

Minutes of Meeting: Radiation Safety Committee

Date: Wednesday 3 December 1997

Present: L. Ahrens, D. Beavis, A. Etkin, P. Ingrassia, W. MacKay, A. McGeary,  
R. Reciniello, K. Reece, J. Sandberg, A. Stevens, T. Tallerico, R. Thern.

Subject: PASS changes for the V Target and V1 Primary areas.

The MCR Operations Group requested the RSC consider the existing access requirements to the V Target area. At present, in order to preserve the "area sweep", the person inside the V Target Cave must call MCR for a simultaneous release from exit the area. This most probably leads to an unnecessary incremental dose accumulation for this person. Additionally, the "sweep" of the V Target area takes only seconds (given the small size of this cave). To address this concern, a group was formed from AGS and RHIC staff (Ingrassia, Etkin, Sandberg, Tallerico). Their proposal (attached) was presented to the RSC and reviewed in this meeting.

1. A 90 second latch time-out for the MCR simultaneous release upon entry to the V Target cave was suggested. Committee concerns re: this item included;
  - This 90 second latch time-out adds to the PLC code.
  - The time-out must be monitored.
  - PLC action to be taken if the time-out fails must be defined.
  - This dependant action must be tested.
  - Could the simultaneous release time-out for the V Target gate interact with the *required* MCR simultaneous release through the V Primary gate ?

After much discussion, since the issue at hand is Controlled Access (CA) for sweeping the area, the solution accepted by the committee (including the MCR Operations Group Head) is to **not use a 90 second time-out, but when entry to this cave is requested, require the MCR person giving the simultaneous release to hold the simultaneous release button until the person entering the cave has also left the cave and the V Target gate is closed.**

2. It was noted in these discussions that the identifying names for the two V Primary area gates have been changed without consultation with the person responsible for the naming convention at RHIC. Also, although the reason(s) for making these names changes were undoubtedly well intentioned, these name changes could lead to some measure of confusion given that many of the AGS and RHIC staff are familiar with the original definitions.

3. Clarifications regarding Restricted Access (RA) for the V Target area;

- proposed: the RA cylinder *at the V Target gate* be removed (**accepted by the RSC**).
- RA for the V Target area will remain an option in the PLC (**accepted by the RSC**).
- The CA key from MCR **will allow access to the V Target cave with the area in Restricted Access without an MCR simultaneous release.**

4. The committee could not envision the prompt radiation hazard that would require the V Target gate to be monitored by the U-D/S PLC. **If there is no justification (prompt radiation) for dual monitoring of the V Target gate, it should be eliminated.** It was noted in the discussion that this would not have been an issue if both the V Target and V Primary area were monitored by the same PLC (U-U/S).

5. The committee asked R. Thern to review the requirements for *any* access to the V Target cave. The residual activity levels in this area are such that (at least during operations *and* for a long time period afterward) a **job specific RWP should be required for each access.** RSC recommendations from the initial reviews for this areas included the use of a job specific RWP for access.

- If residual activity levels in the V Target cave are  $\gg 5$  Rem/hour, the question of whether the area should even have an RA state should be addressed, (W. Meng).
- Note: present access requires the use of a procedure specifically developed for this area and includes;
  - Closing the V Target shutter (shield) prior to entry.
  - Requiring a separate, controlled key padlock be used to secure this gate as a secondary control measure.
- **The use of a Kirk type lock and key at the V Target gate was proposed** and will be investigated by A. Etkin and W. Meng.

6. The committee recommends that **access to the V Target cave should not depend upon the state of the V Primary area.** The U-D/S PLC may be off-line.

7. The committee recommends that **the V Primary sweep should not be lost if the V Target sweep is lost.** This is an ALARA concern since several upstream V1 primary and secondary elements could have significant residual activity.

8. The suggestion to develop a **monitoring system for the key-switches within key-trees should be considered, proposed and undergo an engineering review prior to review by the RSC.** Specific detailed proposals should be submitted to J. Sandberg.

Attachments:

1. Memorandum, PASS change proposal, Ingrassia, et al., 19 November 1997.
2. E-mail proposal summary w/comments, Reece to Ingrassia, 20 November 1997.

cc: RSC  
RSC file  
R. Frankel  
W. Meng