

Proper chemical disposal is key

Chemical waste must not be poured down a sink or put out in the trash, but disposing of hazardous waste properly can be expensive. A school district can save money if it limits the amount of chemical waste set aside for disposal in any one month to less than 220 pounds. If a school anticipates generating more than this amount, it must plan to accumulate 220 pounds of waste each month over a period of months before disposal takes place. In this way, disposal requirements will be simpler. For example, a bill of lading can be used instead of a hazardous waste manifest.

It may also be possible for a school to qualify to use county-sponsored Household Hazardous Waste (HHW) days. If the district participates in the NJDEP School Chemical Management Project, it will receive assistance qualifying for status as a nonprofit organization to use HHW days.

Clearing the record

In the May 2006 *NJEA Reporter*, it was erroneously stated that a cancer cluster scare resulted in the removal of physical education teachers' desks from a staff work area at the Gavlak Elementary School in Wallington. There was actually no cancer cluster at the school, or in the district.

The Wallington Education Association's health and safety committee was concerned about a possible mold problem in the physical education office due to water incursion. The Wallington School District had a consultant selected by the Association check each area initially, and then had independent firms test for mold and clean the areas in question. The areas were found to be safe. The source of the moisture was found and is in the process of being repaired. The teachers' work area was cleaned and other areas painted.

The *NJEA Reporter* regrets the error.

Clean out chemicals this summer

Existing stocks of outdated, unknown, excessive, or unnecessarily hazardous chemicals are present in many schools. When improperly used or stored, chemicals can put students, staff, and others at risk from exposure, spills, and even explosions.

High schools and vocational-technical schools tend to have the most chemicals. In Monmouth County alone, cleanouts have been done at 65 schools and yielded 35,000 pounds of hazardous materials and excess chemicals.

Throughout New Jersey, schools are getting help finding and disposing of unwanted chemicals. Therefore, chemical cleanout can be a serious, even dangerous, undertaking and must be approached with careful planning.

N.J. Department of Environmental Protection (NJDEP) can help

At no cost, NJDEP educates school districts on applicable regulations and best practices for chemical safety.

Health departments in Bergen, Burlington, Camden, Essex, Gloucester, Mercer, Middlesex, Monmouth, Sussex, Union, and Warren counties receive funds from NJDEP to perform School Chemical Management Projects. The phone numbers for these county health departments are listed below.

In counties not presently participating in the School Chemical Management Project, school districts can receive help from NJDEP's GreenStart Compliance Assistance Program (see below).

NOTE: Local associations should work with their UniServ field reps and district administrators to encourage their districts to apply for assistance.

Essential steps

Although successful chemical cleanouts range in their design, there are some essential steps, including:

1. Take an accurate and complete inventory of every chemical, preferably using a computerized spreadsheet. The school's 2003 NJ Right to Know (NJRTK) Survey is a good starting point.
2. Review the inventory and decide which chemicals are really used and how much needs to be kept for no more than a two-year supply.
3. Review the inventory and try to eliminate special hazards such as carcinogens, mutagens, teratogens, corrosives, flammables, reactives, heavy metals (lead, cadmium, mercury), and organic solvents.
4. Review the inventory and identify high-risk chemicals, leaking containers, and unknowns that may pose an immediate health or safety risk. Contact local emergency responders, if necessary.
5. Move chemicals out of storage into a room where used chemicals may be more easily separated from unused or excess chemicals. Put red paper dots on containers of chemicals that are not used and plan for disposal.
6. Consolidate storage in a single, well-ventilated and secure area. Provide sufficient shelving with "lips" to prevent items from sliding or rolling off the shelves and cabinets for corrosive and flammable materials.
7. Label shelving, cabinets, and chemical containers with a color-coded numbering system that will allow containers to be easily returned to their proper location; organized by compatible chemical families, not alphabetically.
8. Assure container labels comply with NJRTK (NJAC 8:59) and the Public Employee Occupational Safety and Health (PEOSH) Hazard Communication Standard (1910.1200/NJAC 12:100-7).
9. Bag and can dangerous chemicals. Secure chemicals safely until they can be properly discarded.

Additional preventive activities

Successful cleanouts can also be complemented by commitments from schools to implement preventative measures, such as:

- Change in purchase practices (e.g. no longer buying "high-risk" chemicals, buying smallest quantity of chemicals needed)
- Policies restricting the acceptance of unnecessary donated chemicals
- Availability of spill procedures and kits for major hazardous chemical classes
- Use of lab kits (pre-mixed chemicals in quantities sufficient for use by individual class)
- Adoption of micro-scale or green chemistry approaches to laboratory experiments
- Commitment to make entire facility (not just laboratories) a chemically safer school environment.

For more information

- County health departments – Contact the environmental coordinator in the following counties.

Bergen	201-634-2780	Burlington	609-265-5543
Camden	856-374-6065	Essex	973-228-8152
Gloucester	856-262-4100	Mercer	609-278-7165
Middlesex	732-745-8481	Monmouth	732-431-7456
Sussex	973-579-0370	Union	908-654-9890
Warren	908-689-6693		

- GreenStart – If your county is not presently participating in the School Chemical Management Project, your school district may want to consider applying for the NJDEP's GreenStart Compliance Assistance Program. GreenStart is a cost-free compliance assistance program created specifically for municipalities and small businesses. For more information, contact Erica Bergman, NJDEP, at 609-633-0727, or via e-mail at greenstart@dep.state.nj.us. GreenStart information is also located on the web at www.nj.gov/dep/enforcement/greenstart.htm
- NJDEP Bureau of Hazardous Waste – 609-584-4250
www.nj.gov/dep/enforcement/hw.html
- N.J. County Hazardous Waste Coordinators – www.state.nj.us/dep/dshw/rtrp/hhwcp.htm
- EPA School Chemical Cleanout Home Page – www.epa.gov/epaoswer/osw/conservation/clusters/schools/index.htm
- PEOSH Model Chemical Hygiene Plan, 1994, Provides an outline written format for a chemical hygiene plan that complies with the Occupational Exposure to Hazardous Chemicals in Laboratories Standard, 29 CFR 1910.1450. www.state.nj.us/health/eoh/peoshweb/labstand.pdf

- PEOSH Public Employer's Guide and Model Written Program for The Hazard Communication Standard, 2005. Helps employers and employees understand the requirements of the PEOSH Hazard Communication Standard (HCS), N.J.A.C. 12:100-7. A sample written hazard communication program is provided to illustrate how to develop a written program. www.state.nj.us/health/eoh/peoshweb/hcsguide.doc
- New Jersey RTK Hazardous Substance Factsheets give accurate and complete health and safety information on over 1,500 specific chemicals. Hundreds are also available in Spanish. www.state.nj.us/health/eoh/rtkweb/rtkhsfs.htm
- Flinn Scientific – Seven-Step Plan to Clean-up Your Chemical Storage Area www.flinnsci.com/Sections/Safety/chemicalSafety/sevenStepPlan.asp
Catalog/Reference Manual – www.flinnsci.com/Sections/Freebies/flinnFreebies.asp
Hazardous Chemical Storage, OSHA, EPA, NFPA, and UFC Regulations and Guidelines You Must Follow, www.flinnsci.com/Sections/Safety/chemicalSafety/hazardousStorage.asp

Self-Inspection checklists for schools

- PEOSH Hazard Communication Standard – www.nj.gov/njded/schools/safeschools/check80.PDF
- Right To Know – www.nj.gov/njded/schools/safeschools/check14.PDF
- Toxic and Hazardous Substance Exposure – www.nj.gov/njded/schools/safeschools/check25.PDF
- Flammable and Combustible Liquids – www.nj.gov/njded/schools/safeschools/check39.PDF
- Hazardous Waste – www.nj.gov/njded/schools/safeschools/check41.PDF
- Pesticides – www.nj.gov/njded/schools/safeschools/check24.PDF