

Physics Department Management Review

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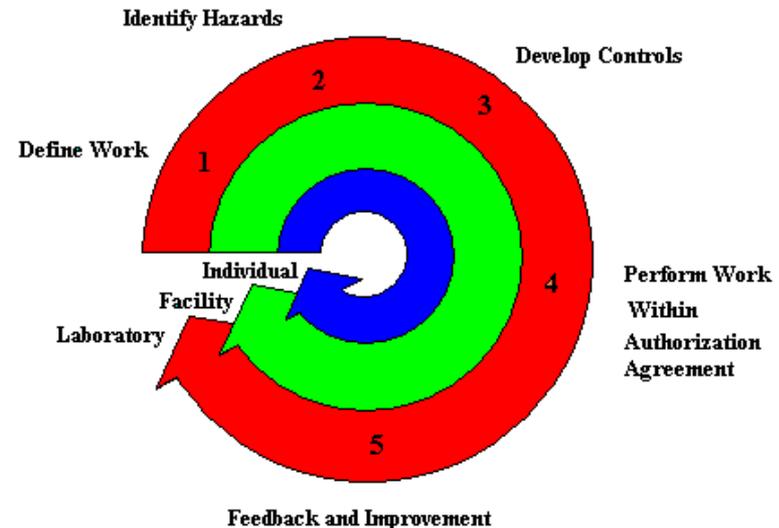
SIXTY YEARS
OF DISCOVERY
1947-2007

BROOKHAVEN
NATIONAL LABORATORY



ESSH Self-Evaluation

The Physics Department has embraced the 5 core functions of Integrated Safety Management (ISM) in its conduct of work planning and control for operations and experiments. The Experimental Safety Review Form is organized into sections that are aligned with the 5 core functions – Define the scope of the Work, Identify the Hazards, Develop Controls for the Hazards, Work Within the Approved Safety Envelope, and Provide Feedback to improve or fine tune the processes.



7 GUIDING PRINCIPLES OF INTEGRATED SAFETY MANAGEMENT ...AND HOW THE PHYSICS DEPARTMENT IMPLEMENTS THEM

Line Management Responsibility for ESSH.

- Responsibilities are well documented (Physics Department Policies, SBMS, etc.)
- Weekly Management discussion of safety as first item
- Group Leader involvement in any incident/accident investigation
- Department Management and Group Leader participation in Tier I Inspections
- Department Line Management participation in Safety Observations
- Department Chair directs Group Leaders to appoint a Group Safety Coordinator, and Group Leaders allow that person to spend time on ESSH issues

Clear Roles and Responsibilities

All employees have R2A2s
Safety Responsibilities well defined by Department Policies
JTAs reviewed annually or as jobs change

Competence Commensurate with Responsibilities

Authorized Worker Lists
Users receive hands-on training (where applicable)
Workers are required to read and sign ESR or Work Permit

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Balanced Priorities: on the grand scale, are the hazards being appropriately addressed?

- The Department does address the hazards associated with work and recognizes its need to allocate resources to address safety, through its programs and operations.
- Job Risk Assessments are used to evaluate hazards or risks

Identification of ESH Standards and Requirements

- The Department follows the SBMS for all the standards and requirements it operates under.

Hazard Controls Tailored to Work Being Performed

- The Department has comprehensive SOPs and ESRs that list and describe all the hazards and provide controls for each. This is a dynamic system that changes with feedback or as experiments evolve.

7 GUIDING PRINCIPLES OF INTEGRATED SAFETY MANAGEMENT ...AND HOW THE PHYSICS DEPARTMENT IMPLEMENTS THEM

Operations Authorization

For the User

- Comprehensive Check-in procedures and forms
- Site specific training by PIs (or his designee) is an individual training providing an excellent platform for interaction and evaluation of competence.
- Authorized User Lists (Electrical Workers, LO/TO, Laser Operators, ATF Linac Operators, Modulator Operators, Machine Shops, Material Handlers, MPMS, Rotating Anode)

For the Experimental Laboratory

- ESR or Work Permit that is comprehensive

For the ATF

- ATF Specific training
- SAD, ASE, COO, ATF Procedures

Details of the Assessment

Who?

- Physics Department's Safety & Training Office
- Input was solicited from Group Leaders and members of the Department

Reviewers

- The draft was distributed to the ESSH Committee, Group Leaders, Group Safety Coordinators, and Line Management

Areas Assessed

- Communications
- Training
- Leadership
- Tier I Inspection Program
- Industrial Hygiene Monitoring
- ESSH Committee and Work Planning
- Security
- Cyber Security
- Accident and Incident Management
- Corrective Action Management
- Accelerator Test Facility (ATF) issues
- Memoranda of Understanding (MOUs)
- Group Safety Coordinator (GSC) Program
- Environmental Performance
- Summer Student Monitoring Program
- Safety Observations.

Communications – Line Management

Line Management Commitment

- Discussion and review of ESSH topics at each Department Administration Meeting (usually weekly), Department Group Leader Meetings, Department Group Meetings, and at Department “All Hands” Meetings. These meetings have been enhanced with an increased safety focus, with a goal of reaching every employee. The meetings included safety issues as a principal component of discussion, usually first.
- The Physics Department continues to disseminate information on accidents, recalls of products, timely safety messages, and lessons learned.

Group Leaders' Commitment

- To provide their personnel a safe working environment and encourage communication in their group meetings. Groups meet at different frequencies depending on the nature of their work. The following have been reported by Group Leaders for this self-evaluation.
- The **Electronic Detector Group** has weekly meetings with safety as a regular agenda item. They discuss ORPS reports, ESRs and observations from their everyday work experience. This group is taking the primary responsibility for developing safety policies for the Daya Bay project with Ralph Brown as chief engineer and Dana Beavis as the US Project Safety Officer. This group is also starting to develop safety policies for the Long Baseline Neutrino Experiment's Water Cherenkov Detector.
- The **PHENIX Group** has group meetings the first and third Thursdays of the month for scientific staff. The first topic on the agenda is safety. Additionally, the PHENIX technical support team has weekly meetings to discuss safety, work planning, and jobs for the upcoming week. This includes all technicians, engineers, scientific associates, and PHENIX physicists involved in operations. In addition, the engineers and techs on PHENIX discuss the work plan in 1008 at the beginning of each working day. This involves CA-D engineers and safety personnel before the start of all major tasks and scheduling the necessary safety reviews with the various safety review committees when appropriate.

Communications – Group Leaders

- In the **STAR Group** there are three primary vehicles for communication:
- Regular group meetings at which safety is a recurring item for discussion; regular (weekly during the Shutdown) Scheduling and Coordination meetings to review tasks planned to be carried out in the STAR experimental hall and associated buildings, in which work planning is one of the objectives; STAR Skill of the Craft Training.
- The first item above is targeted to maintain high awareness on the part of BNL employees who work on STAR that safety is integral to every task they perform and that it has first priority. Ten to fifteen minutes is spent at each group meeting (approximately 1 per month) discussing an aspect of safety (e.g. work planning), reviewing the lessons learned from incidents that have occurred, etc.
- The second vehicle above is intended to insure that all work performed at the STAR site by BNL employees and non-BNL guests and visitors goes through the appropriate work planning process before work begins.
- The third item is the way in which STAR visitors, collaborators, and guests are informed about their responsibilities related to work planning while working at the STAR site. All STAR Collaborators are further required to take and pass C-AD user training before going to the STAR hall. This training they are aware of the potential hazards they may encounter while at RHIC/STAR, what their response should be if they do encounter such hazards, and what their rights and responsibilities are regarding safe conduct of operations at the STAR hall.
- The **Advanced Accelerator Group** has roughly 2 group meetings per year where safety is discussed. Most of the group's work is computer based.

Communications – Line Management

- The **Physics Applications Software Group** holds weekly meetings where safety is discussed as relevant to computer engineers and scientists.
- The **RHIC Computing Facility Group** holds weekly group meetings that include safety and cyber security.
- The **Accelerator Test Facility Group** has engineering meetings each Monday morning to discuss safety related to the ATF (any corrective actions related to ATF, interlock work, documentation, rack grounding, etc.), and Friday meetings where safety is also discussed.
- The **OMEGA Group** does not have group meetings. The scientist in charge of the technicians who are involved in laboratory setups works individually or in small groups with the technicians where safety as applicable is discussed on roughly a monthly basis.
- The **Medium Energy (RHIC Spin) Group** encompasses three working sub-groups: STAR, PHENIX, Polarimetry. The STAR subgroup discusses safety regularly in its weekly work planning meetings. The Polarimetry subgroup meets weekly during the running of RHIC and as needed during the other periods. Safety is an integrated part of the meetings and included in the work planning. The PHENIX subgroup includes safety discussions and training in preparation for shift duties.

TRAINING

- The Physics Department maintained a level of 97% of required training completed for employees and 89% for guests as of 9/30/09.
- The average number of hours spent in training by Physics Employees was 7 hours.
- All employees and long term guests received and reviewed their JTAs.
- Cyber, physical, and personal identity security issues received much attention across the laboratory this year. All Physics Department employees completed the required refresher training.
- The ATF ESH Officer performs monthly training database and ESR audits of all ATF staff and experimenters. He also gives the Department specific training in addition to the ATF Facility training.
- The Physics Department recognizes the additional risk posed by inexperienced people working in areas where hazards are present. In an effort to manage this, the Physics Department's Safety & Training Office maintained a list of summer students. The Department Chair and the ESH Coordinator met with the students as a group when they arrived. The ESH Coordinators and Building Manager specifically looked for students working in laboratories throughout the summer to make sure they were working safely. Students were reminded to wear bicycle helmets.
- The ATF does host students throughout the year. The students receive a comprehensive orientation and are monitored at all times. Their ability to work independently is governed by their achievements in their areas of expertise and demonstrated record of compliance.

LEADERSHIP

- The Physics Department has representation on SBMS Subject Area Development Groups
- Cyber security issues are included in our weekly Management Meeting with one or both of our two Cyber security representatives, Brett Viren and Tom Throwe attending and giving weekly updates. The Department demonstrates leadership as Tom Throwe was the former head and Martin Purschke is the current head of CSAC (Cyber Security Advisory Council). The Department has a total of seven representatives in CSAC.
- Additionally, the Physics Department makes up approximately one-third of the Cyber Security Policy Working Group (Brett Viren, Jerome Lauret, Wayne Betts, Martin Purschke, and Tom Throwe) with one-third from ITD, and the remainder from other BNL Departments. Tom Throwe and Brett Viren organized a working group to improve the network based security scanner. This group includes representation of ITD's Cyber Security, Unix and Windows groups.
- Ron Gill has developed an 'on-line' ESR form that has been adopted lab-wide this year. This form is very beneficial to the principal investigator as it guides them to including more appropriate text and informational links.
- Ron Gill recognized a hazard with Piranha Solutions (Hydrogen Peroxide and Sulfuric Acid). They are known to evolve gases after their use is completed, and that storing them in a closed container can lead to explosions due to excessive pressure build up. It is believed that allowing the used solution to off-gas for 24 hours in a hood is a reliable method to mitigate this hazard. During an inspection of our 90-Day Area, two bottles of hydrogen peroxide - sulfuric acid waste were checked and a substantial amount of gas was released (more than from a 2-li soft drink bottle) when opened, even though the solution had been allowed to off gas in a hood for more than 24 hours. This information was communicated to other ESH Coordinators in order to mitigate this hazard. Our department is now requiring that all such wastes be stored in a container with a pressure relief cap. This has been adopted lab-wide.
- The ATF was awarded \$2,000 for an S2 project – Emergency Lighting and Exit Sign upgrades
- During a Tier I inspection, it was learned that the ventilation system goes off at night invalidating the ODH calculations for the rooms involved. The Physics Department shared this information at an ESH Coordinators' Meeting as it could have lab-wide implications.
- The Physics department recognized its Group Safety Coordinators with a 'Thank You Luncheon' again this year for the leadership they provide do in bringing safety issues to their groups and group safety issues to management.

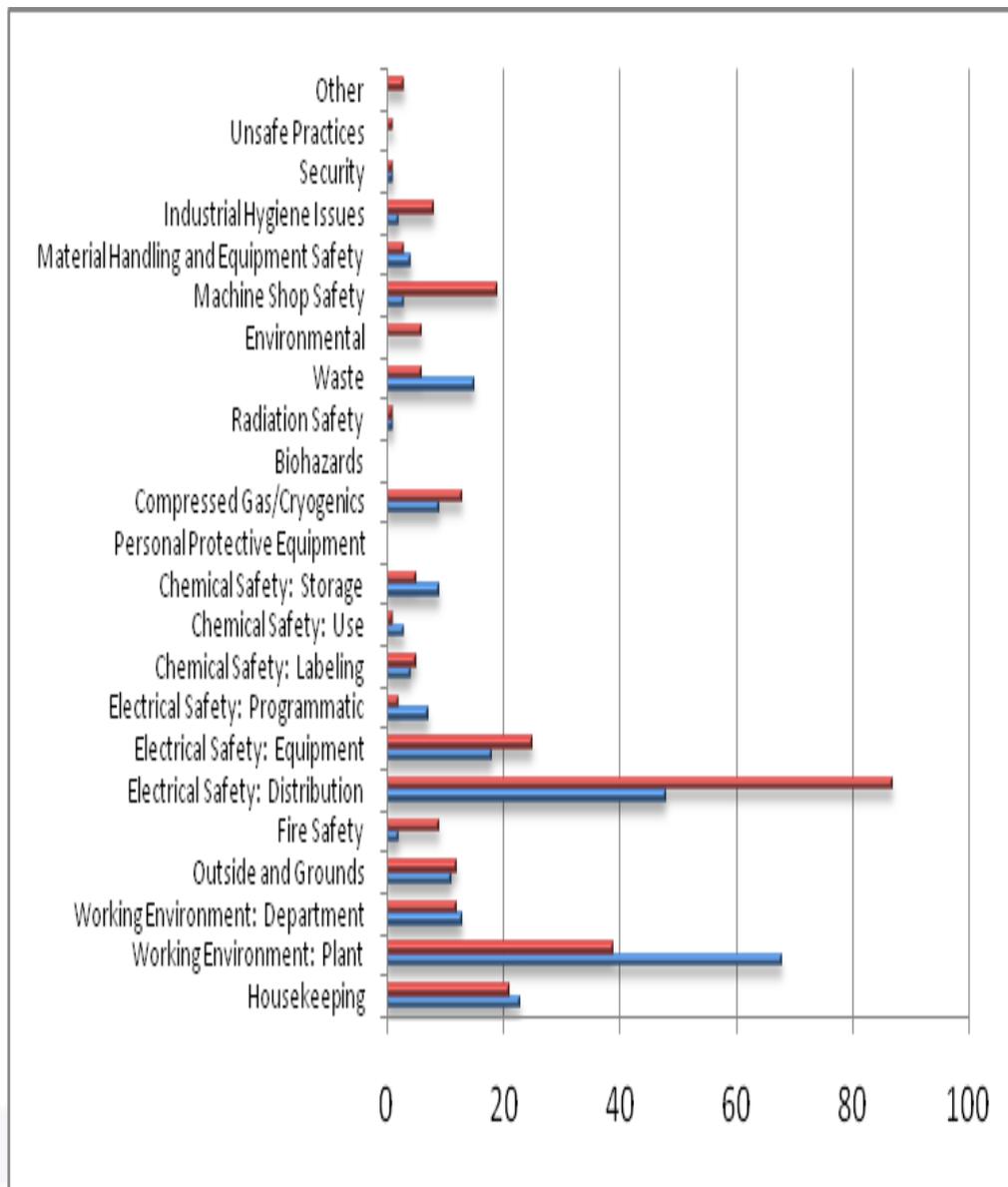
Members of Physics Department who are involved in Departmental and Laboratory Safety Committees or SBMS Subject Areas:

- Marcus Babzien - **Laser Safety Committee**
- Dana Beavis, - **Chair, C-AD Radiation Safety Committee, C-AD Experimental Safety Committee, Laboratory ES&H Committee, Daya Bay Safety Officer**
- Bill Christie – **RHIC Experimental Safety Committee, HP Advocate**
- Ron Gill, **ESH Coordinator, Laboratory ES&H Committee, Working with Chemicals Working Group, Small Science Working Group, Physics Department ESSH Committee, HP Advocate, Group Safety Coordinator, Electronic ESR Development Team**
- Brant Johnson - **ESSH Committee Chair - BNL Director's Safety Committee, PAAA Committee, PPE Working Group**
- Karl Kusche - **ESSH Officer at the ATF, Public Access AED SBMS Subject Area, Group Safety Coordinator, Physics Department ESSH Committee**
- Mike Zarcone – **Event Categorizer (ORPS), Emergency Response Organization, Training & Qualifications Steering Committee, Laser Safety Committee, Operations Forum, Radiation Protection Working Group, PPE Working Group, Physics Department's ESSH Committee, EEO Representative, Diversity Committee, HP Advocate. Causal Analysis for BHSO ORPS Findings, Event issues Subject Area Revision, Review of Radiological Control Manual, DOE Accelerator Workshop, Tier I Enterprise Tracking Application, ISM Corrective Action D 4.2 Workshop to Identify Key ES&H Performance Information, SBMS Documents Subject Area: Document Development and Revision Processes, Fire Safety SA Revision, Accident investigation SA.**

TIER I Program

The Tier 1 program worked very well this year and the number of findings fell by about 10% from last year. This is mostly attributed to the change in Machine Shop Safety and Electrical Safety Distribution findings due to the consolidation of machine shops. No situations involving 'imminent danger' were discovered. As can be seen from the data and the chart below, Housekeeping, Working Environment Plant (lighting), Electrical Safety Distribution (daisy chaining, blocked breaker panels), and Electrical Safety: Equipment issues (bad cords) make up 2/3 of the issues, same as last year. Corrective Actions are assigned and tracked to completion. Responses to the corrective actions were timely. Participation was good with Department Chair, Associate Chairs, ESSH Committee Chair and members, PIs, Group Leaders, and Group Safety Coordinator participation.

RED = 2008 **BLUE = 2009**



Industrial Hygiene Monitoring

- The Physics Department has expanded its use of our Industrial Hygienist this year with more sampling (lead, cadmium, chromium, beryllium, etc.), reviews of flammable cabinets and chemical storage areas for incompatibles and compliance, and sampling for legacy contaminants (radiation & perchlorates) in our hoods scheduled for replacement/removal in the refurbishing of the 3-story wing of Building 510.
- The machine shop that had been a Central Shops Satellite Shop was decommissioned, sampled and cleaned, then reopened as the Physics Department's Shop. This was a major change and required help of the IH personnel. Any changes in labs now involve sampling and clean up as necessary.
- Finally, we had discussions with different groups about personal hygiene regarding eating and drinking in areas where soldering operations occur.

ESSH Committee and Work Planning

- The Committee reviewed and approved all ESRs that were brought to it this year. Work Permits have been updated in the Department for Machine Shops, Winding Machines, and the routine work performed by staff at the ATF.
- The storage and radiological footprint for several laboratories where students occupy desks in the lab for long periods of time was reviewed and rearranged. The students no longer sit in a radiologically controlled area. As these students are part of the Medical Department, we have reviewed their dose rates and each received no dose for 2009.
- Whole body exposures continue to be very low with a total cumulative exposure of **22 mRem** for the entire year. This has been the case for the last 5 years where the annual exposures in mRem were **28, 24, 0, 56, 50, and 33** for the calendar years **2008, 2007, 2006, 2005, and 2004** respectively. Doses at the ATF for the complex continue to remain below 100 mRem as seen on the area monitors.
- Researchers using radioactive sources have made greater use of the site-wide inventory. This has reduced the purchasing of sources to a minimum. We also reduced our inventory by 10% and have reduced the number of instruments we keep.

Security Issues

- Security issues and information are presented at All Hands meetings.
- Emails relating to security are distributed to all personnel by the Physics Department's Safety & Training office.
- The Physics Department is in compliance with all SECON security requirements. In particular, all laboratory and office doors are locked outside of working hours. Noncompliance reports (doors left open) have been given to the Department Chair and Group Leaders of the responsible individuals. In 2008 the ATF secured S2 funding to install timed locks on both main entrances to building 820. This continues to work well.

Cyber Security

- Cyber security receives a great amount of emphasis each year and the Physics Department has done its part to satisfy the concerns of the DOE. Cyber security issues are included in our weekly Management Meeting with at least one of our two Cyber security representatives attending.
- Cyber security received a "satisfactory" rating from the DOE Chicago Office audit conducted in September of 2009. As a result of the high rating, the Chicago office will not conduct another cyber security audit for two years. The successful outcome of the audit was due, in part, to the great amount of emphasis cyber security is given by the Laboratory as a whole and by the Physics Department in particular. The Department's management and individual members continue to take the cyber security concerns of the DOE seriously.
- All computers in the Department continue to have password protected screensavers activated, and DOE login banners installed. All computers running Windows based operating systems are part of the BNL Domain and all those running a form of UNIX have the Ordo host-based scanner installed. The Department continues to respond to potential findings from both the full quarterly network-based scans and the targeted continuous network-based scans. An in-house developed application gives weekly notice of any systems that are out of compliance. S. Aronson and P. Bond are on the distribution list to keep them apprised of our compliance. Typically there are on order of or less than 0.1% of the department machines with any findings. Finally, the Physics Department continues to ensure that all new and existing laptops are compliant with DOE requirements regarding encryption capability.
- ITD continues with the process of rolling out a project to centralize the administration of user accounts and system configuration management. The department is working with them to identify which groups are candidates to install their particular solution. Other Physics groups have had these functions centralized for a number of years and we are working out how they can continue to work in this fashion while complying with the spirit of ITD's project.

Accident/Incident Management

- There was one incident, ORPS reportable, for the fiscal year as compared to one in 2008, five incidents/accidents for 2007, four in 2006, three in 2005, and four in 2004. There were no PAAA violations.
- The incident was:
 - The ATF Fire in one of the Modulator Cabinets, due to a failure of a capacitor.
- This incident was discussed with the Group Safety Coordinators and at a Department All Hands meeting.
- There was 1 DOE (OSHA) recordable case, a DART rate of 0.00 (number of cases/200,000 hours worked), a TRC rate of 0.0 (number of cases/200,000 hours worked) and only 1 first aid case (non-sport related).

Accelerator Test Facility Issues

- In February, there was a fire in one of the modulator cabinets that destroyed the cabinet, its contents and did collateral damage to the adjacent area totaling around \$100K. An extensive investigation was undertaken due to other incidents that had occurred in the Laboratory in which common threads were found. Although it took 7 months for the ATF to come back on line and renew its User Program, the investigation and subsequent committees' reports were beneficial to the Laboratory and have helped enhance safety. Nearly all of the ATF's procedures were audited and updated where necessary.
- The dose to the area monitors was reviewed quarterly. The only concern was two areas that may reach 100 mRem in a year requiring a higher level of posting. Documentation establishing one of these areas as a low occupancy area was completed few years ago. The other area is in an interlocked room, generally unoccupied when the beam is on, and presents no hazard to the public. An effort to map the radiological footprint in this area was conducted and found to be confined to a small area where there is no occupancy. It is noted that all TLDs of personnel at the ATF have no recorded dose.
- The new laser interlock system functions well. The testing procedure continues to be updated with small refinements.
- This year we will update the SAD, ASE, and COO. The SAD and ASE will require a Laboratory ESH Committee review, the COO Matrix will receive a BHSO review.

MOUs

- There were six Memoranda of Understanding that were reviewed, or updated. These MOU establish the responsibilities for Work Planning and Control of Experiments and Tier I Inspections. They are:
 - - MOU with C-AD for Physics Personnel working in C-AD space (due to be renewed 1/10)
 - MOUs (3) with ITD for our use of Building 515 (1 new one for the sigma seven room)
 - MOUs (2) with the CMPMS Department for their use of Building 510 space.

GSC Program

- The GSCs were again involved as members of teams reviewing Job Risk Assessments. A 'Thank-You' luncheon and meeting was held in September. Amber Aponte, Ken Asselta, Dana Beavis, Marcy Chaloupka, Joseph Cracco, Susan Duffin, Ron Gill, Harold Kirk, Karl Kusche, John Riordan, Sean Stoll, and our colleagues from the CMPMS Department - Robert Konik, Al Langhorn, Fran Loeb, Bill Schoenig, and Ed Stein.
- The discussions and interaction of this group remain productive each year. There is more feedback and discussion of items on the agenda and other issues are brought up by GSCs.
- Many of the GSCs are now part of our Emergency Response Program. They have 'sweep' routes and accountability responsibilities. They work with the Group Leaders and the LEC and have greatly improved our compliance.

Safety Observations

The Physics Department has 5 members (Chair, Associate Chair, Deputy Chair, ESSH Committee Chair, and Manager of ESSH&T Programs) who have taken the training. Additionally, the ALD of NPP, Manager of ESSH&T Programs in Physics, and the Associate Chair for ES&H/QA from the C-A Department perform monthly walkthroughs in the NPP Directorate. These have proved to be fruitful and worthwhile. A number of corrective and follow-up actions have resulted from these observations.

Three observations were undertaken in the Physics Department and one in the Phenix Experimental Hall this past year. No unsafe acts were observed.

Additionally, our DOE Facility Representative and the Manager of ESSH&T Programs also make unannounced visits to areas of the Department. During these visits, workers have an opportunity to bring safety issues to the attention of our DOE Representative who has followed up on issues to the benefit of the Department, the work area, and the morale of employees.

Audits – External Assessments

- Accelerator Safety (by DOE) – ongoing during FY09
 - ATF SAD & ASE
- DOE BHSO Assessment of BSA Required Reading Program – 4/09
- EMS/OSH Surveillance Assessment 6/09
 - Noteworthy practice – online ESRs; incorporating JRA into ESR
 - Noteworthy practice – Improvements evident in Emergency Management
- Nanomaterials ESH (by DOE/BHSO for CMPMSD Labs) 6/09
- Electrical Safety (by DOE/BHSO) 11/08
- Noise/Hearing Conservation (by DOE/BHSO) 8/09
- Compressed Gas Training Effectiveness (by DOE/BHSO) 6/09
- DOE Chicago Cyber Security Audit 9/09
 - BNL received a "satisfactory" rating. As a result of the high rating, the Chicago office will not conduct another cyber security audit for two years.

Audits – BNL Internal Assessments

- Nessus Daily scans for cyber security high vulnerability
- Nessus Full Scans – Quarterly
- SHSD Review of tier I data – 10/08
- Emergency Management Review of Shelter in Place for a tornado – 11/08
- Radioactive Source Accountability – 11/08
- Emergency Drill – 12/09
- 2008 Environmental Multi-topic Assessment Hazardous, Industrial, Mixed, and Radioactive Wastes – 1/09
- Beryllium Use Forms – 1/09
- IA&O Interview: Quality of Training Review: Training & Qualifications Steering Committee Function 2-09
- ATF Fire Investigation Audits 2/09 – 9/09
 - ATF Procedures
 - Conduct of Operations
 - Implementation of Recommendations from 1999 NSLS Modulator Fire
- ESH Multi-topic Environmental Assessment – 5/09
 - Beryllium, Non-Ionizing Radiation, Electrical Safety, Lifting Safety, Underage Workers
 - Radiation Generating Devices, Industrial, Hazardous, Radioactive, and Other Wastes
 - Noteworthy practice – Posting to inform waste generators of rules for use of area

Audits – BNL Internal Assessments

- Compressed Gas Assessment – 6/09
- Laser Tier I – 7/09
- Field Assessment of Training Program Effectiveness - organization job-specific electrical safety training 7/09
- Review of Facility-Specific Training - Required Self-Assessment 7/09
- Well Pump House Explosion Extent of Cause (EOC) Review 7/09
 - Building Manager Program
 - Configuration Management
 - Flammable Gas
 - Integrated Assessment/Lessons Learned improvements

- **Preliminary hazard discussion for renovation – 3/09**

Audits – Physics Assessments

- Tier 1 Inspections - Quarterly
- Management Work Observations - Quarterly
- Lead & Cadmium Surface Wipes
 - Identify contamination of areas being vacated
 - Improve work practices, in collaboration with CMP
 - Clean up legacy areas, in preparation for the renovation
- Quarterly Reviews of ATF Area Dose Rates
- Annual review of Individual Dose Rate including cross-departmental workers
- Annual Policy & Procedure Reviews
- Annual Hazard Placard Reviews
- Annual LO/TO Review
- Various Ergonomic Evaluations
- Emergency Management – 11/08
- Radioactive Source Review for reduction in unneeded sources – 1/09
- Physics Department FY08 Self Evaluation – 2/09
- Chemical Inventory Reconciliation – 3/09
- Various Ergonomic Evaluations
- Hood flow audit 5/09
- Noise Surveys Buildings 510 & 820 – 10/09
- Hood Survey for Perchlorates – 6/09
- Surface Surveys for Heavy Metals – 11/08, 8/09

Completed Recommendations/Goals for FY 2009

- Evaluate eating and drinking areas in laboratories.
- Remove more unused spray cans from the labs.
- Reduce the amount of high storage.
 - Reduced by 25%
- Reduce the stored equipment that is stored in the basement.
 - 3 cages/storage areas cleaned
- Remove 1 storage cage in the basement.
 - Mostly cleaned out but not yet removed
- Improve the Emergency Planning for accountability.
 - Greatly improved accountability, received kudos for this
- Prepare for the renovation project.
 - Some materials and equipment removed,
 - Hoods sampled for radioactivity and perchlorates
- Reduce the amount of unused sources and radioactive materials.
 - Reduced by 10% - 2 DOE accountable, 2 – BNL accountable
- Improvement of the network scanner through the Scanning Working Group.
 - Progress made – ongoing process
- Resolution/completion of ITD's centralization project in the department.
 - Progress made – not yet complete

Recommendations/Goals for FY 2010

- Continue reducing chemicals and cleaning up flammable cabinets of unneeded spray cans
- Prepare for the renovation by reducing unneeded equipment and clean up more storage cages
- Sample and clean at least 2 labs for heavy metal contamination
- Compliance with new PPE rules for chemicals
- ALARA Review of new Phenix workspaces
- Generate a MOU with NSLS and NSLS II for Building 820
- Renew MOUs with C-AD and ITD
- Keep up with NRTL/EEI inspections for new and brought in equipment
- Improve emergency planning by conducting and analyzing a drill
- Continue to suggest improvements of the network scanner through the Scanning Working Group.
- Continue to bring eligible machines into ITD's centralization project and provide an equivalent option for other machines.
- When the new computer room is completed, move the NUHEP computing resources to the new room ahead of the building renovation.