

## **Safety Week Follow-up for Cross-Departmental Issues with the NSLS and C-AD**

*The Department's ES&H Coordinators, Ron Gill and Mike Zarcone, and the breakout session facilitators, Al Langhorn and Bill Christie met with safety representatives of the NSLS (Bob Casey, Associate Chair for Safety) and C-A Department (Ed Lessard, Associate Chair for Safety and Ray Karol, Head ESH&Q Division) to address the following issues.*

- \* The implementation of Work planning into the everyday tasks carried out at the Lab differs from Department to Department.
- While employees may, and generally do, understand how their tasks get reviewed and incorporated into a Work Planning scheme in areas and Departments where they often work (e.g. in Physics Dept. Labs, RHIC Facilities, of the Light Source), they do not necessarily know how to "Plug in" to the Work Planning Scheme in areas or Departments where they only occasionally perform tasks.

A specific suggestion regarding this point could be that it is incorporated in general Employee training that to ensure that all tasks are performed under the auspices of Work Planning, that when people go to work at any area of the Lab that there is clear guidance who they should contact before they start their work.

An example of how this should and should not be done comes from STAR, and its interaction with C-AD personnel. When we request C-AD Techs from the EP&S group we submit a Work Order. The Work Order explicitly states who the Techs must contact when they get to the STAR site. This ensures that their tasks get folded into the STAR Work Planning. The same applies when we put in an ILR to Plant Engineering for Electricians, etc. There is an entry for a point of contact that the PE personnel are to make at the site before they start working.

The example where this doesn't work, and presents a hole, is when we ask for some work to be done by other groups at C-AD (e.g. Vacuum group, PASS group, etc.). These people have a tendency to show up and just start working in the area, often without making it a point to contact Ralph or Tony (our Work Planning people).

The C-A Department has an assigned Liaison Physicist, Liaison Engineer, Liaison Experimenter, and an Experiment Work Control Coordinator for each experiment. All users must take an annual training where Work Planning issues and responsibilities are reviewed. Information is passed from C-AD Management through the identified people for dissemination.

The C-A Department is also addressing the issue of their internal groups (vacuum, PASS group, etc.) showing up and commencing work that had been requested without checking with the local Work Control Coordinator. The C-A Department identified this concern in its own Safety Partnership Week meetings and will make sure the local coordinators are contacted before any work is done.

The NSLS has an assigned PRT (Participating Research Team) that includes a Spokesperson, Local Contact(s), and a Beam Time Scheduler. All information is passed to the Spokesperson for dissemination to all who work at the beam line. The training for the NSLS is renewed every 2 years and includes the information for work planning and control. Work Permits are required for certain work (moving more than 100 lead bricks, working hot, etc.). The Spokesperson should be aware of these rules

After discussing these items it becomes clear that the effectiveness of these programs is predicated on effective communication between the spokespersons or liaisons and the people doing the work at the experiments. PIs and other responsible people must ensure that all workers are aware of the rules and contact people. Individuals must ensure that work is done only after it has been reviewed and the worker(s) completely understand what they are to do and who to contact. The NSLS is reviewing the effectiveness of this method of communication with the PRTs and expects responses from them in January.

#### Action Items

Remind all PIs of their responsibilities for communicating information to their colleagues and workers. (Completion Date – January 31, 2005)

\* To the extent that is reasonable, Training should be uniform across the Laboratory.

There were two examples of this that were discussed. One was department specific required Training for working in Machine shops. Some people argued that this should be uniform across departments, so that if one was trained in Physics, one could also use the Shops at the Light Source. Others argued that this particular Training should be department and Shop specific. The second example was Lead Handling Training. All agreed that Lab-wide Training should be applicable in all departments, with no additional department specific Training requirements.

Each department has people who are responsible for the machine shops. In addition to basic machine safety and operation, each department has specific rules it must communicate to individuals working in their shop. To this end, each department provides training that includes the site-specific rules. As machine shop training is a one-time training, it is usually worth the time getting qualified if machining is part of your responsibilities rather than returning to the Physics Department to do all your work.

For material handlers site specific training on cranes at the NSLS or C-A Department is necessary not just for the operation of the crane but to pass other rules and point out facility-specific hazards.

The NSLS has specific rules for lead that go beyond the rules provided for in the BNL lead awareness training including the use of PPE. The Physics Department's Safety &

Training Office will contact the Training and Qualifications Office to see if the NSLS Lead training satisfies the BNL requirement.

#### Action Items

The Physics Department's Safety & Training Office will contact the Training and Qualifications Office to see if the NSLS Lead training satisfies the BNL requirement so an individual will not have to take both. (Completion Date – January 31, 2005)

#### Other items discussed.

Cross Department Communication and Information Sharing.

Each Department should be aware of events that may have cross-departmental significance either to ensure a similar incident doesn't occur and/or that people working in other departments are getting the proper information and are performing in a manner that is satisfactory to all.

The Physics Department wants to know when any of its personnel are involved in any incident in order to determine if there is something it needs to do to prevent the incident from repeating or if there is potential for other Physics Personnel to be involved in a similar incident. This information may help the Department in tracking and trending incidents and providing targeted solutions. In the same manner, the Physics Department will notify other Departments if one of their people is involved in an incident in our Department.

Accident/Injury reports (mostly First Aid cases) for Physics department Personnel are sent to the Department's ES&H Coordinator even when they occurred in another Department. The Physics Department, NSLS and C-A Departments will forward a copy of an accident report to the Department in which the accident occurred.

#### Action Items

The Physics Safety & Training Office will contact P. Cirnigliaro (C-A) and N. Gmur (NSLS) for copying accident/injury reports. (Completion Date – January 31, 2005)

E. Lessard will provide a link and password to all Critiques C-AD staff have authored since FY 2001 and will inform the Physics department whenever any of its members is involved in a C-A incident. (Completed 12/28/04)

B. Casey will provide the link for NSLS Critiques it has authored and will inform the Physics department whenever any of its members is involved in a NSLS incident. (Completion Date – January 31, 2005)

M. Zarcone will establish a web page where the incidents that have occurred since FY 2003 will be published. Links will be provided to B. Casey and E. Lessard. (Completion Date – January 31, 2005)

#### New Initiatives

The laboratory performed an audit of practices when working on or near live electrical parts. This includes checking for zero voltages after applying LOTO. It was found that many people are not using the personal protective equipment required by the NFPA code (70E).

The C-A Department developed new guidelines that were put into place on December 22, 2004. Liaisons and Work Control Coordinators were informed of the new rules.

Neither the NSLS nor the Physics Department have issued new guidelines but will soon. The NSLS will inform the PRTs of the new rules for dissemination to its group.

#### Action Item

The Physics Department will formulate new guidelines for PPE when working on or near live electrical parts and will meet with the Group Safety Coordinators and Group Leaders to make sure the use of proper PPE is integrated into their work practices. (Completion Date – February 28, 2005)

As a result of the ISM Assessment at BNL, it was determined that many items of electrical equipment do not have a UL approval or other NTRL label. All items without an NTRL label must have a certificate of approval from the laboratory's Electrical Safety Officer.

All three Departments are beginning to address this issue. New equipment that is put into service is being inspected but it will take some time to certify all the older equipment that exists.

#### Action Item

The Physics Department will institute a program to identify all equipment in use and make sure it is properly certified. The Electrical Safety Officer will be asked to assist the Department. (Completion Date – March 31, 2005)