

Memo

date: April 14, 2014
to: RSC
from: D. Beavis 
subject: RSC Check-off list for 56 MHz Cavity at RHIC

The radiation hazards related to the 56 MHz cavity in a temporary blockhouse were reviewed by the RSC on Feb. 16, 2012. The radiation source terms used in that analysis are the same for the operation of the cavity at IR4 in RHIC. The potential for x-rays at the internal gates at RHIC is estimated to be less than 3mrads/hr. The shielding walls at IR4 are thicker than the temporary blockhouse discussed in the minutes and the area around the blockhouse is not allowed to be occupied while RHIC is operating.

A short RSC check-off list must be completed to ensure the following:

- Dual interlocks for the 56 MHz cavity have been added.
- Dual interlocks have been functionally checked.
- ECN for State table has been signed.
- ECN for wiring prints for the interlocks has been signed.
- Software for interlocks has been archived.
- RCT are notified to make surveys at the interior gates when possible during maintenance days if 56 MHz cavity is operating.

The operation of RF only mode must be reviewed if the adjacent areas are not in the beam operation configuration. Often access to the outside area is allowed and some shielding removed when RHIC IR4 is in RF only mode. Due to the new location of a potential x-ray source, 56 MHz Cavity, the potential for x-ray leakage through cracks must be examined.

Review RF only configuration for IR4 (ATS-RHIC-RF-June 15, 2014-Drees&Beavis).

CC:

A. Drees
A. Zaltsman
C. Folz