Hazardous Waste Management and Reduction in Schools

Hazardous materials can harm human health and the environment, yet they often are part of daily life. This handout will help schools reduce the amount of hazardous materials on campus and properly manage those that are deemed necessary.

1. **Create a team to manage hazardous waste (HW) at your school.** This team can be part of a waste reduction committee described in the ANR School Waste Reduction Guide. Members should include:
    a. A school Administrator,
    b. Lead custodial staff, and
    c. A Hazardous Materials Coordinator.
    d. Optional: Students can be involved but should not handle hazardous waste.

2. **Identify which hazardous materials are used and stored on school property.**
    a. Commonly found materials: light bulbs, paints, fertilizers, printer toners, cleaning supplies, medical equipment, refrigerants, drain cleaners, pottery clear coating glaze, concentrated acids, aerosol cans, science department lab chemicals.

3. **Inventory the hazardous materials entering the school and how they are being disposed.**
    a. Develop a tracking sheet that includes columns for “chemical name of material”, “shortened name” (if there is one), “where it is stored”, “size of the container” (if applicable), and “number of containers”.
    b. Create a schedule to update the inventory. Save previous inventory sheets as separate files from new ones if completing the document electronically so as to not save over documents.
    c. Only individuals properly trained to manage hazardous waste should be permitted to handle and inventory the materials.

4. **Create a plan to limit the use and storage of hazardous materials.** Work with your local Solid Waste Management Entity (SWME) and/or a private contractor to create a plan to limit hazardous materials purchased, used, and generated by the school.
    a. Identify dangerous chemicals that should not be present or used.
    b. Work with facility staff, repair personnel, science teachers, and art teachers to limit the use of dangerous chemicals. Educate staff on environmentally preferred alternatives to more hazardous materials.
    c. Do not purchase more hazardous materials before auditing current supply. Include in audit: lab chemicals, art supplies, and facility maintenance materials such as cleaning products, paint, fluorescent light bulbs, etc. Plan for proper disposal of materials or waste not in use.

5. **Create a storage plan for hazardous waste.**

    a. Keep hazardous waste stored in as few locations as possible and follow hazardous waste storage requirements. Contact VT DEC Hazardous Waste Program with questions.

    b. Make sure the storage area is clean, dry, and free of obstructions.

6. **Create school-wide standardized procedures** for how, when, and where collection and disposal of hazardous waste will occur.

    a. Set up collection days for staff to go through their hazardous material and bring it to a designated consolidation area for proper packaging and removal by a Hazardous Waste Contractor or SWME. When possible, work with a SWME to access their services, Household Hazardous Waste (HHW) events, and/or HHW facility.

    b. This may include creating a secured hazardous waste storage area.

    c. Never dump unknown and untreated chemicals down the drain.

    d. Train personnel on the procedures and review them on a recurring basis to evaluate if they need updates or revisions.

7. **Educate Faculty.**

    a. Annually train teachers that handle hazardous materials. A Chemical Hygiene Plan is required by OSHA and should be in place for science labs.

    b. Faculty and students who use these chemicals should learn and practice procedures necessary to minimize exposure to these substances.

8. **Educate Students.**

    a. Science teachers using hazardous materials, such as lab chemicals, must train students before use.

    b. Explain the connection between hazardous materials and health and environmental issues.

    c. Incorporate lessons about hazardous products and hazardous waste awareness.

    d. Explain how hazardous materials can be reduced, reused, and disposed of properly.

    e. Offer suggestions for use of non-hazardous products for both school and home.

RESOURCES

- Chittenden Solid Waste District - Hazardous Materials Management in K-12 Schools cswd.net/wp-content/uploads/CSWD-schools-hazardous-materials-management-201604.pdf
- US Environmental Protection Agency - Healthy School Environments-Chemical Use & Management epa.gov/schools/toolkit-safe-chemical-management-k-12-schools
- Hazardous Waste Teaching Resources, King County Solid Waste Division, WA your.kingcounty.gov/solidwaste/education/hazwaste.asp