

Sunday 5 June 1994

K. Reece
KRC

Minutes of meeting: RSC sub-committee, Friday 3 June 1994.

Present: D. Beavis, R. Hubbard, E. Lessard, E. Njoku, A. Pendzick, K. Reece

Subject(s): Pulsed radiation levels at Bldg. 911 - 912 ramp and D6 area.

It was briefly noted that with an AGS maintenance day scheduled for next Tuesday, placing shielding close to the AGS ring in the North Conjunction Area may be possible. D. Beavis and A. Pendzick are examining this option and will report on Monday whether this can be done.

Quality factor (QF) measurements were made in two locations (requested in the sub-committee meeting yesterday) in Bldg. 911 -912.

Bldg. 912 ramp:

The first area was the walkway/ramp leading from Bldg. 911 to 912, adjacent to the AGS ring and upstream SEB switchyard (map attached). Results indicate the QF in this area to be at most 2.5 - 3 and several locations approximately 1.5. While making these measurements, the contribution to the measured field from any "hot" water bus or pipes should be considered. In this area there is a water cooled bus immediately downstream of Trench#2 (location #5 on map). Also, given the assumption that trenches should be a conduit for neutrons, it was suggested that the QF at locations#6 & 7 should be verified.

This area is already posted "Do Not Linger" and "Pass Through Quickly". If we define the QF in this area to be 2.5, then the worst case radiation field here would be just under 25mrem/hr (chipmunk interlocks at 50mrem/hr w/QF = 5). Assuming 5% occupancy would limit the integrated dose for this operating period to less than 500mrem.

Custodians clean this area twice weekly. This should be curtailed (except for when the AGS is not operating such as maintenance days) for the duration of this run. R. Hubbard will notify the custodians of this restriction.

Shift personnel (EAG, Cryo watch, HP) walk through and work in this area and should be made aware that they should not routinely work here without consulting with MCR. R. Hubbard will notify these groups. Further discussion focussed on asking these groups to routinely wear pencil or digital dosimeters while working in Bldg. 912. However, the appropriate multiplier (QF) for the dosimeters could not be agreed upon. It was decided that E. Njoku should make a measurement to correlate the response of an HPI-1010, "Rem-ball" meter, pencil dosimeter and digital dosimeter to determine the correct multiplier to use for dosimeters in Bldg. 912. Edwin will report his findings on Monday.

D6 area:

Quality Factor measurements here confirmed that most of the radiation field appears to be coming from the water pipes under the catwalk (map attached). The only concern was in the experimenters trailer (trailer#151) where, with a QF = 2.5 and 8 hours per day occupancy for the next ten weeks, it could be possible to reach an integrated dose of 250mrem. As a result, it was

decided that this trailer (#151) must be posted as a "Controlled Area - Film Badge Required".

Quality Factor measurements remain to be done in the vicinity of the C3 target gate.

Action Items:

1. Proposal for AGS ring internal shielding, (Beavis, Pendzick).
2. QF measurement at location#6 & 7 of Bldg. 911 - 912 ramp map, (Njoku, HP).
3. Dosimeter QF multiplier determination, (Njoku).
4. Notify shift personnel to carry dosimeter in Bldg. 912 and use defined multiplier, (Hubbard, Njoku).
5. Notify custodians not to work in Bldg. 912 assembly area without approval, (Hubbard).
6. QF measurement at C3 target gate.

cc: RSC committee
RSC file.