

K. Reece

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

Date: Wednesday 21 January 1998

Present: D. Beavis, R. Marascia, K. Reece, A. Stevens.

Subject: PHENIX side shield wall.

Alan Stevens presented results (attached) of dose estimate calculations for the permanent shield wall located on the southeast side of the PHENIX counting house. This area is defined as a "low occupancy area", (<0.5 hour per 8 hour shift). The RSC sub-committee acknowledged that the design as presented meets the design criteria and accepted this proposed configuration.

1. The area immediately outside of this shield wall will be fenced (**CK-PHENIX-01**) to restrict access to the shield wall.
2. The gate leading into this area must be locked with a Health Physics lock, (or other similarly "controlled" lock), (**CK-PHENIX-02**).
3. This fence must be posted "No Access with Beam ON. Contact MCR for Entry", (**CK-PHENIX-03**).
4. The labyrinth will be covered with a permanent roof, (**CK-PHENIX-04**).
5. The labyrinth roof must be posted "Do Not Climb. No Access Permitted to Roof with Beam ON. Contact MCR for Access", (**CK-PHENIX-05**).
6. Procedure(s) must be written to define how RHIC and PHENIX will control this area as "low occupancy", (**CK-PHENIX-06**).
7. An item found in the "walk-through": The berm fences (upstream/downstream of the PHENIX IR), must be located sufficiently back from the IR to allow the berm shield to shadow any "punch-through" there may be above the IR end-point shield blocks, (**CK-PHENIX-07**).

While recognizing these dose estimates to be conservative, the RSC sub-committee recommended that A. Stevens investigate the possibility of extending the labyrinth ~ 4ft. to further reduce the possible dose, (**CK-PHENIX-08**). An extension could be made using only fence; of course, the access gate would also be moved out. R. Marascia noted that the labyrinth roof could be cantilevered by that amount (~ 4ft.), (**CK-PHENIX-09**). The shield wall fence would then also be moved out by this amount, (**CK-PHENIX-10**). This recommendation should be followed if A. Stevens finds there would be no impact (\$ and/or access) on PHENIX.

cc: RSC (w/att) RSC file (w/att)