



Environmental Health and Safety Office (EHSO)

Hazard Alert December 14, 2010

Old Lab Equipment Containing Radioactive Antistatic Devices Recently, an item of lab equipment discarded for scrap metal triggered a sensitive radiation detection alarm on the way to the recycler. The equipment, (a Mettler balance) was equipped with a radioactive antistatic device.

Take the following steps to survey lab equipment manufactured prior to 1990:

- All balances and other equipment that may have an antistatic device must be checked for radioactive material with a survey meter – if your department does not have a survey meter (portable Geiger counter or gamma meter) – contact Radiation Safety at 789-3613 or 789-3359 to make arrangements.

Be aware – the older Mettler balances have no visible warning indicating the presence of radioactive material.

- If the survey meter detects radiation, the equipment must be reported to Radiation Safety for further assessment – some Mettler balances must be licensed.

Do not dispose of any lab equipment with antistatic devices without ensuring they are not radioactive.

Mettler Toledo has identified several types of lab equipment that was made with radioactive material as antistatic devices.

- The Mettler Balances (B5, B6, and M5) built from 1955 to 1966 contained radioactive Radium-226 as an antistatic device. The Radium-226 has a long half life (1600 years) meaning these items are still a radioactive concern. Mettler documentation, Standard (N 113-6 en), states “As long as the balance is used as intended, and service work is performed correctly, there is no hazard to people. Incorrect dismantling and disposal, however, can cause a hazard to people and the environment.”
- Other antistatic devices contain Polonium-210 with a shorter half life (4.5 months). Although after two years, the devices are no longer effective as antistatic devices, however, disposal must still be arranged with EHS.

Mettler Balance B5 Gram-Atic – Max. load 200 g	Mettler Balance M5 Max. load 20 g	Antistatic brushes containing Polonium-210
 	 	 