Tuesday 3 December 1996

K. Reece

Minutes of Meeting: Radiation Safety Committee, sub-committee.

Date: Wednesday 20 November 1996

Present: L. Ahrens, K. Reece, A. Stevens.

Subject(s): RHIC 4 o'clock beam dump shielding (re-visited).

The full Radiation Safety Committee has reviewed the shielding of the RHIC sextant test beam dump located at the 4 o'clock interaction region(IR), (ref: RSC minutes 6 March 1996). This sub-committee meeting was necessary to consider the additional shielding required to protect "un-trained" workers in the area adjacent to the 4 o'clock region.

During the time of RHIC sextant test operation, workers will be in the vicinity of the RF building at the 4 o'clock IR. These workers will not be trained Radiation Workers and therefore the RHIC Project has committed to limit their possible integrated dose (due to prompt radiation from the beam region) over the 320 hour duration of the test to < 15 mrem. Alan Stevens presented the shielding design that includes additional (beam left @ the dump) shielding required to meet the Project commitment (RSC Shielding file). This shielding must be inspected and "signed-off" on the RSC RHIC Sextant Test Check-off List by both the liaison physicist and liaison engineer (**CK-RHIC-01**). Appropriate fencing is also noted on this shielding print to limit access to the "nearby" beam dump location (**CK-RHIC-02**). As a means of monitoring the prompt radiation levels in the area, an additional chipmunk will be placed at a location beam left of the IR and will be interlocked (2.5 mrem/hr) and included in the chipmunk data logging system such that the integrated dose can be monitored from the MCR (**CK-RHIC-03**).

As required for all new beam lines/areas, fault studies will be defined and conducted for this region as well as thorough surveys for "normal" operation (**CK-RHIC-04**).

The 4 o'clock shielding was approved by the sub-committee as presented.

cc: RSC
RSC file
J. Mills