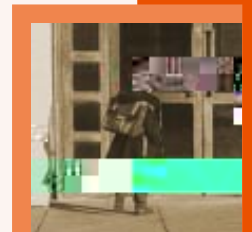
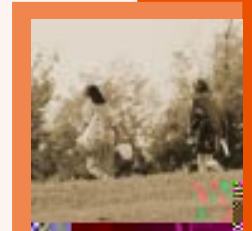
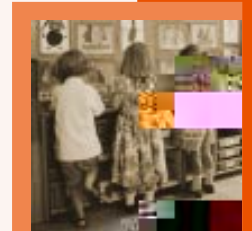


Poisoned School

It's not,
At



A REPORT OF THE
CHILD PROOFING OUR COMMUNITIES:
POISONED SCHOOL CAMPAIGN

Poisoned School : Invisible Threat , Visible Action

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For more information or to order a copy of this report contact :

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National attention is increasingly focused on the poor condition of US public schools. In May of 2000, President Clinton took a “School Reform Tour” highlighting the need for school renovation and construction across the country. School buildings begin to rapidly

and disruptive in school. Extensive scientific evidence documents the role pesticides play in this epidemic. The report *In Harm's Way: Toxic Threats to Child Development* summarizes the latest evidence linking commonly used pesticides to hyperactivity and permanent brain damage. It includes research that links pesticide combinations—like those farming typically contributes to our groundwater—with harm to the immune, hormone, and nervous systems.

Tragically, schools are regularly sprayed with these toxins and most parents have no knowledge of their hazards. Parents have a right to know about the risks chemical exposures pose for their children and to demand alternatives. Informed parents are empowered to take the steps that chemical and pesticide industry lobbyists most fear as they strive to repeal laws meant to protect our children.



We stand at a critical juncture. Laws that could safeguard our children from pesticide exposure are under siege. Record numbers of schools are going up on contaminated land, without protective guidelines against exposure of children to soil, water, and air toxins. Delay in action exposes more children to toxic chemicals in school, day care, and Head Start centers. We must act now, before still more children are unnecessarily harmed.

The Child Proofing Our Communities: Poisoned School Campaign

Recommendations for School Integrated Pest Management (IPM) Programs

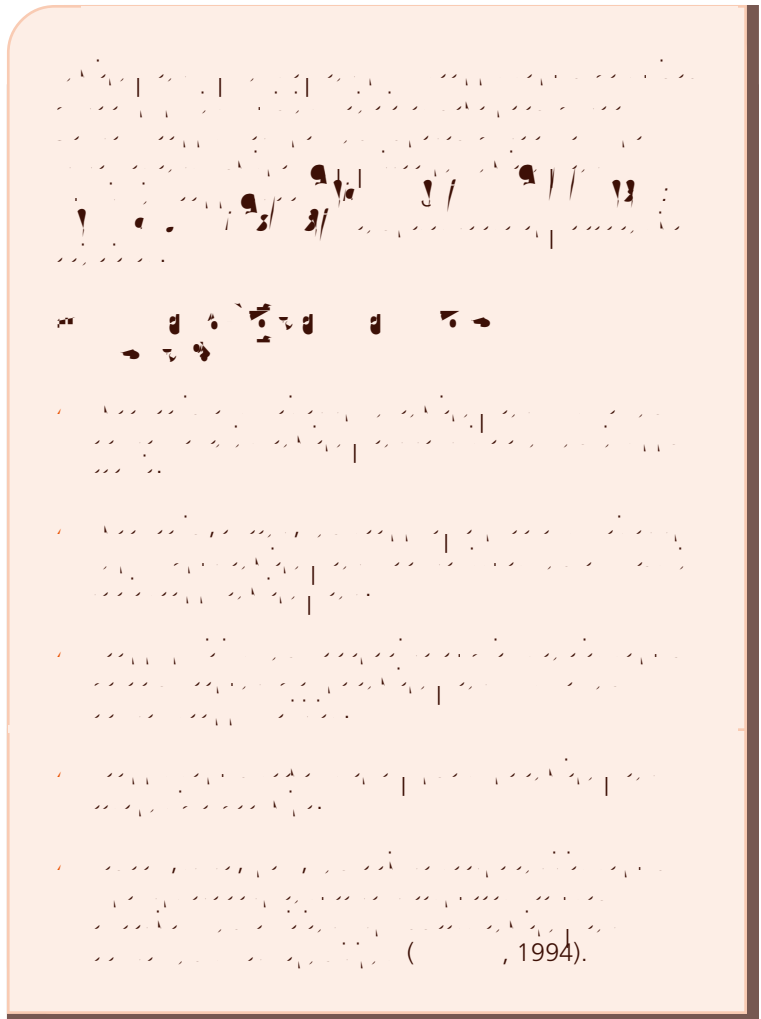
- ▶ Participation in a school Integrated Pest Management (IPM) committee or other formal group should be available to parents, age-appropriate students, teachers, and community members.
- ▶ Preventive and alternative pest controls should be used first. These include sanitation measures that eliminate pest habitats, structural remedies that block pest access, and maintenance measures that prevent pest infestations.
- ▶ Only use least-toxic pesticides if pests present a documented health or safety hazard and never for strictly aesthetic purposes.
- ▶ If pesticides are used, they should be the least-toxic available and their use strictly limited. Under no circumstances should pesticides be used that can cause cancer, reproductive damage, nervous system damage, disruption of the hormonal (endocrine) system, damage to the immune system, or are acutely toxic.
- ▶ If least-toxic pesticides are to be applied, parents, students, and teachers should be notified in advance through written notification and posting. Notification should include what pesticides will be used, health affects associated with exposure, contact information, documentation as to why use is necessary, and the right to request alternatives.

Pesticide use and school siting are just two of many pervasive environmental health problems in our school systems. Other concerns include ventilation, air quality, toxic school products, renovation, maintenance, and sanitation. Groups throughout the U.S. are working hard on these issues. We support continued growth of the *Child Proofing Our Communities: Poisoned School Campaign* and are committed to working together to develop strategies and tools for creating healthier homes, schools and community environments for all children.

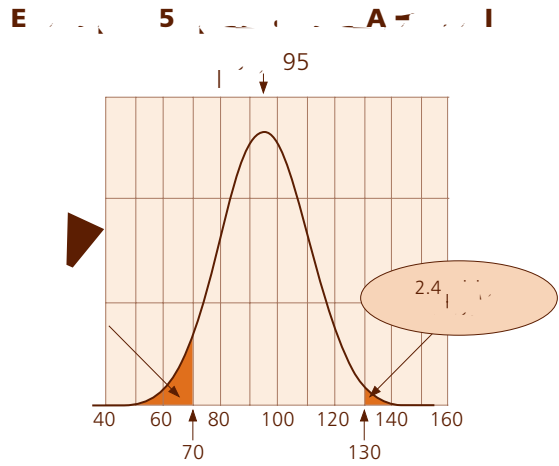
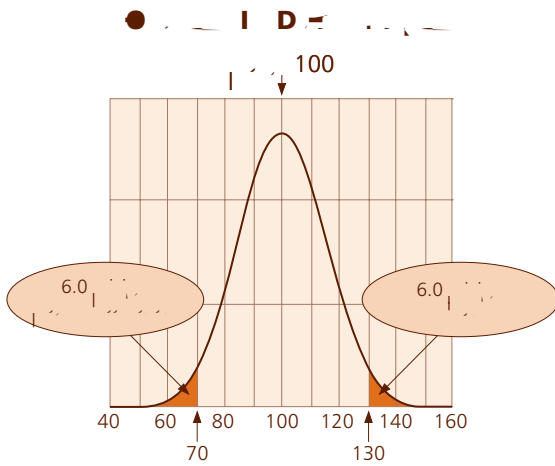


health hazards associated with pesticides and contaminants on or near proposed or existing school property.

- ▶ Ensure that new schools are built on land that poses no unnecessary health risk to children from contaminated soil, air, or water releases.







of lead has an economic value of over \$100 billion per year for the lifetime income of those children (Wirth, 2000).

Schools are crucial for our children to succeed and our nation to compete. Clearly, for them to provide the education and training our children require, learning must occur in an environmentally safe place—one that supports, and most certainly does not impede, intellectual growth.



The special vulnerability of children to environmental chemicals demands that schools act to protect them.

Children are not little adults

Children are more often exposed to environmental threats than adults and more susceptible to environmental disease. This makes them highly vulnerable to chemical exposure. Of small size and still developing, they take in more food, drink, and air per pound of body weight. Also, children behave like children.

Children are still developing and remain vulnerable through adolescence

During prenatal development, infancy, and adolescence, children are growing and adding new tissue more rapidly than at any other period of their lives. Because their tissues and organ systems are still developing and mature at different rates, they are susceptible to environmental chemical influences over an extended time.

Children move through several stages of rapid growth and development. From conception to age 7, growth is most rapid. The ensuing years, through adolescence, bring continued growth, as crucial systems, such as the reproductive system, mature. Insulation of brain nerve fibers is not complete until adolescence. Similarly, air sacs in the lung, where oxygen enters the blood stream, increase in number until adolescence (Needleman, 1994).

During these critical years, as structures and vital connections develop, body systems are not suited to repair damage caused by toxins. Thus, if neurotoxins assault cells in the brain, immune system, or reproductive organs or if endocrine disruption diverts development, resulting dysfunction will likely be permanent and irreversible. Depending on the organ damaged, consequences can include lowered

intelligence, immune dysfunction, or reproductive impairment (Landrigan, 1998).

Children's immature systems are less able to handle toxins

Because organ systems are still developing, children absorb, metabolize, detoxify, and excrete poisons differently from adults. In some instances, children are actually better able to deal with environmental toxins. More commonly, they are less able and thus much more vulnerable (Landrigan, 1998). For example, children absorb about 50 % of the lead to which they are exposed, while adults absorb only 10–15 %. Their less developed immune system is also more susceptible to bacteria such as strep, to ear infections, to viruses such as flu, and to chemical toxins (Needleman, 1994).

Children eat more, drink more, and breathe more

Children consume more calories, drink more water, and breathe more air per pound of body weight than adults. Their body tissues more readily absorb many harmful substances and outside play heightens their exposure to environmental threats relative to adults.

US children ages 1 to 5 eat three to four times more per pound of body weight than the average adult. Infants and children drink more water on a body-weight basis and they take in more air. Differences in body proportions between children and adults means children have proportionately more skin exposure (NRC, 1993).

Children behave like children

Normal activities heighten children's vulnerability to environmental threats. Their natural curiosity, tendency to explore, and inclination to place their hands in their mouths often opens them to health risks adults readily avoid.

Young children crawl and play on the ground or floor and play outside. These natural proclivities expose them to contaminated dust and soil, pesticide residue, chemicals used to disinfect or clean, garden weed-killers, fertilizers, and other potentially hazardous substances.

Air pollution impacts children more because they are frequently outdoors and physically active. They thus breathe pollutants more directly and deeply into their lungs.

Children's natural curiosity leads them to explore situations that could expose them to environmental hazards. For example, they may enter fenced-off areas or polluted creeks and streams (Bearer, 1995).

Children have more time to develop disease

Children's longer remaining life span provides more time for environmentally induced diseases to develop. Exposure to carcinogens as a child, as opposed to adult, is of particular concern since cancer can take decades to develop (Landrigan, 1998).

Many of our nation's schools seriously threaten children's health. The average US public school is 42 years old (USED, 2000). Most have not been renovated in the past 20 years. Public elementary and secondary enrollment is expected to swell another million between 1999 and 2006 to an all-time high of 44.4 million. Nearly 3,000 more schools are needed in the next few years to accommodate this flood (USED, 2000).

Schools are four times more densely occupied than many offices, and students are placed in trailers and attend school in shifts to manage overcrowding. The US Government Accounting Office admits, "While laws compel children to attend school, some school buildings may be unsafe or even harmful to children's health." Half of schools the GAO surveyed self-reported at least one unsatisfactory environmental condition; estimates for repair costs ran over \$112 billion (USGAO, 1995).

According to American School and University's *29th Annual Maintenance and Operations Cost Study*, school districts spend more now to maintain and operate their buildings. However, in terms of the total budget, maintenance and operation now receive a smaller portion of available funds. For the 1999–00 school year, school districts nationally dedicated slightly more than nine percent of their net current expenditures (NCE) to maintenance and operation—the third consecutive year of budget percentage reductions. This represents a marked cut from 1990 when school districts earmarked more than eleven percent of net current receipts for maintenance and operation (Agron, 2000).

Congress has pledged to enact School Construction and Modernization Legislation and the bill again in the new 2001 Congress.

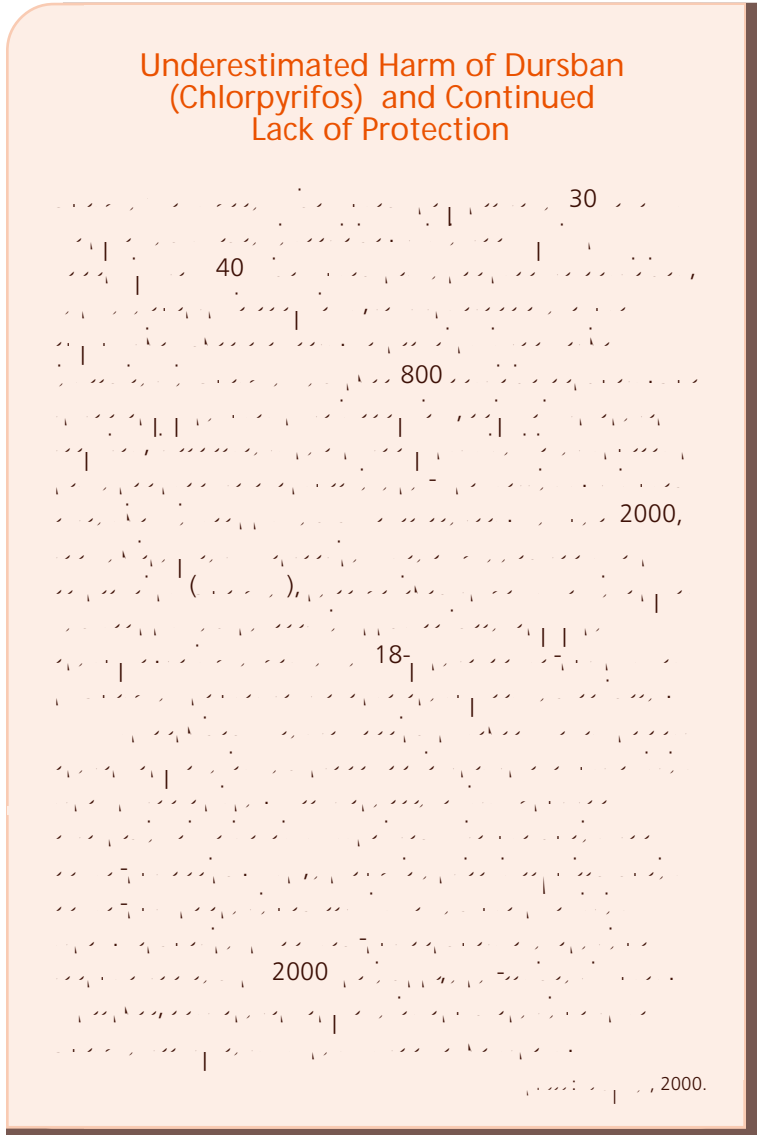
The report *In Harms Way: Toxic Threats to Child Development* cites evidence that a small single dose of commonly used pesticides on a critical day of development can cause hyperactivity and permanent damage in the brain's ability to receive messages. The report also includes research that links combinations of pesticides—like those typically found in our groundwater from farming practices—with harm to the immune, hormone, and nervous systems (GBPSR, 2000).

What is not known about pesticides far outweighs what is known. The numerous pesticide formulations on the market, lack of disclosure requirements, insufficient data requirements, and inadequate testing make it impossible to accurately estimate the hazards of pesticide products upon single, much less lifetime, exposure. Further, we have little control over or knowledge of many of our exposures, making determination of risks and hazards still more complex.

Given this factual ignorance, waiting until all the facts are in means we continue to expose children to harmful pesticides in our homes, schools, and communities, underestimating immediate and long-term damage to their developing bodies.



Most of the public believe that government agencies and regulations adequately protect children's health at school, or that some "authority" surely oversees school safety and takes great care to guard children from exposure to toxic chemicals. This assumption is often incorrect. Only a few very specific and limited laws and regulations are specifically designed to protect children—for example, regulation of asbestos in schools and



lead in wall paint. A 1999 survey of New York State Education Department staff found that although the department is mandated to protect student health and safety, it does not require schools to employ school nurses; report student accidents, illness, or injury; or assign staff to help with environmental issues (HSN, 1999).

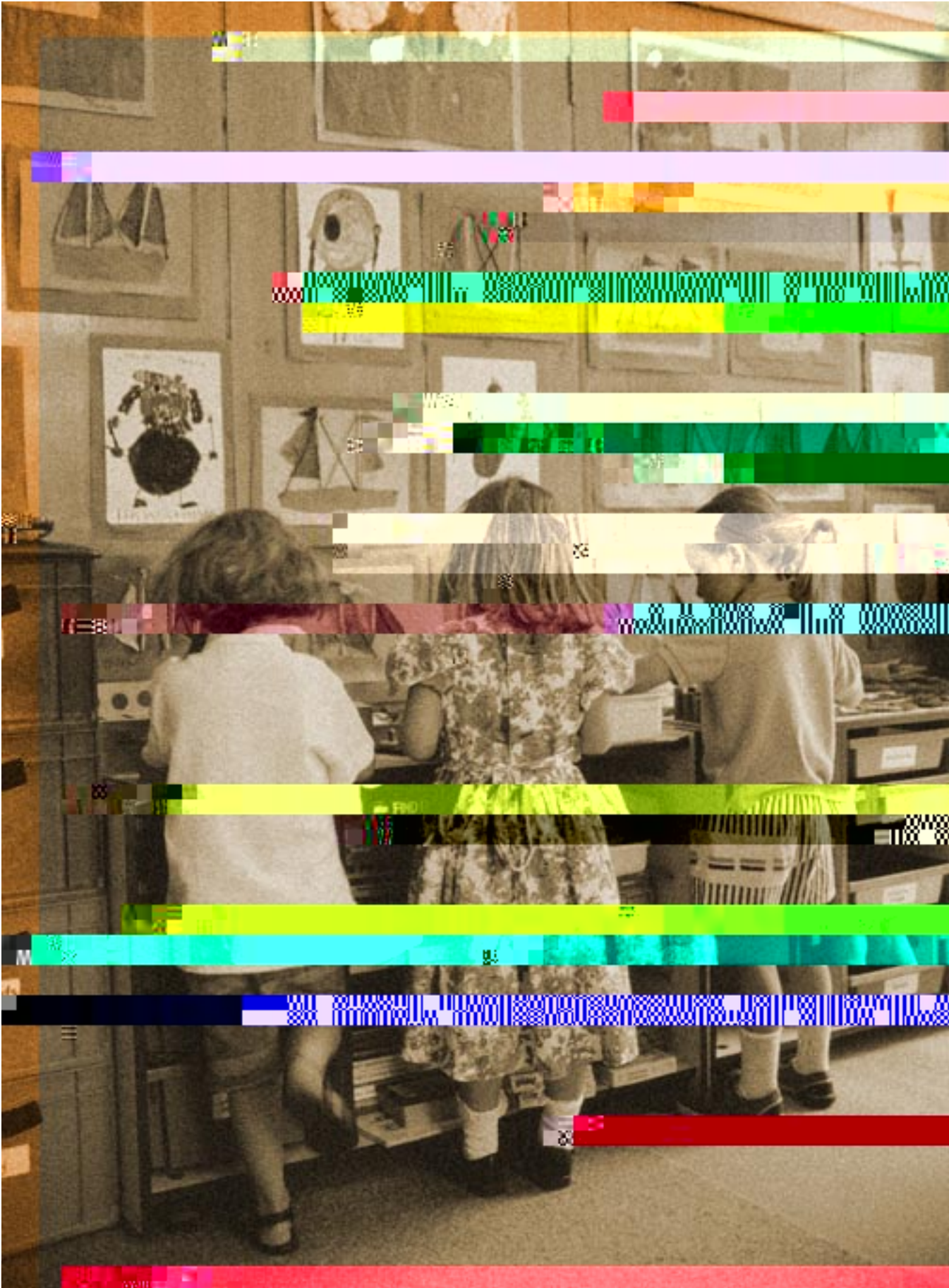
Many factors contribute to the lack of regulations and practices protecting children from exposure to toxic chemicals in the school environment. For one, special interest

lobbying heavily influences our current

serious health risk rather than to experts who judged health risks to be too high and possibly responsible for the leukemia cluster.

Only years of community activism brought the school board to limit access to certain school-ground areas with high concentrations of contaminants, or “hot spots.” However, not until the Department of Defense agreed to discuss appropriating funds to help pay for a new school would the board consider construction of a new school. In November 2000, county voters approved a bond that would provide funds to build a new school, but building will not be complete until 2003. Meanwhile students remain exposed to the documented contamination.

A Charleston, South Carolina, school also shirked accountability when a pesticide was mistakenly sprayed into a classroom instead of



Overcrowded, dilapidated, technologically obsolete schools pose a national crisis. The average public school is over 42 years old (USED, 2000). Nearly half of all schools lack



often face an unfair decision: accept siting on inexpensive contaminated land so that

Elmira, NY—Industrial Site

Several Southside High School parents concerned about high cancer rates among students and past graduates want the school closed and relocated. Twenty-four students, five teachers, and three custodial workers have contracted cancer. A number of residents living near the school also report high cancer rates among family members. The school property is on land that has been home to several factories since 1887 and now neighbors a long-time manufacturing complex, much of which was dismantled in 1977 to construct the school. Soil testing at the time showed “relatively widespread contamination by a refined petroleum product” topped by “unsuitable” fill. Parents have been unable to confirm that a cleanup ever occurred.

The school district Health and Safety Hygienist claims “Today red flags would be flying all over the place; it’s a former industrial site.” The neighboring factory spent \$900,000 to remove 2,000 cubic yards of contaminated soil. The NY State Depart-

Former Department of Education Secretary Richard Riley for years pushed for an appropriation bill to provide funds for nationwide school construction and renovation. Such funds would add fuel to states' rush to build and renovate schools. In Massachusetts, for example, school construction is already underway or planned in over 150 communities. However, no federal standards exist to guide school officials in assessing the health risks a piece of property or neighboring facility may pose to children. Consequently decision-makers default to what they do in similar circumstances—hire experts to measure chemicals in the soil, water, and air and undertake a health risk calculation, usually focused on cancer and based on adult exposure to a single chemical.

Calculating risks based on health effects found in adults weighing 160 lbs, exposed for a lifetime (70 years).

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in place? Clearly much more thought and research and new laws are required to ensure our children's protection. However, California has recently taken the initiative to seriously examine this issue. Their approach provides a working model for other states to follow.



Responding to the many cases in California where dangerous levels of contamination were found on brownfields and other sites redeveloped as school sites, the California state legislature passed two laws in 1999 requiring that the Department of Toxic Substances Control (DTSC) be involved in the environmental review process for the proposed acquisition and/or construction of school properties utilizing state funding (CDTSC, 2000). This environmental review process provides the information needed to determine if the selected properties are free of contamination, or if the property is contaminated, that it is cleaned up to a level that is protective of the students and faculty who will occupy the new school.

The brownfields issue—highlighted by the Los Angeles Belmont High School fiasco and other similar cases in Southern California—largely prompted the passing of this new legislation. While there are pros and cons to using brownfield properties, the Department of Toxic Substances Control (DTSC) has

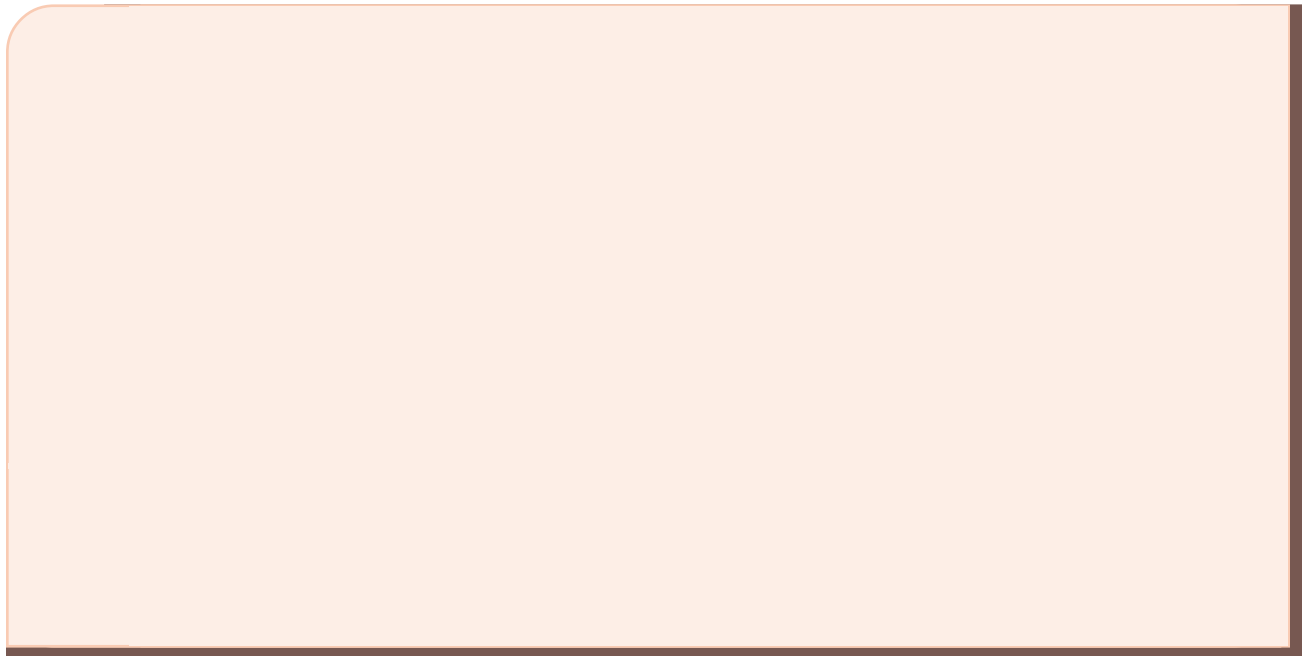
developed a process for environmental review of school sites. This process involves a site assessment by DTSC to determine if the site is contaminated. If contaminated, DTSC will require the site to be cleaned up to a level that is protective of the students and faculty who will occupy the new school.

Below are a few examples of these successes.

**SUVA Elementary and Intermediate
Schools—Montebello, CA**

Responding to public concern over the possibility of adverse health effects occurring due a school's location adjacent to a chrome plating facility, DTSC coordinated an expedited multi-agency/multi-media environmental investigation. Within six months, DTSC held public hearings to hear parent and community concerns, conducted a thorough school investigation, oversaw removal o





Above is a list of chemicals USEPA and the federal Agency for Toxic Substances and Disease Registry identify as the most common found at Superfund sites (USEPA, 1995a). NYS soil cleanup levels for these chemicals are included. NYS standards for a more extensive list of substances are available from CHEJ or from the NYS DEC website (www.dec.state.ny.us/website/der/tagms/prtg4046.html). *Children should not be allowed on any site with contamination above these levels.*

If the environmental sampling data collected during the Environmental Assessment indicate that contamination levels exceed the NYS standards, then a PEA is warranted at the proposed school site.

Data collected during Phase III of the Environmental Assessment is also used to

hazardous material contamination, and preliminary evaluation of risks actual or potential contamination may pose to children's health, public health, or the environment (CEPA, 1994).

In California, the PEA must meet CDTSC PEA Guidance Manual requirements (see the Resources section for contact information) and be approved by the DTSC. The evaluation should include:

- Description of health consequences of long-term exposure to hazardous substances found on site.
- Description of all possible pathways of exposure to those substances by children attending school on site.
- Identification of which pathways would more likely result in exposure (CEPA, 1994).

If the PEA determines that the site has a significant hazardous materials contamination problem, the school district must either find more suitable property or fund a cleanup plan that would reduce contaminant levels to the NYS standards listed above (see page 31). The remediation process would include a more comprehensive site investigation in order to determine the extent of cleanup needed at the site.

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- The remediation plan approved by the departments of environmental protection and health is estimated to take more than 6 months to complete, and
- The Department of Education determined that the site is the best available.

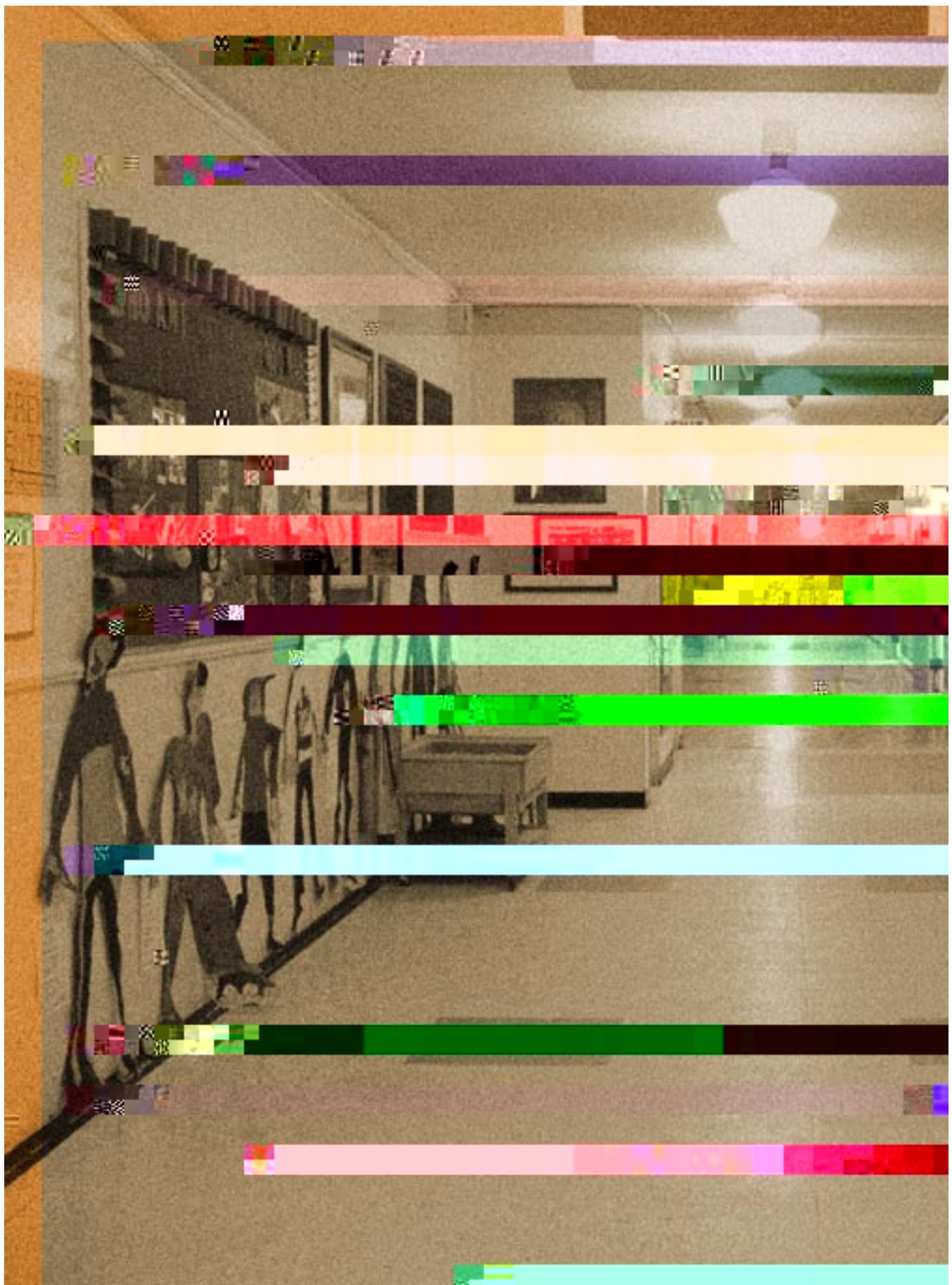


If a school has been constructed, effort must be made to ensure children's protection from new or existing sources of contamination nearby. We recommend the following:

- ▶ None of the above listed sources (see page 31) of contamination should be built/located within 2 miles of a school or Head Start center.
- ▶ The State Department of Environmental Protection should require operating facilities to provide nearby schools with early notice of any application for a permit or renewal permit for construction or location of industrial facilities.
- ▶ Industrial facilities operating near schools should hold annual public meetings to discuss hazard prevention strategies with parents, school personnel, local unions, and local media. Parents have a right to know about hazardous chemicals being stored and released into the air, soil, and groundwater and about potential negative health effects. They should initiate and be part of hazard prevention strategies.
- ▶ In cooperation with school science classes, teacher's unions, and the State Department Environmental Protection or universities, school districts should develop and support programs that enable students and school staff to monitor

storage and air emissions of chemicals at nearby facilities. EPA currently funds similar programs under its Air CURRENTS Project using state-of-the-art portable air-monitors and specialized software to monitor air toxins. For more information, contact EPA at http://www.epa.gov/epahome/other2_0525.html.

- ▶ Schools located near contamination sources should have a monitoring program for acute and long-term health affects. Findings must be confidential, yet health officials and the public must have access when concerns arise, provided identifiers are removed. These should be permanent health records, held even after





Pesticides are toxic chemicals widely used in agricultural production, factories, offices, homes, restaurants, and schools to control and kill “pests.” School kitchens, cafeterias, athletic fields, playgrounds, classrooms, and offices are regularly treated with a variety of pesticides. An increasing body of scientific data on the potential harmful effects of pesticide exposure on humans and our environment raises concern about the broad use of this family of toxins, which includes herbicides, insecticides, rodent poisons, miticides, and fungicides (GBPSR, 2000; Landrigan, 1999; NRC, 1993).

Pesticides contain not only active but also “inert” ingredients. The latter make either application easier or a pest more vulnerable, and often constitute more than 80% of a pesticide formulation. Common inert chemicals are toluene and xylene—toxins that affect people as well as “pests.” Inerts can be equally or more toxic than active ingredients. A wide range of chemicals can be added to a pesticide formulation as inert components, some of which are “active inerts” (NCAP, 1997). Other substances that can be added as inerts include other pesticides, toxic chemicals, hazardous waste, solvents, propellants, wetting agents, and petrochemicals (NCAP, 1998). The mixed chemicals create a toxic brew that could cause or promote adverse health impacts we cannot yet determine or even anticipate.

EPA registers both active and inert ingredi-

drooling, uncontrollably vomiting, and unable to walk. Luckily his doctor recognized his symptoms as classic signs of organophosphate poisoning. He was rushed to the hospital fighting for life and is now overly sensitive to tiny pesticide amounts. He had tasted what looked like sand under a tree on school grounds—disulfoton, one of the most acutely toxic EPA registered pesticides, applied nine days earlier to control maple tree aphids (BP/NCAMP, 1996).

Portland, OR—Pesticide Use Causes Serious Harm to Students, Teachers, and Staff.

Portland's Powellhurst School was treated with the pesticides chlorpyrifos and dichlorvos for ant control in May 1993. One day later, at least 65 persons, including infants, children, teachers, and school staff, reported nausea, vomiting, diarrhea, massive headache, rashes, dizziness, itching eyes, sore throats, and other symptoms upon return to school.

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התמודדות עם איומים בלתי נראים בחדרי הלימודים

התמודדות עם איומים בלתי נראים בחדרי הלימודים

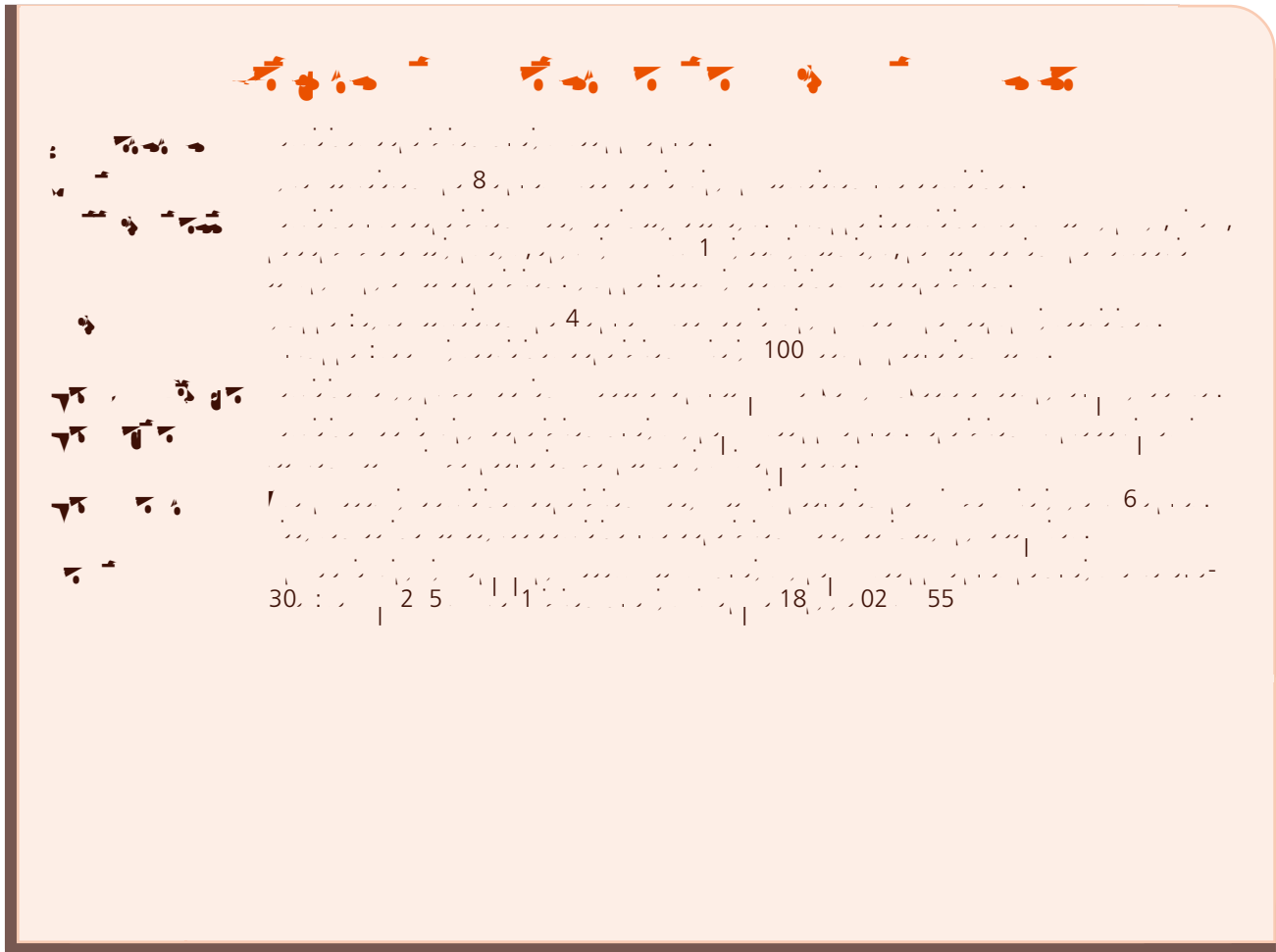
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Even the General Services Administration
(GSA)—the government agency that manages





Child Proofing Our Communities: Poisoned School Campaign, representing groups working nationwide to eliminate school pesticide use at the national, state, and local levels, have developed a “Gold Standard” School Integrated Pest Management policy after research showed that IPM is interpreted and applied in many ways.

Some of the best IPM policies currently used, though originally thought protective, have not eliminated children’s exposure to the most harmful pest control products—products that can cause cancer, reproductive damage, nervous system damage, disruption of the hormonal (endocrine system), or

pdl

The IPM coordinator should be a school district employee appointed by the district, trained in school IPM principles, and responsible for:

•

Approved Least-Toxic Pest Control Products:

- ▶ Boric acid and disodium octoate

Applicators should only use the smallest amount of least-toxic product needed for pest control.

property. When aerial pesticide applications are involved, zones should extend at least 3 miles around the school. Buffer zones should be in effect at all times of the day. Spray restrictions are especially important during commuting hours and while students and employees are on school grounds.



Pest prevention measures include sanitation and structural repair, and physical and mechanical controls such as screens, traps, weeders, and air doors. Specific IPM strategies for specific school sites are provided below and taken directly from *Pest Control in the School Environment: Adopting Integrated Pest Management*, EPA Office of Pesticide Programs (USEPA, 1993). (Note: Each school will experience slightly different pest combinations.)

IPM Strategies for Indoor Sites

Typical Pests: Mice, rats, cockroaches, ants, flies, wasps, hornets, yellow jackets, spiders, microorganisms, termites, carpenter ants, and other wood-destroying insects. Although beneficial as predators, wasps, hornets, yellow jackets, and spiders can be troublesome.

Entryways (doorways, overhead doors, windows, holes in exterior walls, openings around pipes, electrical fixtures, or ducts):

- Keep doors shut when not in use.
- Place weather stripping on doors.
- Caulk and seal wall openings.
- Install or repair screens.
- Install air curtains.
- Place weather stripping on door at comb)1 "wj11x" cGwFE'xcG—koG9-“) 'Fj—E-“) '—'1xo1xlth-x" Gwj-'tGjP9sxNG&bj9C

Dethatch in early fall or early spring, when

- ▶ The health effects grid modeled on page 40—*Health Effects of 48 Pesticides Commonly Used in Schools*—accompanies notification form.
- ▶ Posting of treated areas remains a minimum of 72 hours after application.
- ▶ All pesticide application records are kept on-site for at least 5 years (termite applications for life of property).
- ▶ School personnel, including school nurse, can readily tell you where IPM and Pest Sightings Logs are kept and know they are responsible for reporting complaints and sightings in the logs.
- ▶ When asked, school immediately shows you where maintenance chemicals are stored and provides product labels and material safety data sheets for all pesticides in use.
- ▶ School board has annual report on the pest management program, including products and amounts used.
- ▶ School has designated IPM coordinator and IPM committee for pest control questions and complaints.
- ▶ Food is stored and eaten only in limited areas; no snacks in the classrooms.
- ▶ Food and waste are stored in containers with tight lids. Waste is removed at the end of each day.
- ▶ Lockers and desks are routinely cleaned out.
- ▶ No standing water or water-damaged or wet materials.
- ▶ Grass and shrubs are planted and trimmed to stay away from buildings. Building foundations, fence lines, and sides of drives and walks are not edged with brown grass (evidence of herbicide use).
- ▶ When chemical pesticides are to be used, school provides documentation that all other non-chemical methods outlined in the policy have been exhausted and that

Are contractors following the rules?

- ▶ School readily shows you signed contract with pest control company that adheres to its approved IPM policy objectives.
- ▶ School uses only pesticide applicators certified and over 21 years old.
- ▶ IPM coordinator monitors contractor performance and regularly reports to IPM committee.

Does the school practice true IPM?

- ▶ Custodians and cleaners carry caulk guns and screen patching (or have them readily available).
- ▶ Sticky traps are set and checked regularly to monitor pest populations.
- ▶ Windows, indoor food storage areas, and outdoor trash centers have screens.
- ▶ No pets in classrooms.

reproductive toxins (Landrigan, 1998).

- If school is in rural area or near agricultural area, buffer zone of at least 2 miles encircles school for ground applications and at least 3 miles for aerial pesticide applications.

Step Three: Build Core Support and Establish Your Platform.

After your research is complete, begin developing a core group of individuals to launch your campaign. Alone, you will likely be overwhelmed by the effort involved. In addition, a group is less vulnerable to accusa-

change is needed and an IPM committee forms to develop a school district policy and program. In fact, many school district staff take their own initiative to adopt IPM once they learn about the problem. More often, however, staff expresses concerns about alternative pest control methods. Listen carefully. Some concerns may indicate lack of understanding of what IPM is and how it can benefit the school.

Step Five: "Power map" the School Board

To achieve your goals you must convince the majority of the school board that the Gold Standard IPM Policy is appropriate. Always keep in mind that your primary targets are these individuals.

"Power map" the school board to determine how to win. This tool for determining how to

educational fact sheet is one of the best ways to get out your message. Sheets are easy to prepare and highly effective. The fact sheet must describe the problem, your solution, and what people can do to get involved; indicate upcoming meetings, important hearings, or school board members that need to be contacted; and provide a contact person and phone number for more information.

- ▶ Collecting petition signatures educates the public about your campaign, demonstrates support for your platform, and recruits volunteers. Petitioning while parents drop off or pick up their children is effective in many communities. Often students will circulate a “student” petition as well as one for adults. Provide space on the petition for people to indicate their interest in volunteering. Keep a copy of all signed petitions for future use and in order to collect names, addresses, and telephone numbers.
- ▶ Handing out informational flyers to recruit support and memb—'jxmoG\$xinfgSs&As)')nfbfskiGpareHwj)'dell as

discussion of important community events. Call your local station and sell them on your campaign.

Editorials in newspapers cover a wide range of topics, including local issues that impact schools. To set up a meeting with an editorial board to discuss your concerns, send a letter of request. Include information about the issue you want to discuss and whom you would like to bring to the meeting. Follow the letter with a phone call. At some newspapers, it is fairly easy to get a meeting, at others all but impossible.

Opinion editorials sent from the public regularly appear in newspapers. Opinion pieces are an ideal medium to communicate with the public because you control the content. When a reporter or editor presents your issue, they are free to put their own slant on your message through what they exclude and include, the tone they use, and the context in which they place it. Consult your local paper to determine opinion piece guidelines. If the piece is co-authored by an influential community member considered an authority on the subject, such as the PTA chair, the paper is more likely to print it.

Letters to the editor are usual in most newspapers. Consult the paper for special requirements, such as the number of words permitted, if you choose this tactic.

Feature stories are composed by reporters on issues they believe are or should be of interest to their audience. Community activist Theresa Tye worked with a local reporter to cover her campaign to rid her son's school of pesticides. She told local reporters her story, several of whom followed through with articles over the next several years.



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American Federation of Teachers, a union that represents K–12 teachers, other school

Californians for Pesticide Reform (CPR) is a coalition of over 140 public interest organizations committed to protecting public health and the environment from pesticide proliferation. CPR's mission is to educate Californians about environmental and health risks posed by pesticides; eliminate the use of the most dangerous pesticides in California and reduce overall pesticide use; promote sustainable pest control solutions for our farms, communities, forests, homes and yards; and hold government agencies accountable for protecting public health and Californians' right to know about pesticide use and exposure. CPR's Healthy Schools Campaign works

Children's Health Environmental Coalition researches the causes of childhood cancers and their relation to environmental hazards. Its advisory board includes founders Nancy and Jim Chuda and environmental health experts and advocates from around the nation, including spokesperson Olivia Newton-John.

P.O. Box 1540, Princeton, NJ 08542 • Phone: (609) 252-1915 • Fax: (609) 252-1536
 chec@checnet.org • www.checnet.org

Healthy Schools Network, Inc. is a not for profit advocate for the protection of children's environmental health in school; HSN seeks systemic reforms working in coalition with local, state, and national parent, public health, environment, and education groups. Founded in 1994, HSN's child-centered research and information and referral services work to ensure every child and school employee an environmentally safe and healthy school which is clean and in good repair. HSN's guides, reports and technical assistance are designed to help parents and others in the education community promote environmentally responsible schools and secure protections for children.

773 Madison Avenue, Albany, NY 12208 • Phone: (518) 462-0632 • Fax: (518) 462-0433
 www.healthyschools.org

Institute For Children's Environmental Health, a non-profit educational organization, works to foster collaborative initiatives to mitigate environmental exposures that can undermine the health of current and future generations. ICEH is coordinating the national Partnership for Children's Health and the Environment—a loosely-knit group of government, academic, and grassroots organizations working on children's environmental health issues—and the Healthy Futures Project—a project-based environmental health training program for teens in the Pacific Northwest that fosters both scientific thinking and creative expression to inspire youth to serve as change agents for a healthy future.

P.O. Box 757, Langley, WA 98260 • Phone: (360) 221-7995 • Fax: (360) 321-7993
 elise@whidbey.com • www.iceh.org

IPM Institute of North America, Inc. is a non-profit formed in 1998 to create recognition and rewards for goods and service providers who practice IPM. Consumer IPM support is a powerful incentive for increasing IPM adoption in agriculture, grounds maintenance, and public and private facilities such as schools. Organizations, professionals, products, and services meeting IPM Institute Standards earn the right to display the IPM Institute Certified Seal. The institute assists with developing and maintaining IPM requirements; training and certifying compliance verifiers; and heightening consumer awareness of and support for IPM-identified products and services. Its manual, *IPM Standards for Schools: A Program for Reducing Pest and Pesticide Risks in Schools* (now available on-line), provides a new tool to help answer questions about whether school pest management practices are least-toxic and effective.

1914 Rowley Ave., Madison WI 53705 • Phone: (608) 232-1528 • Fax: (608) 232-1530
 ipminstitute@cs.com • www.ipminstitute.org

Learning Disabilities Association, a volunteer organization comprising persons with learning disabilities, their families, and professionals, seeks to enhance the quality of life for all with learning disabilities and their families; alleviate learning disability effects; and support efforts to determine the cause of learning disabilities. One project focuses on developmental effects on children of exposure to environmental chemicals.
4156 Liberty Road, Pittsburgh, PA 15234 • Phone: (412) 341-1515 • Fax: (412) 344-0224
www.ldanatl.org

Mothers and Others for a Livable Planet advocates translating environmental concerns to everyday life by providing practical, solutions-oriented information on safe foods and products. It publishes a monthly newsletter, *Green Guide*, among other publications.
40 West 20th St., New York, NY 10011 • Phone: (212) 242-0010 • Fax: (212) 242-0545
greenguide@mothers.org • www.mothers.org

National Pediculosis Association seeks to protect children from misuse and abuse of potentially harmful lice and scabies treatments. It produces various publications as well as the LiceMeister website.

P.O. Box 610189, Newton, MA 02461 • Phone: (781) 449-NITS (6487)

Fax: (781) 449-8129 • npa@headlice.org • www.headlice.org

New York Coalition for Alternatives to Pesticides (NYCAP) strives to eliminate use of hazardous chemicals by promoting safer alternatives to pesticides, cleaning supplies, and other chemicals. NYCAP outreach efforts include publishing *Solutions* magazine and many other publications.

353 Hamilton St., Albany, NY 12210-1709 • Phone: (518) 426-8246 • Fax: (518) 426-3052

nycap@igc.apc.org • www.crisny.org/not-for-profit/nycap/nycap.htm

Northwest Coalition for Alternatives to Pesticides (NCAP) provides information on pesticides and pest management alternatives, including facts on risks of school pesticide use, and strategies for reducing use. Publications include *Unthinkable Risk: How Children Are Exposed and Harmed When Pesticides Are Used at School*, which profiles nearly 100 pesticide poisoning incidents. NCAP also quarterly publishes *Journal of Pesticide Reform*.

8. Do you have a site selection policy for locating new schools? Yes No

Does this policy include an environmental assessment of the proposed school site?

Yes No

If YES, does your environmental site assessment include the following?

A. Site history Yes No

B. Site visit Yes No

C. Interviews Yes No

D. Soil, ground and surface water and/or air sampling Yes No

E. Survey of facilities within 2-mile perimeter of the site, including facilities reporting to the Environmental Protection Agency's Toxic Release Inventory, chemical storage facilities, waste treatment facilities, landfills Yes No

9. Does your environmental site assessment take into account the special vulnerabilities of children? Yes No

If YES, please describe how. _____

10. Do you have a site selection policy for locating new schools? Yes No

a Yes

Appendix B

SAMPLE PEST MANAGEMENT SURVEY

1. Your Name _____
Your Title _____
Name of School District _____
School District Address _____
City _____ State _____ Zip Code _____
Phone _____ Fax _____
E-mail _____

2. How many schools are in your school district? _____

3. Approximately how many students are enrolled in your school district? _____

4. Does your school district have a written policy for
indoor pest management? Yes No
outdoor pest management? Yes No
outdoor grounds management? Yes No

If YES to any of the above, is the policy adopted by the Board of Education?

Yes No

If YES to having written policy, do all district schools follow the same policy?

Yes No Not Sure

Please include a copy of the policy with your returned survey.

5. What pest problems does your school district face?
Use an "I" for indoor and/or "O" for outdoor.

___ Cockroaches	___ Spiders	___ Stinging Insects
___ Ants	___ Flies	___ Moths
___ Rodents	___ Mold/Fungus	___ Head Lice
___ Aphids	___ Weeds	___ Moss
___ Plant diseases	___ Birds	___ Wood Destroying Insects

Other _____

6. Does your school district use pesticides? If YES, go to question 7. If NO, go to 22.
 Yes No

7. List the pest control products your school district uses. For each product, check whether it is applied indoors, outdoors to control pests, or outdoors to control weeds. Pesticides include insecticides, herbicides, fungicides, and rodenticides.

Product	Indoor	Outdoor—Pest	Outdoor—Weed
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

8. If pesticides are used, what kinds of records are kept of applications?

- Log book
 Invoice
 Other: _____

9. Where are records kept?

- School district office
 School principal office
 Facility manager office
 School business office
 Other: _____

10. How long are records kept (specify number)?

____ days ____ weeks ____ years ____ other _____

11. Is pest control contracted out to a private firm or managed by a school employee?

	Indoor	Outdoor—Pest	Outdoor—Weed
Staff	_____	_____	_____
Contractor	_____	_____	_____
Other	_____	_____	_____

12. If contracted, who is responsible for monitoring contractor performance after the contract is signed?
 Facility manager School staff IPM coordinator Other_____
- Please include the contractor service agreement with your returned survey.
13. Does your school district require that those applying pesticides in your school district meet any training or certification or age standards? Yes No
- If YES, which of these is required?
 Over 21 years of age State certification State license
 Other_____
14. Are pesticides applied on a regular basis (e.g., weekly, monthly) or as needed?
 Regular basis (please specify interval: _____) As needed
15. Does your school district have information on the identity or toxicity of “inert” ingredients in pesticide products used? Yes No
16. Does your school district have product labels and Material Safety Data Sheets (MSDS) on file for public inspection for all chemicals used? Yes No
17. Does your school district provide any notification of pesticide applications to....?
 Parents Teachers and staff Students Community
 Other_____
18. Is notification given before or after the pesticide application?
 Before After
- If BEFORE, how long before application is notice given (specify number)?
 ___hours ___days
19. How long after application do postings, notices, or signs remain (specify number)?
 ___hours ___days ___none
20. How are those listed in question 17 notified?
 Bulletin board posting Letter home to parents Letter to staff
 Students are told Teachers are told Signs posted indoors
 Signs posted outdoors Other_____
21. What information is given in notification?
 Site(s) of application Date of application Time(s) of application
 Product(s) applied Health effect(s) of product(s)
 Contact information Information on how to avoid exposure
 Information on how to appeal proposed application
 Other: _____

22. Is the school nurse or health unit staff trained to recognize pesticide poisoning?

- Yes No

23. Does the school's emergency management plan address possible pesticide accidents or exposures due to on-site use or use on adjacent properties?

- Yes No

24. Are you aware of staff bringing in their own pest control products?

- Yes No

Is it against state law to do so?

- Yes No Not sure

25. Does your school district use any non-chemical forms of pest management?

- Yes No

If YES, how long has the school district been using these methods (specify number)?

____Months ____Years

Please describe the non-chemical pest management methods used, including structural, maintenance, and housekeeping practices.

26. What is the approximate annual cost for your school district's pest management activities? \$_____

27. Are you familiar with the term "Integrated Pest Management" (IPM)?

- Yes No

If YES, how would you define IPM? _____

28. Would you like to receive information about a model School IPM Policy?

- Yes No

**For more information or to order
copies of this report contact:**

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