Final Minutes of the Tier I Working Group Meeting FY 09 Q3 held August 4, 2009
Safety and Health Services Division
Brookhaven National Laboratory

As August 4 is National Coast Guard Day, Steve Kane mentioned that on August 4, 1790 the Revenue Cutter Service was created by the U.S. Congress, and in 1915 this service merged with the U.S. Lighthouse Service to form the U.S. Coast Guard. Steve is a graduate of the U.S. Coast Guard Academy and served in the U.S. Coast Guard for 5 years.

Attendees:

Kay Conkling, Cheryl Conrad, Deborah Cubillo, Michael Dooling, Don Farnam, John Flannigan, Ayse Frosina, Ron Gill, Steve Kane, Keith Klaus, Qiao Yun Li, Ed Nowak, Michael Paquette, Richard Portesy, Marteenio Rankine, Robert Sabatini, Tom Schlagel, Patrick Sullivan, M. Van Essendelft.

Agenda:

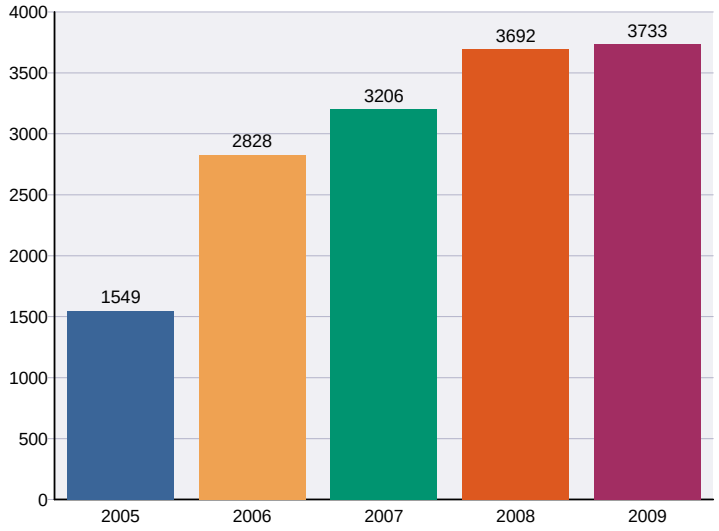
1 Other Tier I Efforts this Past Quarter (S. Kane)
2 FY 09 3rd Quarter Tier I Inspection Findings (S. Kane)
3 Database Requirements Document and Database Update (T. Schlagel)
4 Facility Operations Center (M. Paquette)
5 Three Highest-Risk Tier I Findings (S. Kane)
6 Discussion of Master Checklist for Tier I Inspections (S. Kane)

Other Tier I Efforts this Past Quarter:

The following points were made:

1 At the last Working Group Meeting the attendees requested hazardous waste training for Tier I inspections.
2 Steve Ferrone of the Environmental Protection Division provided a training session on two different days and this training has been posted on the SHSD Tier I Program Area.
   2.1 Some attendees at today's Working Group meeting felt that the training was not worthwhile as it was attended by the wrong audience, namely they already knew how to handle hazardous waste.
   2.2 It is suggested that the training be given to the people who generate hazardous waste.
3 Steve Ferrone also put together a Tier I Satellite/Universal Waste Accumulation checklist which has been posted on the SHSD Tier I Program Area.
4 As mentioned at a previous Working Group meeting, the Fire Safety Checklist started by Joe Levesque was much too detailed. Steve Kane is working with Joe Levesque who is scaling down the checklist to make it more user-friendly. Joe will then develop some training.

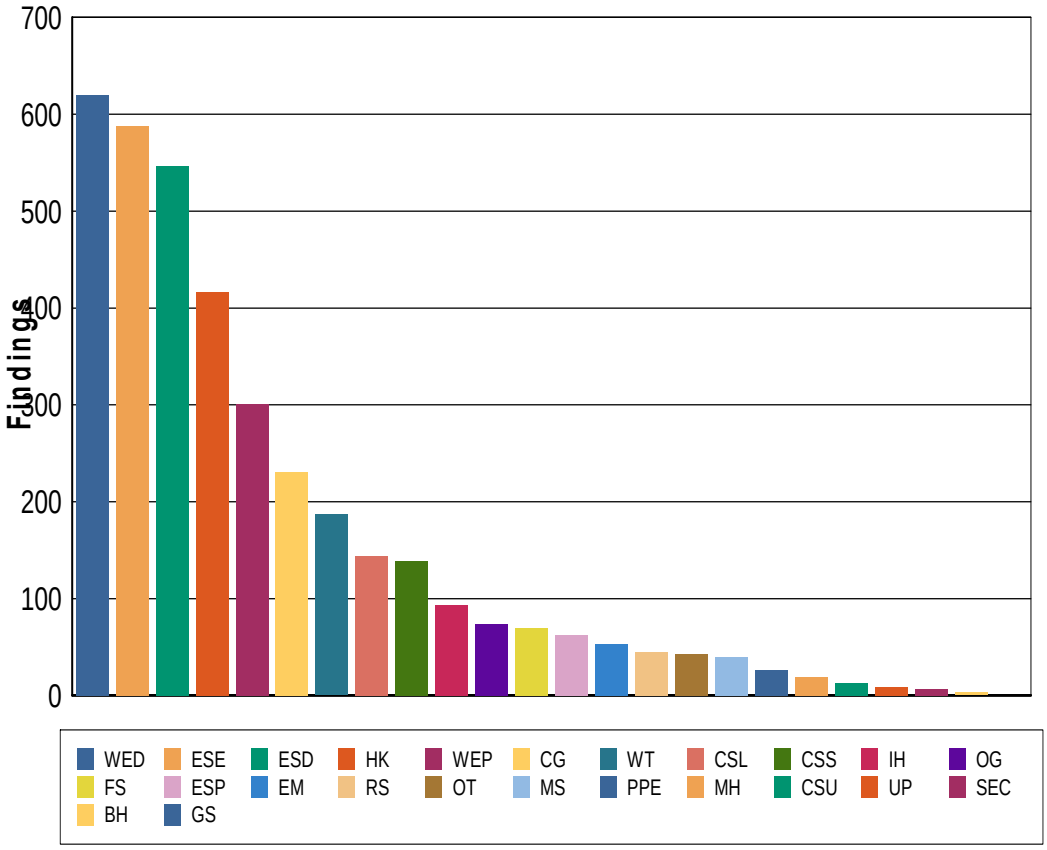
Data Rollup of Tier I Findings by Fiscal Year:



The following points were made:

1 The number of findings for the first three quarters of FY 2009 has surpassed last year's total findings.
2 This indicates that the people are working harder to find what is out there to be found which is great.

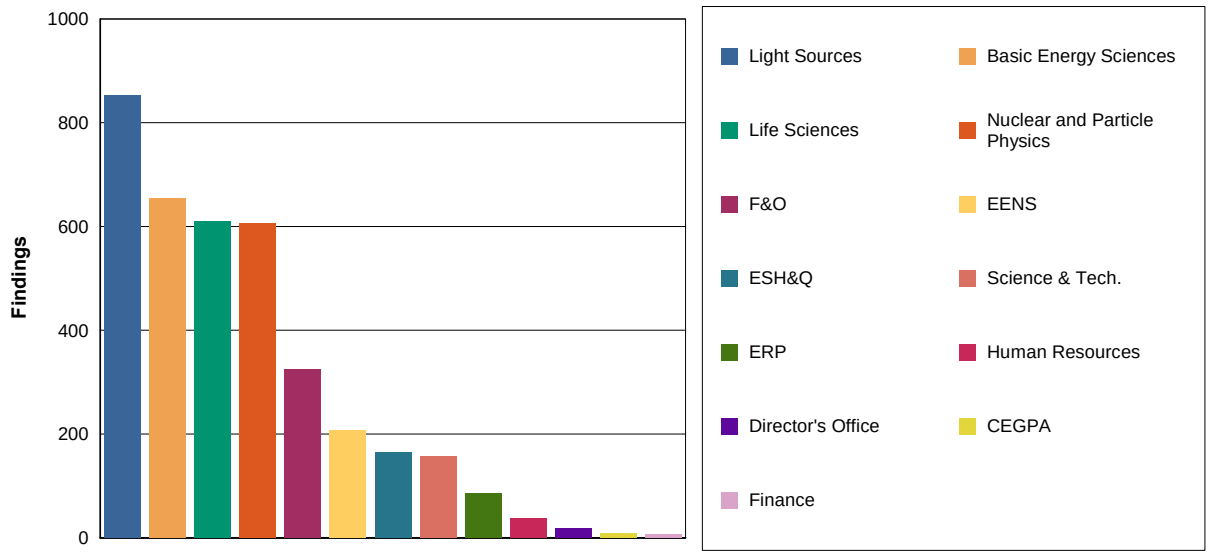
Data Rollup of FY 2009 Q1, Q2, and Q3 Tier I Findings by Category:



The following points were made:

1 This is the first time that Working Environment-Department had the highest number of findings.
2 Electrical Safety-Equipment and Electrical Safety-Department are second and third; these categories have always been among the top categories.

Data Rollup of FY 2009 Q1, Q2, and Q3 Tier I Findings by Directorate:



The following points were made:

1 People are paying attention to what is going on in their department.
2 Light Sources had the most number of findings, followed by Basic Energy Sciences, and then Life Sciences.
3 Keith Klaus of Light Sources is doing a great job.
4 There is no question that the Small Sciences are doing their job. Small Science Directorates are #2 and #3 in Tier I findings.

Database Requirements Document and Database Update (T. Schlagel):

The following points were made:

1 This database update resulted from the 2007 ISM Audit which found there was a lack of sharing of ES&H information at the institutional level that could help reveal trends, both positive and negative.
  1.1 The original ISM action was closed and a follow-up action was written to develop an application.
2 Every organization is required by SBMS to track Tier 1 deficiencies.
  2.1 Departments use different databases of varying complexity and having departments perform their own tracking can cause problems with the sharing of data, the level of effort needed to compile the reports, and the lack of an institutional view of Tier 1 issues to understand overall trends.
  2.2 The goal was to have a database that met everyone's needs and yet allowed people an easy way to track and trend the data.
3 The Tier 1 Deficiency Tracking Application will provide a single, laboratory-wide application customized for documenting, tracking, trending and analyzing deficiencies found as a result of organizational Tier 1 inspections.
  3.1 Last year a Working Group of SMEs for Tier 1's was formed and they generated a Requirements Document, completed in March 2009, which determined the requirements for the application.
  3.2 The Business Systems Division (BSD) will be the Application Custodian and will take charge of writing the application.
  3.3 The business owner is the SMEs for the Tier I's and improvements will need to come through Steve Kane or whatever Working Group he delegates, which could be this group.
  3.4 BSD will be responsible for taking the requirements for the application approved by the SMEs for Tier 1 inspections, and turning it into an application that meets the defined requirements. Requests for changes to the application must come from the Tier 1 SME.
4 The Data Fields used to store information fall into two types: (1) Inspection Information – Data regarding information describing the particular inspection activity, and (2) Deficiency Information – Data regarding information describing a deficiency within an inspection.
  4.1 The Inspection Information data fields are as follows:
    (1) Unique inspection identifier

(2) Inspection date(s)
(3) Building(s) included in the inspection
(4) Areas either within or outside the building that were included in the inspection
(5) Team Leader
(6) Organization that the team leader belongs to
(7) Inspection Team Members
(8) Invited Members
(9) Inspection Type – Frequency (i.e., quarterly, monthly, or once a year).

4.2 The Deficiency Information data fields are as follows:
(1) Deficiency Location
(2) Deficiency Category/Code
(3) Deficiency Type
(4) Checkbox if maintenance issue or opportunity for improvement (OFI) (although this is not really a Tier I finding, it can be handled in the same application)
(5) Deficiency Description
(6) Corrective Action/Status Description
(7) Action Owner
(8) Status Codes
(9) Due date for resolution
(10) Risk Ranking (Steve Kane would assign this)
(11) Regulatory Requirements associated with the deficiency
(12) Solution Provider (who will be solving the problem, i.e., deficiency goes to the building manager who will request a work order that goes to Facilities and Operations [F&O] so F&O will be the solution provider).

5 To address security concerns, the web-based application will only be available from the internal BNL network and will not be available directly through the Internet. Personnel requiring access from off-site will have VPN-like accessibility assigned.

6 The application will be role based, wherein each role will have specific rights, i.e., read (view), write (create/edit), or delete inspections; read (view), write (create/edit) or delete deficiencies; or create reports.

7 There will be definitions for building, area, frequency, and each user will be able to customize this list from a master list for the specific area.
7.1 There will be a hierarchical structure: building, room, floor.

8 IBM/Maximo was chosen for delivering the Tier I Deficiency Tracking Application.
8.1 The milestone for rolling out the new system is October 1, 2009.
8.2 The primary developer is Rich Portesy of BSD who will get help from the same outside consultant that helped Pete Eterno develop Maximo for maintenance management.

Facility Operations Center Update (M. Paquette):

The following points were made:

1 Mike Paquette is working with Tom Schlagel on the Maximo interface that should make things easier for tracking and help do away with paperwork.

2 Since Mike's last presentation to the Working Group (May 2009), people are providing better descriptions and locations of the findings. They are sending their Tier I findings to Pete Eterno, Bldg. 97, rather than calling in their findings.

3 Deficiencies should be identified as Safety, Maintenance, or OSHA.

4 Emergencies only should be called in to the Facility Operations Center, ext. 2468.

5 There are a lot of mold issues now and folks are responding to them faster than in the past.

6 The people are not having a problem with "Safety" findings being changed to "Maintenance" findings, as appropriate.
6.1 Common Tier 1 Findings that are changed from "Safety" to "Maintenance" are: Missing Ceiling Tiles, missing leader on a gutter system, cracks in a window pane, repairing leaking faucet, light out in hallway/office, and roof leaks.

7 The goal is to resolve a Tier I finding by the next Tier I inspection.

8 Mike Paquette has been promoted to Chief Planner Estimator, but he will still go out on Tier I inspections as his time permits, if requested. A second pair of eyes on the inspection is always a good thing, and SMEs, Don Farnam, or planner estimators are available to go on a Tier I inspection.

9 For OSHA projects, there was $100,000 available in the beginning of April 2009, of which 80K was spent in C-AD fixing fan guards and pump guards.
   9.1 In Bldg. 901 ladders were changed to OSHA-compliant ladders. There were also loading dock repairs, i.e., handrails and loading dock fall protection.
   9.2 In Bldg. 490, OSHA funding was used for cleaning eye wash stations and 8 or 9 hallway showers.
   9.3 There is an interim requirement and the administrative control is to keep lab doors open when the eyewash is not available.
      9.3.1 It is not known how long this interim requirement will be in effect.
   9.4 C-AD had pump guard and belt guard issues lagging behind; there were 500 deficiencies.
   9.5 There are still fixed ladders on buildings which are not OSHA compliant.
   9.6 There is $20K left and Mike may be able to get additional funding to resolve OSHA issues.
   9.7 If you have an OSHA issue, let Mike know and he will arrange to have it resolved if there are available funds.
10 Of the Tier 1 findings reported in FY09 Q1, Q2 and Q3, there were 305 Tier I findings (not including emergencies) entered into Maximo, of which 153 were "Safety" concerns and 152 were "Maintenance" concerns.
   - Of the 153 Safety concerns, 144 (or 94%) have been closed, taking an average of 27 days for closure.
   - Nine out of the 153 were in the "In progress" status, of which 4 were less than 30 days in Maximo, 2 were for panel labeling, and 3 are still open (i.e., waiting for parts) and are waiting to be scheduled.
   - Of the 152 Maintenance concerns, 120 (or 79%) are closed, taking an average of 35 days for closure.
   - Twenty have been in the open status for less than 90 days, and 12 have been in the open status for more than 90 days.
11 If you need a tracking number, contact Mike for the work order number. When you go out on a Tier I inspection, if you find the same deficiency, write down the work order number and inform Mike so that he can contact the shops to see why it is taking so long.

Three Highest-Risk Tier I Findings:

The following points were made:

1 Steve appreciated the people who submitted their three highest-risk Tier I findings.
2 There was a question as to what "risk" meant. As the new database application will have a field for risk, the group should discuss what is meant by risk as this will drive the priority for work orders.
3 The findings identified as highest risk fall into the categories indicated below:
   3.1 Chemical Safety
      3.1.1 CO identified a fading label on a glass vial with chemical. (Addendum: D. Cabelli)
   3.2 Compressed Gas
      3.2.1 CMPMSD identified non-conforming compressed gas hookups which needed backflow prevention. The recommended upgrades and labeling of hoses were installed.
   3.3 Electrical Safety Distribution:
      3.3.1 CMPMSD identified a vacuum pump's internal wiring was routed outside the housing which is not in accordance with electrical standards.
      3.3.2 Life Sciences identified an unlabeled breaker box and an outlet box mounted to a wall that had been knocked away from the wall. This is non-compliant.
      3.3.3 Instrumentation and ITD identified blocked panels and outdated arc flash labeling. People are finding these deficiencies on their Tier I's all the time and it doesn't matter whether you put up tape or signs or put a cage around the area, people will still find a way to put something in front of the panel. The "danger" stickers are confusing.
      3.3.4 In F&O there are missing knockouts which could be from when the outlets were first put in.
   3.4 Electrical Safety Equipment:
      3.4.1 NSLS and Life Sciences identified frayed electrical cords/damaged strain relief on flex cords. This is constantly an issue.
      3.4.2 One organization was always dealing with frayed cords. Some of the cords, 40-50 years old, got brittle.
   3.5 Fire Safety:
      3.5.1 CMPMSD identified that emergency exit doors from the west end of the building had been marked as no access by red tape during a construction activity.
      3.5.2 Exit signs in the area had no apparent emergency lighting.
   3.6 Housekeeping:

3.6.1 ITD identified issues with keeping the work areas clean and safe for working.

3.7 PPE:

3.7.1 NSLS identified PPE non-compliance where people were entering a lab without adhering to the PPE requirements on the entry door to the lab.

3.7.2 Steve Kane mentioned that when he goes on Tier I inspections, he sees a face shield located in one place and gloves located in another place.

3.8 Waste:

3.8.1 CFN had a piranha etch waste can that needed a venting cap. The can, still active, had a buildup of pressure and had the potential to explode. Relief caps would relief the pressure at 1 psi. [Subsequently, Ron Gill checked containers in his areas and found two that had some pressure.]

3.8.2 CO identified smudging hazardous waste label information on an organic solvent waste container. (Addendum: D. Cabelli)

3.9 Working Environment Department:

3.9.1 Life Sciences had missing information on hazard placards/postings and -80 freezer contact lists.

3.9.2 About a month ago, power went out to a freezer storing samples which resulted in the loss of about 1 million dollars worth of samples.

3.9.3 NSLS had damaged step stools, i.e., missing antiskid material). When Keith Klaus visits other areas and sees damaged step stools, he fixes them. [Thanks, Keith.]

Discussion of Master Checklist for Tier I Inspections:

The following points were made:

1 Tier I inspection checklists are a tool and an aid and are not a requirement. Checklists are a part of continuous improvement. Addendum: What had been referred to as a “Master Checklist” will now be referred to as an “Inspection Guide”.

2 The Satellite/Universal Waste Accumulation Area Checklist has been posted on the SHSD Tier I Program Area.

3 Light Source does weekly documented inspections of the satellite areas. If issues are found, measures are taken with the satellite accumulation area (SAA) manager and waste generator to ensure compliance. If neither is available, the issue is fixed and the SAA manager and generator will be contacted later. This is why their Tier I findings in this category are historically low relative to the rest of the lab.

4 In Light Source, if a new experiment begins that will generate hazardous waste, they do briefings, review training, and show the users what to do.

5 Suggestions made to the Inspection Guide currently on the Tier I program area website are as follows:

5.1 Under A. Housekeeping, remove “Absence of food drinks, etc. in hazard areas” and add to “Chemical Safety” and “Machine Shop”.

5.2 Under B. Working Environment, add ““Piping labeled.”

5.3 Under C. Fire Protection, add “Fire Rescue Run Card information accurate and saved by end of first quarter of calendar year”. (Addendum: C. Conrad)

5.4 Under C. Fire Protection, add “Local emergency plan current and posted.” (Addendum: C. Conrad)

5.5 Under D. Hazardous Waste Operations, add “Satellite areas in compliance.”

5.6 Under E. change “Machine Safety” to “Machine Shop Safety/Material Handling”. Add “No food or drink in shop”, “Shop inspections up to date, i.e., monthly, annually”, and “Area free of rodents, insects and other pests”.

5.7 Under F. Chemical Safety, add “Chemicals (Inventories) bar coded”, “CMS Inventory up to date”, “No food or drink in lab,” and “Area free of rodents, insects and other pests”.

5.8 Under G. Electrical Safety, add “Cascaded cords/power strips (daisy chaining).”

5.9 Under I. Compressed Gas/Cryogen Safety, in “Cryogen storage and usage in compliance with ES&H Standards”, change “ES&H Standards” to “SBMS requirements.”

5.10 Under K. Personal Protective Equipment, add “PPE in good condition/working order”. (Addendum: B. Colichio, unable to attend the meeting.)

6 We will incorporate these changes and post this revised Inspection Guide on the SHSD Tier I Program Area.

7 Recommendations and suggestions are always welcome.

For Next Meeting:

1. Invite Alan Raphael to talk about labeling and what panel labels should look like.

For Steve:

1. See if the Tier I ES&H Inspection Guide for Facility Inspections Satellite/Universal Waste Accumulation Area Checklist is under the Hazardous Waste Management Subject Area.
2. Email the folks concerning information about the interim requirement to keep lab doors open when the eyewash is not functional.