

December 20, 2008

To: Piermaria Oddone
From: Greg Bock
Subject: Results of the 2008 Particle Physics Division ES&H Plan

As requested, below are the results of the 2008 PPD ES&H Plan.

Task # 1 Continue to solicit and implement ES&H suggestions from PPD employees.

Original Plan Continue to solicit and implement ES&H suggestions from PPD employees. Continue to give cash awards for good ES&H suggestions.

Actual Effort Suggestions may be submitted using one of several suggestion boxes located throughout PPD, via the ES&H Section electronic suggestion box, via the CD Help Desk or by sending email to either the employee's supervisor, the SSO or directly to me. Each suggestion submitted is given a response by the PPD ES&H Group. Suggestions are collected and near the end of the year, cash awards are given to those employees whose suggestions are chosen by division management. In 2008, PPD identified 7 employees for such awards and we are in the process of issuing them now. The suggestions range from altering sump pump discharges to reducing radiation doses while using good ergonomics. PPD requests suggestions in order to promote ES&H participation and feedback. PPD also distributes a monthly ES&H newsletter. Each newsletter requests comments, feedback and suggestions from any PPD employee. The SSO receives these comments and suggestions, and responds appropriately.

Impact The suggestion boxes generate a small percentage of the suggestions sent to PPD management. But combined with electronic suggestion boxes, and employees directly contacting the ES&H group, 2008 recorded 25 suggestions from PPD personnel. In many instances the suggestions were implemented and have resulted in a safer work environment. In addition, employees are appreciative of the recognition they get from PPD management, even if their suggestions do not result in a cash award. The newsletter has received very positive feedback and continues to be a valuable communication tool. In 2008, two PPD/ES&H Newsletter articles were written as a result of topic suggestions from PPD personnel.

Task # 2 Inventory all credible chemical spill sources in the division.

Original Plan This inventory will be compiled by the ES&H Group and written up for posting on the PPD ESH/BMS Department webpage. Each credible spill source will be accompanied by a spill plan. Both the inventory of the spill sources and the spill plans will be reviewed by the Environmental Officer before being posted to the webpage.

Actual Effort PPD/ESH evaluated the credible spill sources owned by the Division. The credible sources identified were: oil containers (multiple sources), and Flammable Liquids Cabinets. All oil in PPD is stored in secondary containment, and spill plans exist for some of these. However, the Fermilab Environmental Protection Subcommittee is organizing an effort for a lab-wide Spill Prevention, Control & Countermeasures (SPCC) Plan. As the SPCC Plan will provide a spill plan for the entire laboratory's oil inventory, PPD has forgone creating spill plans for PPD oil at this time. The Flammable Liquids Cabinets throughout the division present a minor spill hazard. The chemicals in these cabinets are already inventoried and posted on the [PPD/ES&H webpage](#). In addition, instructions (spill plans) in case of a spill have been posted on each cabinet along with a small spill kit.

Impact The SPCC Plan will have a large impact on PPD when it is implemented in 2009. Creating spill plans for the Flammable Liquids Cabinets will provide easy to understand instructions for any individual encountering a spill in or near a Flammable Liquids Cabinet. The instructions also include contact information, and will keep the PPD/ES&H group apprized of all spills, even minor ones.

Task # 3 Complete a comprehensive inventory all air emission sources in the division.

Original Plan This will include not just those sources that need to be considered for the Laboratory's annual permit, but all small sources as well. The inventory will be written and posted on the PPD ES&H/BMS Webpage.

Actual Effort The air emissions inventory includes all PPD processes that must be considered for the Laboratory's air permit (Lifetime Operating Permit). The inventory is the "worst case scenario" as each source is calculated to its maximum emission, 24 hour operation, 365 days per year. Very few of PPD's emission sources operate at that frequency. Also, many PPD operations are exempt from the Lifetime Operating Permit, but listed as sources in the inventory. The inventory is posted on the [PPD/ESH webpage](#).

Impact The air emissions inventory does not have great impact in PPD. However, the inventory is very useful for the ES&H department, as well as the ES&H Section for permitting reasons.

Task #4 Lunch with the division head.

Original Plan Lunches will be set up by department. Each lunch will be catered and held in the area where the greatest number of department personnel sits. The lunches will be limited to 30 people or less and will include at least one member of the division management team. This lunch will be a forum for department personnel to give feedback to the division management regarding the program strengths and

weaknesses, as viewed by them. It will also serve as a morale booster as the lunch will be paid for with employee morale money. Four lunches will be held this year.

Actual Effort This task was not accomplished. After the announcement of furloughs, and possible layoffs, PPD management concluded that the lunches would not be an effective ES&H forum. It would have been very difficult to schedule lunches that most employees could attend due to furloughs. Also, it was determined that lunches might be inappropriate with the looming possibility of layoffs.

Task # 5 Create an online database of example hazard analyses.

Original Plan These will be used as guidance documents by division personnel. This database will be created by the ES&H Group and will include several examples of good, current hazard analyses. This will serve as an aid to those inexperienced employees and those employees who do not write hazard analyses often and may overlook some of the details. The database will be reviewed quarterly and updated as needed.

Actual Effort PPD/ESH gathered many “good” written hazard analyses (HAs). These have been posted on the PPD/ESH webpage, under [ES&H Tools](#). In addition to the database of HAs, a “How To” webpage was created to help employees understand when and how to write HAs.
A recent Work Planning Tripartite audit found that PPD employees were using HAs for their tasks. It was noted though, that the form for the HA was not always consistent. This problem is addressed on the HA “How To” webpage. The [October PPD/ES&H Newsletter](#) was used to disseminate this information to the Division.

Impact The online database of HAs helps employees to be confident in the HAs they’ve written. The HA “How To” webpage also provides a quick reference for employees who do not frequently write or use HAs.

Task # 6 Create an employee’s grassroots safety committee for PPD.

Original Plan This committee will include one member from each of the following departments: Mechanical, Electrical, ESH/BMS, Technical Centers, D-Zero, CDF and Support Services. The committee members will be chosen by their department heads. This committee will meet monthly to discuss relevant ES&H issues in the division and at the Lab.

Purpose:

The primary purpose of the employee’s grassroots ES&H committee is to provide a forum for non-supervisory employees to identify and discuss unresolved unsafe conditions, processes, and practices in their workplace. In addition, the Particle Physics Division management encourages the PD grassroots committee to engage themselves in discussing, deliberating, and recommending solutions to common ES&H issues. Such issues may include personal protective equipment, training

problems, safety procedures, and to look out for each others (co-workers) to help instill the Fermilab Integrated Safety Management (ISM) safety culture in their respective areas of work.

Actual Effort The following individuals have accepted positions on the grassroots safety committee: Warren Bowman (Mechanical), Ed Dijak (Technical Centers), Albert Dyer (Electrical), Steve Huey (Site), Bill Lee (D0), J.J. Schmidt (CDF), and Crae Tate (Support Services). The committee members have been charged with identifying, discussing, and deliberating unresolved safety issues and practices in the work place. Since the group is a diverse representation of PPD, they are able to discuss issues from every aspect of PPD work. The committee has met twice in 2008, and plans to meeting on a monthly basis. Warren Bowman, the group's spokesperson, and J.J. Schmidt, the secretary, are responsible for drafting and submitting meeting minutes to the Division Head and SSO. Action items must have Division Head response within 10 days.

Impact Although the committee has only met twice this year it has been very well received. It is anticipated that the impact will be greater employee involvement in environment, safety and health. It is also expected that non-supervisory and non-ES&H personnel will give a fresh perspective to ES&H issues.

Task 7 Direct attention on housekeeping in the division.

Original Plan Particle Physics Division will choose four days in the next calendar year that will be dedicated to housekeeping. Each department in the division will have to choose one of the four days to participate. On the housekeeping day, no other work (except those tasks related to the ES&H of the people or property) will take place except housekeeping. The department heads will be responsible to coordinate the housekeeping in their spaces. This may include asking for assistance from ES&H to dispose of chemical waste, making arrangements for scrap metal or cardboard recycling hoppers to be available or placing a work order to have WCI help with additional cleaning services. Whatever the individual circumstances, each department will dedicate one entire day (less in areas where the work load is less) to the task of cleaning out and organizing their work spaces.

Actual Effort PPD/ES&H chose four dates in 2008 for housekeeping days: April 2, June 4, July 30, and October 1. Each department chose one day to concentrate on housekeeping. For many departments (i.e. Electrical Engineering Department, Technical Centers) a whole day was dedicated to cleaning up work spaces. For others only a couple hours were necessary.

Impact It was concluded by Division management and the ES&H Department that dedicated housekeeping days are very beneficial. For example the Electrical Engineering Department recycled hundreds of old, unneeded electrical components (boards, cable, etc.). The ES&H groups plans to repeat the dedicated housekeeping days in 2009.