buildings and violations. It was explained that even if Plant Engineering employees leave a trash can in front of an electrical panel, it's our finding.
  - Examples of "Elect. OSHA" Tier I findings include rain water dripping on electrical panels.

    This is a disgrace. If we're going to have a fatality, it will be because of this.
    On the CURL list, there are several million dollars for roofs, prioritized for those leaking over electrical panels.
  - We have continued to increase worker involvement in the OSH program.

How many people were involved with the JRAs? We had 100% participation at the weekly meetings.
Have you received feedback from the technicians who are on the WOSH committee? Yes, I have talked to them about the meetings. There are not WOSH committee issues for SMD.
In canvassing the staff, they are satisfied with worker involvement, but post job reviews are still not great.

- SMD has met its targets for closure of OSHA findings; most of the ones remaining are for Plant Engineering.

- NRTL requirements are being implemented. George Ganetis has staff going around and inventorying items.

  A list of minimum requirements was made for equipment. If equipment doesn't meet the requirements, then it is taken out of service. Items are actually being tested.

- The DOE ISM Review has been postponed until February 2007.

  Why has it been postponed? Because of the assessment performed by McCallum and Brog. There is a lot that we have to do in the corrective action plan.

- 10CFR851: Will go into effect on February 7, 2007. It is a law that will be applicable to all DOE Labs.

  What about training? We need it ASAP to remove potential violations.
  Everyone will hear about it in the next few weeks.

- There were no reportable injuries in FY05.

- The Record of Decision will be covered by Mel in his presentation.

- **EMS Management Review** – Mel VanEssendelft

  Management Review Presentation

  - SMD aspects have been reviewed and there were no new ones identified.

  - One of the FY05 objectives was to enhance natural and cultural resources.

    What is a cultural resource? The WWI trenches for example.

  - The EMS audit was done jointly with C-AD.

  - Jim Durnan provided a targeted EMS awareness initiative at a toolbox meeting.

  - FY05 Target – compliance

    - Mel inspects tanks with oil in building 924 on a monthly basis.

    - The list of satellite accumulation areas is reviewed on an ongoing basis.

- There were no findings for the SMD from the FY04 RCRA Assessment.
- The inventory of mercury devices contains mostly thermostats.

Are there any compliance issues? No.

- Internal Audit: there were no findings from the Lab– level audit, but several from the C-AD one.
- There were no findings from the External Audit.
- Environmental Monitoring: SMD was not reviewed; there were no findings.

  Is monitoring being done for mold? No, that is an IH issue.
- Legacy Issue: Cosmotron System – the system can finally be taken out and disposed of. The day tanks contained about 25 gallons of mixed waste.
- SMD has a lot of propane cylinders in the back, which is a violation. These currently cost approximately $250 to dispose of. Propose joint use of recycling system with C-AD.
- Spills: there were two zero spills in CY2005!
- Propose target for next year to review, inventory, and dispose of expired epoxies in building 924.
- The Federal Electronics challenge is a good opportunity to get rid of as much excess equipment as possible and receive recognition for doing so.
- EMS audits: the Internal Audit is scheduled for February 21 – 24, 2006, and the NSF Surveillance Audit is scheduled for June 2006.

  The audit will include OSH.
- <u>Record of Decision</u>

  Are the EMS/OHSAS Programs effective in achieving environmental policy commitments (P2C4 and injury/illness reduction)?

  Yes.
  The Lab is looking into Safety something event, not just safety week, as long as the Departments participate in the events.
  We should consider draining the presses in Building 924 and backfilling them with nitrogen.
  For unused items, we should look to ensure that these systems don't come back to bite us.
  Some of the systems exist for RHIC.
  Yes, but the question is: do we keep them full of oil?

  Are programs effective in achieving the objectives and measures?

  Yes.

Are the OSH/EMS/SA programs adequate in terms of identifying significant environmental aspects and impacts and occupational safety and health hazards, resource allocations, information systems, and organizational issues?

Yes.
We may have problems reviewing documentation and manuals, since we don't have the resources.

Are the objectives and measures for OSH and E related programs suitable in terms of environmental impacts, occupational hazards, current conditions, stakeholder concerns, current and future regulatory requirements, business interests, technology capability, and internal organizational or process changes?

Yes.

Are there recommended revisions to OSH or Environmental policy and commitments, objectives and performance measures, elements of OSH, or elements of EMS?

No.
In the new 14001 standard, the Management Rep has to hear issues here and raise them above, to see that things are working.

- **Training Review** – Christopher Porretto

Training Presentation

- All goals were obtained.
- Monthly training completion percentages have been 98 or 99% for the entire year.
- The required annual update of JTAs and employee-to-JTA links was performed, with only minor changes.
- The breakdown of hours spent in training is not consistent with previous years – there was a large increase in HR training.
- Average time spent in training per person for the Division (11 hours) is up from last year (10 hours) due to new requirements for both ESH and HR training.

  Does the difference in average hours per person between SMD (11) and C-AD (17) reflect rad training? Yes, that and C-A Access training.
  Electrical techs need to take the rad challenge exam before going in the tunnel.
  This is probably the reason SMD is higher that Physics and Instrumentation.

- Upcoming initiatives include implementing Lab improvements to the Work Control Coordinator/Work Control Manager training program.

- **Integrating ISM, OSHA, OSH, EMS** – Pat Williams

  ISM, OSHA, OSH, EMS Presentation

  - Integration (in ISM) means that it's seamless; we don't have to do extra things. ESH is a value to the organization.
  - OSHA defines a minimum set of requirements for a safe work place.
  - There will be over 400 unresolved OSHA findings by 2/28/06. Many are in C-AD, and are legacy issues which will require major investment. Ray Orbach is angry that BNL only committed to address findings versus fixing them.
  - The Tier I program is relied upon to find OSHA violations. There should be at least one person on the team who has taken either the OSHA 10-hour or 30-hour course.
  - The OSH/18001 process is similar to the EMS/14001 process. We have the same auditor certifying us; and it supports ISM. The ISM policy is high-level and vague.
  - The core functions and guiding principles of ISM can be mapped to OHSAS 18001 and ISO 14001. The scope of feedback and improvement has been broadened to include JRAs.
  - SBMS is the foundation of our systems – it has regulatory requirements built in; we don't have to read the regulations.
  - Performance expectations are established via the Performance Expectations Measurement Plan (PEMP) in the BSA contract. PEMPs are the new name for critical outcomes.
  - The ISM audit has been postponed until February 2007, in order for us to address action plans that resulted from the ISM Readiness Review. However, the bar has now been raised regarding BNL's expected performance.
  - To prepare for the ISM audit, departments have been participating in the ISM Project and have been broken into groups of large science, small science, administration, and operations. Large science consists of the big machines, C-AD and NSLS, which operate predominantly via SOPs. Small science consists of the remaining scientific departments and divisions that perform work predominantly via Experimental Safety Reviews (ESRs).

    Does the Magnet Division really belong in the small science group since we don't use ESRs and perform most work via SOPs?
    Probably not. SMD probably belongs with Large Science; we will look to make that change.

- **SMD Implementation of ISM** – Christopher Porretto

  ISM Implementation Presentation

  - SMD processes map to the five core functions of ISM. The MAPs, OPMs, and travelers are the most important – that's where the rubber meets the road.

We have a lot more JRAs and FRAs to do.
Where would the Management Reviews fit? With Self Assessment, under Feedback & Improvement.
This is a good matrix; we want all departments to have a matrix like this.

- Use of MAPs is being phased out to reflect shift from production to R&D; will use only travelers in the future.

  What information would go on the traveler? More detailed directions like the MAP.

- A new application has been developed to create travelers. It includes a menu of opcodes for ESH&Q requirements.

  Does the opcode menu tie into JRAs? Yes, there is an opcode for JRAs.
  Is the traveler application an Access database? No, it's a SQL Server database.
  Is there a help menu to tell you what the opcodes are? Yes, there's a screen, and a report option will available soon.
  Opcodes need to be reviewed periodically. Yes, it is tentatively planned to have them reviewed by Jim Durnan on an annual basis. Keep in mind that Jim reviews and approves each traveler individually.
  David McChesney did a masterful job on this; it's award-worthy. It really meets our needs.
  This is a good presentation to show to other Dept. ISM POCs and Work Control Managers.

- **Close Out -** Mike Harrison

  Close-out Presentation

  - We appear to be meeting most of the BNL goals.
  - Need more involvement at the technician level.
  - 10CFR851: there is no hope to achieve pressure vessel code – Pat Williams must address to DOE.
  - Question whether there is too much work being performed as skill-of-the-craft.
  - Rain water on electrical panels is a real hazard, but not under our control.
  - Tier I findings are not too serious but represent ongoing work.
  - The Cosmotron waste has finally been cleaned up!
  - Electronic recycling is a growing issue.
  - No issues for training, but some emphasis on work control for FY06.
  - There is emphasis on the feedback function of ISM; we are taking credit for the JRAs.
  - The big concept (ISM et al) has been established; the problem is making sure that it works – fighting it out in the trenches. There will be many external audits.

- Issues
  - Obsolete equipment is an issue for SMD – will be addressed at monthly meetings.
  - Setting targets and objectives is important – we need to think about this.
  - SBMS: we must make it work for us.

    There will be one-on-one training made available in the future.
    Good, this will be addressed with Chris.
    Companies that have a better safety record do a better job of separating hard requirements from good practices – SBMS is full of both.

    The next time SMD conducts its self assessment, it should highlight program improvements, for example, feedback that improved something, travelers, or JRAs. We don't celebrate what we do, the way other labs do. Pat may pull some examples from the SMD.
    SMD will pull some together.

Dist: Attendees