

# THE PORCELAIN PRESS

November 2012 - Weeks 3 & 4

## Special Points of Interest:

### Come to the ES&H Fair

On Thursday, November 29, the ES&H Fair will be held on the 15th floor of Wilson Hall from 11:30 -1:00 p.m. Please join us.

### High visibility vests

High visibility vests are now available in the stockroom. They have sizes small to 5XL. The vests are fluorescent yellow/green mesh with reflective tape stripes - perfect for anyone who needs to be seen while working (road crews/construction/etc.).

### ES&H Concern or Suggestion?

Talk to your Supervisor, SSO or go to the ES&H homepage & click on 'Concerns & Suggestions'.

## Laser Pointers

There are some laser pointers that emit hazardous levels of visible or infrared radiation. The Food and Drug Administration limits laser pointer output to 5 milliwatts (mW). At this amount of power, people are protected by an aversion response – a blink reflex faster than the 0.25 seconds it takes to produce a retinal injury. Permanent injuries from 5 mW lasers are rare and typically require intentionally staring into the beam for 10 to 60 seconds.



Unfortunately, anyone can buy a laser that exceeds 5 mW and believe he or she is getting an FDA-compliant laser pointer. The higher-power devices look like, are marketed as and can be priced just like laser pointers. If you use approved low-power models correctly, permanent injuries are very unlikely.

- Make sure the laser pointer output is 5 mW or less. Contact Fermilab's Laser Safety Officer, Matt Quinn, at x5175, to get your laser pointer's power output tested.
- Read manufacturer specifications to make sure you're purchasing a product with the proper output. Only purchase products from reputable vendors to ensure the quality of the product.
- Most mislabeled pointers have been green rather than red.
- Do not stare into the beam. Do not point the beam at people, vehicles or shiny objects (the reflection can still cause damage).

**Note:** FDA-compliant laser pointers are now available through the Fermilab stockroom.

**Note:** To use a higher power laser at Fermilab, operators must receive laser training and a laser eye exam.

**Note:** For more information on lasers, go to the ES&H Homepage, click on the Industrial Hygiene page and select lasers.

## Medical tests using radioactive isotopes

Medical radiation exposures are not to be included with personnel occupational radiation exposure. In nuclear medicine, radioactive isotopes are administered to a patient via injection, inhalation, or swallowing. Technetium-99m is used in 80 percent of diagnostic procedures for a variety of organs. Thallium-201 may be used to diagnose coronary artery disease. Iodine-131 may be used to treat thyroid diseases. After undergoing a procedure involving radioactive materials, the patient is a low-level radiation source for a period of time. If you receive a medical procedure involving radioactive materials, you are encouraged to do the following:

- Contact the Medical Office, the Dosimetry Program Office, or your D/S/C RSO
- Do not wear your dosimetry badge
- After your nuclear medicine treatment, collect all tissues, napkins, etc. containing any bodily fluids and dispose of them at home

The Fermilab Radiological Control Manual provides additional information.

