

DB

Minutes of the Radiation Safety Committee

March 18, 1991

Attending: D. Beavis, K. Reece, P. Pape, R. Frankel, E. Lessard, A. Stevens, A. Etkin, W. Glenn, W. Pemberton, A. McNerney, G. Bennett

Upcoming Committee Business

A brief outline of upcoming items for the committee was given by the committee chairman. A meeting was scheduled for the 2 GeV/c (D6) beam line for Wednesday, March 20, 1991, at 1330. In addition, a meeting was scheduled for Thursday, March 21, 1991, at 1030, to discuss the proposed positive beam running in the A1 and A3 beam lines. Other items that will come before the committee over the next month are:

- a. E850 in the C1 beam line.
- b. SSC tests in the A3 beam line.
- c. E821 SBE running in the A3 beam line.
- d. E854 running in the B2 beam line.
- e. E856 running in the C6 beam line.

The fence being installed around the AGS was briefly discussed. A permanent five-foot high fence will be installed from Bldg. 911 to the Booster fence this month. A temporary barrier of fence posts, rope and postings will extend from Bldg. 914 to the north conjunction area fence. The fences enclosing the AGS berm will be posted as a radiation area and there will be several access opening in the fence, including the road over the berm. The temporary fence will become a permanent five-foot chain link fence after the berm upgrade is complete in this area this summer. A six-foot high fence with locks will be installed around the two escape hatches.

Committee members were reminded that they should pursue action items that they are responsible to track to completion.

The committee was informed that a memo from the liaison physicist for the AGS ring (for radiation safety issues) was going to recommend removal of "SEB Safely Off" from the interlocks until there is sufficient time and resources to finish the evaluation of safely preventing extraction of AGS beam.

AGS OPM Procedures

The committee chairman expressed a desire to improve the flexibility of the AGS OPM relating to radiation protection to provide for more efficient operations with minimal or no decrease in radiation protection. The three topics discussed were:

1. Access to high radiation areas by workers not trained for high radiation areas, would affect access procedures for the Linac, Booster, AGS ring, switchyard, target caves, and the North Area.
2. AGS OPM 6.1.2 for response to interlocking Chipmunk alarms.
3. AGS OPM 6.1.3 for response to Chipmunk alarms.

Item 1 was discussed first. The chairman requested that a generic procedure be written which would allow for persons to enter areas posted as high radiation areas provided certain guidelines contained in the procedure were followed. The logic for this request is that most high radiation areas at the AGS have only a small percentage of their areas with residual radiation levels which are actual high radiation levels. The guidelines and restrictions might include:

1. The person must wear a SRD.
2. Radiation surveys must be done.
3. Person may not enter radiation fields with dose rates above 100 mrem/hr.
4. Person must be escorted or the locations clearly defined where they may access.
5. These untrained persons must have radiation worker training.
6. Specific group/persons must be specified who can implement this procedure.

It was further noted that the intent of this procedure was to allow for entry into high radiation areas by a person who had not completed all the necessary training if the appropriate guidelines were met and not to dilute the effort to get training to all personnel who need it.

The discussion mainly centered on non-radiation issues which might prevent entry even if all DOE/BNL/AGS guidelines could be satisfied. Based on this and the on-going effort to train all persons as appropriate, the request for this procedure did not receive the support of the committee.

AGS OPM 6.1.2 and 6.1.3

The chairman noted that these procedures deal with response to interlocking Chipmunk alarms and Chipmunk alarms. These procedures have several inconsistencies in them which may hinder operations and do not add to radiation protection. In addition, these procedures should be modified based on past operating experience to allow for appropriate responses which may not have been envisioned on their inception. Finally, it was noted that the procedures are overly restrictive in some cases and the flexibility should be established in the procedure on how to proceed in these cases. A couple of the specific points are:

1. Responding to Chipmunks that are in high radiation areas or areas of higher classification.
2. How to respond to failure of both interlocking and not interlocking Chipmunks.
3. That the dose rate of 20 mrem/hr should be modified where it is too restrictive.
4. That Chipmunks alarm at various levels other than 20 mrem/hr.
5. Alarms are clearly delineated between radiation levels alarms and alarms indicating problems with the device of associated interface electronics.
6. One approach is to provide a list of response actions by specific device and when not specified the generic response is followed.

P. Yamin has volunteered to work on updating these procedures. J.W. Glenn, P. Ingrassia, E.T. Lessard and W. Pemberton agreed to work with P. Yamin and help update these procedures. It is expected that this process will be complete by March 29, 1991.