# **Take 5 for Safety**

**Controlled Area Refresher Pictures of the Week** 

Collider-Accelerator Department 4-10-12



a passion for discovery



#### **Controlled Area Refresher**

- Outdoor RHIC areas are posted as 'Controlled Areas' since there is potential to receive more than 50 microrem above background in an hour (BNL rule) but less than 100 mrem in a year (DOE rule)
- Natural background is typically 5 microrem in an hour
- Calculations and BNL's outdoor TLD measurements from 11 years of RHIC operations show exposures of a few mrem above background integrated during an operating period, which is about 20 weeks; exposures can occur in outdoor unfenced areas close to RHIC shielding
- The appropriate training for unescorted access to the outdoor RHIC areas during operations is BNL's General Employee Radiation Training (GERT) or Collider Access Training, which incorporates GERT; workers are also required to plan work
- Training alerts workers to the signs at RHIC, and informs the worker on the dose criteria for an area with this designation, which is potential for exposure less than 100 mrem in a year



#### **Controlled Area Refresher**

- Relatives, visitors and non-BNL employees may not enter a Controlled Area without training unless escorted by a trained worker
- Work by minors (<18 and >15) in Controlled Areas has additional requirements
- There are several Controlled Area signs at RHIC, some signs are lighted, and the posted RHIC fencing forces persons past the RHIC roadway signs
- C-AD advertizes the Controlled Area status at RHIC in the BNL weekly bulletin prior to starting the RHIC operations period, and sends out email reminders during the running period
- BNL/C-AD trains and retrains BNL workers who work at C-AD, subcontractors, users and BNL tour guides; training covers the topic of Controlled Area signs
- Families that take advantage of on-site housing are informed through the BNL Guest Guide that they can only enter common areas such as the cafeteria or the library without training
- Controlled Areas also exist inside buildings at C-AD, such as B912, and the training and rules are the same, but in some cases a TLD plus paperwork are also required just to enter the building



#### **Controlled Areas at C-AD**









