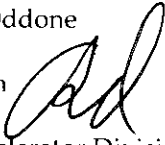


## Memorandum

October 26, 2011

**To:** Piermaria Oddone  
**From:** Roger Dixon   
**Subject:** FY2012 Accelerator Division ES&H Plan

In response to Nancy Grossman's memo requesting an FY2012 ES&H Plan, as in previous years I met with my senior staff and safety officer to discuss the Accelerator Division actions. Our FY12 ES&H Plan will consist of the following six actions, with several being a continuation or expansion from our FY11 plan. A summary of each plan action follows:

- (1) *Technical Group Meetings* – The plan is to continue technical group meetings between myself and with workers within the division. The meetings are held once per month at lunch time with no person higher than the working supervisor included. The focus of the meetings is to gain a grass roots understanding of the safety issues facing the division's workers. Meeting minutes are taken by the AD SSO. The meeting minutes will be published on the ESH Department website with the disposition of each item identified from the meeting.
- (2) *R&R Fund Safety Suggestion Awards* – The program established in FY08 providing a cash reward for safety suggestions that have an impact on the division will be continued. Under the program suggestions are submitted to the ESH Department for consideration. Each safety suggestion received will be evaluated for its impact on safety within the division, as well as the involvement of the employee making the suggestion in working to implement the suggestion. For the suggestions judged to be of the greatest benefit, an award commensurate with the safety impact and efforts made will be issued to the employee. The division has been awarding three to four \$250.00 awards each FY.
- (3) *Recapture of SF6* – AD uses sulfur hexafluoride, a very potent greenhouse gas, as an insulator in a number of RF waveguides and high voltage switches across the complex. In an effort to reduce emissions, in FY11, AD began investigate the feasibility of recapturing the gas from these systems when they need to be opened up for servicing, rather than venting them to the atmosphere. This effort will continue into FY 12 with the plan being to work out an agreement between Fermilab and Argonne to use the SF6 recapture equipment owned by Argonne or to initiate the purchase of the required equipment which would be shared among several AD groups.
- (4) *Management Safety Walkthroughs* - Keeping the necessary people, equipment, and supplies in close proximity to the accelerators creates a continuous challenge. This challenge encompasses general safety concerns from employees, housekeeping, area and building management concerns. Over FY12 I'll be addressing these issues in three ways. First will be through weekly division management walkthroughs. These Division Heads walkthroughs are conducted by one of the division's department heads, Paul Czarapata and me where we walk through the departments spaces talking with employees and looking at the overall conditions in the department. Second will be through the Highly Protected Risk Inspections conducted by the ESH Section and the AD ESH Department of divisional buildings. Third will be through the Department Heads inspections conducted with the Fermi Site Office staff, our ESH Department, and the various division department heads.

- (5) *Human Performance Improvement Initiatives (HPI)* – Although captured as part of the division’s annual ESH Plan, HPI is much more than an ESH initiative. HPI is a systematic approach to improving productivity, quality, and competence by realizing opportunities related to the performance of people. HPI systematically combines three fundamental processes, performance analysis, cause analysis, and intervention selection to promote a sustainable high reliability organization. Over the past few years, AD began implementing HPI principles into the accident and incident investigation process to gain a more complete understanding of causes of human errors and latent organizational weaknesses associated with accidents in the workplace. In FY11, AD began expanding HPI principles into the division’s departments with a focus on the Mechanical and Cryogenic Departments. This implementation will be continued over FY12 by expanding the HPI training into other departments. AD will conduct an HPI investigation for all recordable incidents and other incidents that department or division management deems would benefit from such a review.
- (6) *Fermilab Safety Assessment Document (SAD)* – One of the corrective action plan elements from the DOE SC Accelerator Safety Order implementation from March 2009 was to develop a unified framework for safety assessment documents. The goal of the effort was to develop a system that is coherent; readily adaptable to the ever-changing program of accelerators, experiments, and their operations; internally consistent in both content and nomenclature; and non-redundant in content. Although significant effort has already been accomplished on this CAP, there is still a substantial amount of effort remaining. One of the laboratory notable accomplishment goals for FY12 is to complete several new SAD chapters. AD will complete SAD chapters for the Linac, Booster, 8 GeV Line, and Booster Neutrino Beam areas during the next FY.

Cc Nancy Grossman  
Martha Michels  
Paul Czarapata  
AD Associate and Department Heads