

Thursday 29 December 94

E. Njoku'

Minutes of Meeting: ALARA/RSC Sub-Committee

DATE: Wednesday 21 December 94

PRESENT: D. Dayton, E. Njoku, A. Pendzick, K. Reece,  
J. Spinner

SUBJECT(s): 1. Personnel Doses in Excess of Annual Admin Limit  
2. RWP Review/RWP#511

#### 1. Personnel Doses in Excess of the Admin Limit

The two instances where AGS employees exceeded the Departmental annual administrative dose limit for whole-body radiation exposure were reviewed.

At the end of the Nov'94 monitoring period, two employee whole-body badges were pulled for expedited processing after HP records indicated that the wearers were approaching the 900 mrem cumulative dose level. The Landauer report of the processed badges showed Charles B. Bloxon of the EAG group receiving 500 mrem for the month of November 94, and with a cumulated annual dose of 1030 mrem. Charles Trabocchi of the Beam Components group received 320 mrem in November and now has a cumulated dose of 1010 mrem for the year.

In both cases, it was determined that the SRD values provided by the employees were 40 to 50 per cent below what should have been reported for November 94.

The Committee was informed that the two employees were reassigned even before the results of the emergency film badge processing were in.

#### Committee Recommendation

a) AGS Chair should write a memo requiring that a written procedure be instituted for the use and log-in of SRDs. Such procedure must clearly emphasize the employees obligation to record the SRD results on a daily basis. The memo should also remind the supervisors of their responsibility to review these SRD reports on on a daily basis, particularly when RWPs have been issued for the specific jobs. The supervisors should also be reminded that these SRD reports must be forwarded to the HP and/or Training Office every first working day of the week.

b) The RCC should also review the SRD entries on as needed basis, particularly in high dose RWP activities.

## 2. RWP Review/RWP # 511

RWP # 511 and the associated collective dose were brought to the attention of the Committee. This RWP had been issued to Rodger Hubbard/A. Pendzick for the removal and replacement of AD2 and AD3, and for rewiring the CD101 & CD103 doublet. The work request was approved to run for one month after a review by a committee that consisted of the two primary job supervisors, the RCC, the liason engineer, and the S&EP Rep on behalf of the ALARA Committee.

The following issues/results from the job were brought to the attention of the committee and discussed in detail:

a) The job took significantly longer than expected, eventually resulting in a collective dose more than twice the initial estimate. The SRD collective dose came to 2300 mrem, doubling the initial estimate of 1025 mrem.

b) The job was not halted for a re-evaluation as called for in the OPM and as implied in the work permit. The primary job supervisor (Pendzick) informed the S&EP Rep that the job would take longer than previously estimated. The Rep allowed the job to continue after evaluating all other options, including the fact that there was no spare doublet available.

c) An employee (Bloxon) received a verified film badge exposure of 500 mR from the RWP # 511 related activities. This dose boosted his cumulative dose for the year to 1030 mrem (circumstances discussed in part 1 above).

### Committee Recommendation

The RWP procedure should be revised and all supervisors must be retrained on the procedure. The revised procedure and retraining must emphasize the following:

i) the supervisors must be aware and understand any conditions and implied restrictions that may be placed on the work permit, including safety instructions that may be part of the permit.

ii) all staff involved in any operation conducted under an RWP must read and be familiar with the conditions and restrictions placed on the permit.

iii) all job supervisors must inform the S&EP Rep immediately when conditions under which an RWP was issued change. If the Rep is not available, the supervisor must inform the HP supervisor and at the same time halt the job activity.

Changing work conditions requiring notification of the Rep include changes in the radiation profile, a potential contamination or dispersible event which had not been considered previously. The change may also be as a result of an underestimate of the time needed to execute the job, in which case, the collective dose may be significantly greater (>25%) than the initial estimate.

cc: E. Lessard  
RSC/ALARA Committee files