



This document is one section from EPA's "Chemical Management Resource Guide for School Administrators," published in December 2006. The reference number is EPA-747-R-06-002. You can find the entire document at <http://www.epa.gov/opptintr/chemmgmt/index.htm>.

Chemical Management Resource Guide for School Administrators

Section I Overview

I. Overview

I.A. Introduction

From elementary school maintenance storage closets to high school chemistry laboratories, schools house a variety of chemicals. Many of these chemicals are hazardous and are used daily; however, in some cases, these chemicals have been unused for decades. Ensuring that these chemicals are managed properly will help school administrators to: safeguard the health and safety of students and school employees; avoid disposal expenses and *costly* school closures associated with spills and emergency incidents; maintain a sense of trust between the district and the surrounding community; and prevent damage to the environment. School districts need solid, useful, specific recommendations and information on responsible chemical management to facilitate the establishment of sound district-level policies and procedures.

This document is intended to aid K-12 public school districts and private, religious, and independent schools and school system policymakers in reducing dangerous chemical use and implementing responsible chemical management practices. Institutionalizing such practices will help to minimize the incidence of chemical spills, exposures, and emergency scenarios in schools. This document focuses on broad policy considerations that EPA recommends school administrators consider implementing to properly manage and use all dangerous chemicals. Parents and others in the community interested in school health and safety policies also may use this booklet to determine whether their children's schools are effectively minimizing potential exposure to dangerous chemicals and products.

This document is part of EPA's Healthy School Environments Initiative. The Healthy School Environments website (<http://www.epa.gov/schools/>) serves as a gateway to on-line resources to help school administrators, teachers, facility managers and other staff, and parents address environmental health issues in schools. This document is also an integral part of the EPA Schools Chemical Cleanout Campaign (SC3) toolkit. The goals of the SC3 are to: remove potentially harmful chemicals from schools; emphasize the implementation of preventive programs such as chemical management training for lab instructors and microscale techniques; and raise national awareness of the issue of chemicals in schools. The ultimate goal of the SC3 is to create a chemically safer school environment in which chemicals are purchased wisely, stored safely, handled by trained personnel, used responsibly, and disposed of properly. Finally, this document includes numerous boxes highlighting information on relevant EPA and state information, such as the HealthySEAT tool developed by EPA as a resource to address chemical management among other environmental, safety, and health issues.



EPA has developed a unique software tool to help school districts evaluate and manage all of their environmental, safety, and health issues, including all aspects of their chemical management programs. The Healthy School Environments Assessment Tool (HealthySEAT) can be customized and used, free of charge, by district-level staff to conduct voluntary self-assessments of their facilities and to manage information on environmental conditions within each building.

Source: EPA, HealthySEAT,
<http://www.epa.gov/schools/healthyseat/index.html>

I.B. Organization of this Guide

Section I explains the need for responsible chemical management policies and why school administrators must be concerned about chemical management in their schools.

Section II provides an overview of the various classes of hazardous chemicals and products of concern found in schools, and discusses where these chemicals and products of concern might commonly be found in schools.

Section III presents recommendations for school administrators to develop their own consistent and effective policies, promotes concepts such as pollution prevention and green chemistry, and provides information on best practices for the purchase, identification, tracking, storage, use, and disposal of hazardous chemicals found in elementary and secondary schools.

Section IV discusses special types of chemicals that are of particular concern.

Section V presents conclusions.

The **Appendix** lists specific examples of various “how to” forms, templates, and checklists for establishing policies and procedures that schools may use to facilitate the implementation of EPA’s recommendations.

This document contains numerous references and endnotes to school-focused guidance documents and materials on chemical management, green chemistry, pollution prevention, environmentally preferable purchasing, and school cleanout campaigns initiated in school districts. For example, the Los Angeles Unified School District, one of the largest school districts in the country, along with its home state of California, have been committed to spreading awareness about chemicals in schools, as illustrated below.



The Los Angeles Unified School District (LAUSD) has been particularly active on issues related to chemicals in schools. The LAUSD’s Office of Environmental Health and Safety (OEHS) website contains a wealth of resources for school officials, including a searchable product review tool available on the OEHS Chemical Evaluation Program page (http://www.lausd-oehs.org/productreview_chemeval.asp) and comprehensive information about its Chemical Hygiene Program. The OEHS Chemical Hygiene Program page (<http://www.lausd-oehs.org/chemical-hygiene.asp>) contains links to various handouts and the *Science Safety Handbook for California Public Schools* (<http://www.lausd-oehs.org/docs/Misc/CAScienceSafetyHandbook.pdf>). It also lists chemicals approved by the State of California and OEHS for use in LAUSD school laboratories. These chemicals can be viewed by clicking the “View Approved Laboratory Chemicals” button on the OEHS Chemical Hygiene Program page (listed above).

The State of California has customized EPA’s HealthySEAT software to incorporate California’s regulations and links to other state-specific information, including funding sources. State-customized versions of HealthySEAT make it easier for individual school systems to adapt and use the tool.

I.C. Why You Should Be Concerned

There are five key reasons why school administrators should be concerned about chemical management in their schools:

1 Improper chemical management poses *health and safety risks to students and school employees*. Health, learning, and behavior risks to students are of particular concern, as children are more vulnerable than adults to chemical exposures because their bodily systems are still developing; they eat more, drink more, and breathe more in proportion to their body size; and their behavior can expose them more to chemicals than adults.

2 The *expenses incurred from disposal, spills, and other incidents*, including potential liabilities/lawsuits, can be considerable. The costs of responding to chemical incidents can reach hundreds of thousands of dollars or more at a single school.² In addition to response costs, improper chemical waste management can result in fines and increased insurance premiums.

3 It only takes one chemical incident, such as a spill, explosion, or chemical exposure, to *break the trust with the community*. Reported school

incidents can lead to increased parental and community concern, negative publicity, and embarrassment to the school and school district.

4 Improper chemical management may result in school closures that result in a *loss of valuable education time*.

5 Improper chemical management can lead to unintended chemical discharges and spills, which inflict *damage upon the environment* where students, teachers, staff, and parents live and work. Improper chemical discharges into sanitary sewer lines or on-site waste treatment systems (including septic tanks) can have adverse effects on rivers, streams, and groundwater. Chemical releases and spills can also contribute to air pollution. Spills to the ground can ultimately result in long-term harm to the land and considerable remediation costs.

A safe school environment that prevents harm to students and protects school employees from dangerous chemicals must be promoted. Responsible chemical management is likely to lead to improved learning in the classroom and improved overall health of the environment and the community.