

Radiation

Safety Minutes of Radiation Safety Committee of May 27, 2005

Committee

Subject: NASA Run in the D line

Present: D. Beavis R. Karol, D. Lazarus, and P. Bergh,

The D line will be operated with ions of C, Si, and Fe with energies of 3,5, and 10 GeV/n. The beamline will be tuned with intensities of about 10^{*8} ions per spill. The experiment wants intensities of a 1000-10000 ions per spill for their measurements.

The run has basically two experiments (see attachments 1 and 2). Instrumentation for the experiments will be setup in the D-carrol. This area has been unlocked. The target building northwest corner chipmunk has the interlock level set at 2.5 mrem/hr to protect from dose from the AGS. A chipmunk is required on an unblocked trench to protect from faults from the D line, which could reach 100 mrem/hr with full intensity heavy ion beams. **(CK-D-fy2005-454)** Barriers are required for this trench. **(CK-D-fy2005-455)**

The potential for activation is mainly from the beam intensities used for tuning the beam. The experimental targets may become activated if hit with the intensities used for tuning. The method to reduce the beam intensity was not presented. The beam will be transported to the D dump. The D line chipmunks will be placed for operation. The D6 chipmunks are not required. The beam downstream of the experiment will be in air. The air activation is not considered to be an issue for the ion intensities used. The D cave will be posted as an activation area and high radiation area. **(CK-D-fy2005-456)**. After initial tuning and surveys the postings can be changed as appropriate. The experiment will be operating under two generic RWP's, one for a radiation area and one for a high radiation area. At this time it is not expected that job specific RWPs are required.

The water tubes used in the experiment will have secondary containment. **(CK-D-fy2005-457)**.

Attachments (file copy only):

- 1) ERI-AGS Experiment Protocol, E.R. Benton and B.B. Gersey.
- 2) Experimental Safety Information for the D line Run.

CC:

RSC
Present
RSC Minutes file
RSC D line file
D. Phillips