



Lab News

THE UNIVERSITY OF IOWA

HEALTH PROTECTION OFFICE - 100 HPO

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May 1998

Precipitation of Silver Nitrate Solutions

As a result of HPO's Generator Assessments, we discovered several labs are using a procedure that could potentially result in noncompliance with EPA limits. This procedure involves using sodium chloride to precipitate silver chloride out of silver nitrate solutions. The liquid is then decanted off and the precipitate, which is hazardous, is collected for disposal by HPO. While we appreciate your efforts to minimize waste, this procedure may not be removing enough silver to comply with limits set by the EPA. The limit for silver is 5 ppm. Solutions containing higher levels than this are hazardous and must be managed by HPO.

If you have been practicing this procedure, we ask that you please stop. Instead, place silver nitrate solutions into plastic or glass containers (no metal) and contact us for waste collection. If you are producing more waste than can easily be placed into 1-gallon bottles, we will provide 5-gallon containers for you on request. By allowing HPO to manage your silver nitrate solutions, you will help to ensure that the University is in compliance with EPA limits. In addition, you will save time and expense now spent on precipitating the silver nitrate.

Toxic Gas Cylinders

Do you use toxic gases in your laboratory? While specific safety requirements may vary from one lab to another, the items listed below should be included in every lab.

- Documented safety procedures and trained laboratory personnel.
- Properly stored cylinders.
- Gas distribution equipment that uses compatible materials.
- Critical orifices that limit the flow of gas.
- Air flow monitors or alarms on gas cabinets and fume hoods.

For assistance in identifying specific needs, please call Eric Bauer at 3-5679.

Change In Radiation Dose Monitors

Landauer, the longtime supplier of radiation monitoring devices to the University, is introducing a new technology for measuring personal dose. This new technology is called OSL (optical stimulated luminescence) and replaces film as the standard detection mode. OSL technology works because the radiation dose received by the dosimeter is proportional to the luminescence when the aluminum oxide powder is stimulated by laser.

The OSL technology has several advantages over film dosimeters. Unlike film, OSL is not sensitive to heat and humidity and does not require chemical development. In addition, OSL offers superior precision, sensitivity, and can be reprocessed for verification of a questionable dose.

Availability of the new dosimeters is expected in late 1998 or early 1999. Look for more information on OSL dosimeters in future editions of Lab News.

Power Failures

As the severe weather season approaches, planning for a power failure can save you time and trouble later. Here are some items you should address in your laboratory to be prepared for a power outage.

1. Designate an emergency contact person for your laboratory. This person should be knowledgeable about all of the equipment in the lab.
2. Identify essential equipment that must be reset or started.
3. Make sure all fume hoods have a physical, non-electrical indicator to show they are operating.
4. Have a plan for keeping refrigerated or frozen items cold.

In the event of power failure.....

1. Shut down experiments that can be run again when power is restored.
2. Check and secure all fume hoods. Stop operations that may be emitting hazardous gases or vapors.
3. Make sure all experiments that must continue are stable and are not creating uncontrolled hazards.
4. Disconnect unattended equipment and turn off equipment that could be damaged by any power surges that may occur when power is restored.

New Location for Radiation Safety Training

Beginning in June, the location for radiation safety training will change. The new location will be **283 EMRB** (Seebohm Room). Both the Basic Radiation Safety training, held the first Tuesday of each month, and the Refresher training, held the first Thursday of each month, will be held in 283 EMRB. This should be a more comfortable and convenient location for both of these training courses.

Please take note of the new time schedule for each month as well. Sessions may not always be at the same time every other month, as it is currently. Listed below is the schedule for June, July and August:

Basic Radiation Safety

June 2, 1998	3:30 - 5:00 pm
July 7, 1998	11:30 - 1:00 pm
August 4, 1998	3:30 - 5:00 pm

Refresher

June 4, 1998	2:00 - 2:45 pm
July 2, 1998	11:30 - 12:15 pm
August 6, 1998	2:00 - 2:45 pm



Please check the schedules that are distributed to principal investigators periodically to verify times for each session.