



Idaho Chemical Roundup Managing Radioactive Materials

School labs may contain radioactive chemicals. Examples include uranium compounds such as uranyl acetate and uranyl nitrate. These materials are often classified as mixed waste as they are both radioactive and exhibit hazardous waste characteristics. Because they are a concern for both radioactivity and hazardous waste, they must be managed properly. Unfortunately, they fall under two sets of regulations and their unique properties make disposal difficult and costly. Below are some resources to help schools manage these wastes.

Disposal

Mixed wastes should be disposed of by a broker, licensed and trained to handle both radioactive materials and hazardous wastes. Contact brokers and ask for bids. You may be able to get better pricing from one company over another depending on their service territory, schedule, and expertise.

Brokers serving Idaho¹

Chase Environmental Group, Inc.	(865) 584-0833	www.chaseenv.com
Ecology Services Management Consultants, LLC	(410) 381-2600	www.ecologyservices.com
Environmental Management Services	(925) 939-0120	www.enviro-mgmt.com
Qal-Tek Associates	(888) 523-5557	www.qalteck.com
R.M. Wester and Associates, Inc.	(636) 928-9628	www.rmwest.com
Radiation Safety Associates, Inc.	(860) 288-0487	www.radpro.com/
Solutient Technologies, LLC	(330) 497-5905	www.solutientech.com
Thomas Grey Associates	(714) 997-3561	www.tgainc.com/

Located near a university or hospital? A large part of the fee for disposal of mixed waste is related to transportation costs. If located near a university or hospital, contact their waste management department to see if they have a contract in place with a broker. You may be able to work out a better deal or have the transportation component of the costs waived by using the same broker and arranging collection at the same time as the university or hospital.

Was the item donated to your school? Often, these chemicals are donated to schools by a well-meaning employee or company that originally purchased the chemical. Check to see if your lab has records of where the material came from. If the container was a donation, you may be able to work with the company to take back the item or pay for disposal.

Storage

Since the cost to dispose of these materials may be high, schools may have to hold onto the material until sufficient funds become available. In that case, materials should be stored in a secure place according to chemical requirements. Consult the Material Safety Data Sheet (MSDS) for information about proper storage and handling. MSDS information can be downloaded from the Web. Go to your favorite search engine, and search on the name of the chemical and MSDS. For example, type in "uranyl nitrate MSDS."

Chemicals should be stored with secondary containment to prevent contamination in case of a spill. Secondary containment is the use of another container such as a small bucket or plastic bag. If the primary container breaks or leaks, the spill will be contained by the second container. Ensure the second container is compatible with the primary material.

For more information

Contact the Idaho Department of Environmental Quality, Idaho Chemical Roundup program at 208-373-0502 or visit www.deq.idaho.gov.

¹ DEQ is providing this list as a public service only and does not certify or recommend any business or organization on the list.