◆ *Recommended Component: Use Integrated Pest Management (IPM) Techniques to Control Pests*

Exposure to pesticides can cause both short-term and long-term health problems. In addition to pesticides being used on school property, some buildings in rural areas are at risk of "pesticide drift," which may lead to pesticide exposure for students and staff. Researchers recommend that school establish IPM programs and take additional preventive measures (reduction in pesticide drift and pesticide spray buffer zones) to protect students and staff.[7]

IPM is an effective and environmentally-sensitive approach to pest management, relying on a combination of common-sense practices. IPM programs use current, comprehensive information on the life cycles of pests and their interactions with the environment. This information is used to manage pest damage by the most economical and safest means. IPM is mandated for use in schools in some states. Be sure to check with your state to determine if IPM is mandated in schools.

Use IPM Techniques checklist

- Implement an IPM program in the school as part of a broader IAQ management program
- Establish policies and/or laws requiring notification of school personnel, students and families before pesticide application
- Raise awareness in school and community about the need for and benefit of IPM practices
- Establish school district IPM policies & track effectiveness
- Work with teacher associations and labor unions/associations to ensure IPM language is in contract.

▶ **Implement an IPM program in the school as part of a broader IAQ management program.** A school IPM program includes seven steps:

- Develop an official IPM policy statement
- Designate pest management roles for occupants, pest management personnel, and key decision-makers
- Set pest management objectives for each site
- Inspect sites and identify and monitor pest populations for potential problems
- Set action thresholds, which are levels of pest populations or environmental conditions that require remedial action
- Apply IPM strategies to control pests
- Evaluate results to determine if pest management objectives are reached and keep written records of all aspects of the program

▶ **Establish policies and/or laws requiring notification of school personnel, students and families before pesticide application.** This would aim to eliminate exposure to pesticides, which is related to a range of health effects and illness.

▶ **Raise awareness in school and community about the need for and benefit of IPM practices.** Key points are:

---

[7] Alarcon, W.A., Calvert, G. Blondell, J. et al. Acute Illnesses Associated with Pesticide Exposure at Schools. Journal of the American Medical Association, July 27, 2005—Vol 294, No. 4, 455-465.

- Controlling pests can help control asthma, as it will decrease triggers such as cockroaches
- Using unnecessary chemicals to control pests increases health risks, particularly in children
- IPM presents alternatives to scheduled spraying of pesticides
- IPM provides a cost-effective strategy to controlling pests

▶ **Establish school district IPM policies & track effectiveness.** See the Sample School Pest Management Policy Statement in the IAQ Coordinator's Guide (p. 44-45) of IAQ Tools for Schools or the Sample Integrated Pest Management School Policy included with this hand-out.

▶ **Work with teacher associations and labor unions/associations to ensure IPM language is in contract.** Faculty and staff, through union/association commitment, can require specific IPM management to ensure that they are not exposed to pests and pesticides.

Detailed information on IPM programs is available from EPA's Office of Pesticide Programs (www.epa.gov/pesticides).

REFERENCE MATERIALS

❖ Sample Integrated Pest Management (IPM) School Policy

Sample School Policy

This model policy was derived from existing elements of policies currently being implemented in the San Francisco Unified, Los Angeles Unified, Oakland Unified, Ventura Unified, and Kentfield school districts.

(School Name) School District Least-Toxic Integrated Pest Management Policy

(adopted __/__/__)

The _____ School District ("District") recognizes that the maintenance of a safe, clean and healthy environment for students and staff is essential to learning. It is the goal of the District to provide for the safest and lowest risk approach to control pest problems, while protecting students, staff, the environment, and District property.

The District recognizes that pesticides pose risks to human health and the environment, with special risks to children. It is recognized that pesticides cause adverse human health effects such as cancer, neurological disruption, birth defects, genetic alteration, reproductive harm, immune system dysfunction, endocrine disruption, and acute poisoning.

The District hereby adopts the Precautionary Principle as the basis for this Least-Toxic Integrated Pest Management (IPM) policy. The Precautionary Principle states that "When an activity raises threats of harm to the environment or human health, precautionary measures should be taken, even if some cause-and-effect relationships are not fully established."

The District hereby adopts a Least-Toxic IPM Policy. This policy shall focus on long-term pest prevention and give non-chemical methods first consideration when selecting appropriate control techniques. The full range of alternatives, including taking no action, will be considered first, with chemical controls used as a last resort, giving preference to chemicals that pose the least hazard to people and the environment and excluding use of the most hazardous pesticides. The District's long-term goal is the eventual elimination of all chemical pest control methods.

A. Elements of the Least-Toxic IPM Policy

1. Establishing pest management area objectives (e.g., kitchens, playgrounds, classrooms).
2. Monitoring to determine pest population levels and identify decisions and practices that could affect pest populations.
3. Setting of injury and action levels to determine when vegetation or a pest population at a specific site cause(s) unacceptable economic or medical damage wherein corrective action should be taken.
4. Eliminating pest habitats to deter pest populations and minimize pest infestations.
5. Utilizing pest prevention methods, such as structural modification, and/or employing progressive non-chemical methods.
6. Employing as a last resort pesticides from the approved list, and, if demonstrated to be necessary, pesticides from the limited use list.

B. Decision-making Process

IPM Committee

An IPM Committee shall be established within 45 days of the passage of this policy to develop implementation guidelines and oversee implementation of this IPM policy. The IPM Committee will be responsible for identifying an approved list of pest control products that may be used in the District, ensuring that banned chemicals (see section C below) are not on the approved list. The Committee will also develop a plan for training (see section D below). The Committee will include at least one representative of each of the following groups: district parents, district students, district teachers, school administrators, district principals, public health representatives, environmental representatives, building and grounds or maintenance staff, and the IPM Coordinator.

IPM Coordinator

The District shall designate an IPM Coordinator. This person shall be responsible for coordinating school district efforts to adopt IPM techniques, communicating goals and guidelines of the IPM Program to staff and students, providing proper training, tracking pesticide use and ensuring that related information is available to the public, and presenting an annual report to the school board evaluating the progress of the IPM Program. The IPM Coordinator is responsible for all purchasing of pesticides to be used on District sites. Only persons specifically authorized by the IPM Coordinator are permitted to bring or apply pesticides on district sites or property; other site employees and non-employees are not permitted to bring or apply pesticides on district property.

C. Product Selection and Use Approval

Products selection will be based on IPM Committee review of the product's contents, precautions, and adverse health effects. The IPM Committee will make product recommendations to the board for final approval.

Products will be divided into three classifications: Approved Use List, Limited Use List and Banned Use List. If the use of a material not on either the Approved Use List or the Limited Use List is deemed necessary, the IPM Coordinator may apply for an emergency exemption. (See Section 4 below.)

1. Approved Use Products List

The IPM Coordinator shall maintain a list of all pesticides that the board has approved for use in the schools, along with any restrictions for such use. This list shall be referred to as the Approved Use Products List. The Approved List shall include, but not be limited to:

- Insecticide or rodenticide baits and traps;
- Caulking agents and crack sealants;
- Borates, silicates, and diatomaceous earth;
- Soap-based products;
- Natural products on the FIFRA's 25(b) list (40 CFR part 152.24(g)(1));
- Natural products on the California Certified Organic Farmers organic list;
- EPA "Generally Recognized as Safe" (GRAS) products pursuant to federal EPA;
- Cryogenics, electronic products, heat, and lights;

SOURCE: The California Public Research Interest Group, www.calpirg.org/healthyschools. Reprinted with permission.

- Biological controls, such as parasites and predators;
- Microbial pesticides;
- Insect growth regulators; and
- Physical barriers.

2. Limited Use Products

A pesticide applicator or district staff may submit a written request to the IPM Committee that a particular pesticide not on the Approved List be approved for use for a specific and limited purpose. Limited Use Products may not be pesticides on the Banned Use List. The request must be reviewed by the IPM Committee, signed by the IPM Coordinator, and approved by the board. The IPM Committee may grant a limited use exemption, not to exceed three months, upon finding that the pesticide applicator has:

- Identified a compelling need to use the pesticide;
- Made a good-faith effort to find alternatives to the particular pesticide;
- Demonstrated that effective, economic alternatives to the particular pesticide do not exist for the particular use; and
- Developed a reasonable plan for investigating alternatives to the pesticide in question during the exemption period.

3. Banned Use Products List

The following high health risk pest management products will not be allowed on the Approved List:

- Pesticides linked to cancer, (US EPA Class A, B and C carcinogens and chemicals known to the state of California to cause cancer under Proposition 65);
- Pesticides that cause birth defects or reproductive or developmental harm (identified by the US EPA or known to the State of California under Proposition 65 as reproductive or developmental toxins);
- Pesticides that interfere with human hormones;
- Pesticides classified as Toxicity Categories I and II by US EPA;
- Carbamate or organophosphate pesticides; and
- Foggers, bombs, fumigants or sprays that contain pesticides identified by the state of California as potentially hazardous to human health (CFR 6198.5).

4. Emergency Exemptions

The IPM Committee may allow trained district staff or a company contracted to provide pest control to the district to apply a pesticide not on the approved or limited use lists if necessary for the protection of public health. Such exemptions shall be granted on a case-by-case basis and shall apply to a specific pest problem for a limited time. The IPM Coordinator may grant emergency exemption only if action is required before the next meeting of the IPM Committee. The Coordinator shall report all such emergency exemptions to the Committee.

D. Training

Training of personnel is critical to the success of an IPM program. Staff, students, pest managers, and the public shall be educated about potential school pest problems, the Least-Toxic IPM Policy, and procedures that will be used to achieve the desired pest management objectives. Within five months of district adoption of this policy, the IPM Committee will agree on a plan to educate and train these constituencies.

E. Contractors

All pest control companies contracted by the District shall follow all provisions of the policy.

F. Notice, Recordkeeping and Reporting

In compliance with and in addition to the notification, posting, and recordkeeping requirements mandated by the Healthy Schools Act, the District will notify parents, employees and students of all pesticide applications using the following guidelines:

1. The district will provide annual notification to parents or guardians in the Registration Packet distributed at the beginning of each school year or upon enrollment. Notification will include:
   a. The IPM Policy statement;
   b. The Approved list of pesticide products;
   c. The availability of IPM activity records in the main office of each school; and
   d. A request that parents or guardians notify the school principal if they believe that their child's health and/or behavior would be influenced by exposure to pesticide products.
2. The Approved List and Banned List will be conspicuously posted annually in the main office of each site and remain posted throughout the year.
3. Applications of products not on the approved list will be preceded by a 72-hour notification of parents or guardians and school staff, except for emergencies as determined by the IPM coordinator under section C(4) above. The IPM committee may require notification of Approved List Products.
4. Notification will include:
   a. The product name and active ingredient;
   b. Target pest;
   c. Date of pesticide use;
   d. Signal word on the label indicating the toxicity category of the pesticide;
   e. Contact for more information; and
   f. Availability of further information at the school's main office.
5. Records of each pest management action shall be available upon request to the public and kept at the school site for a period of at least four years. As required by the Healthy Schools Act, each record shall include the following information:
   a. Name and address of the school site;
   b. Location of the pesticide application;
   c. Target pest;
   d. Date and time the pesticide or management action was completed;
   e. Pesticide product name/manufacturer;
   f. EPA/California registration number from product label;
   g. Total quantity of pesticide product used (in lbs., oz., pt., qt., gals.);
   h. Rate of use per acre;
   i. Dilution;
   j. Size of the area treated;
   k. Application method (i.e., ground, air or other);
   l. Application equipment used;
   m. Re-entry period if applicable; and
   n. Name of the pesticide applicator.
6. Signs shall be conspicuously posted around any area where pesticides not on the Approved List are to be applied in a non-emergency situation at least 72 hours before and 72 hours after application. In the event of an emergency as determined above, posting will go up at the time of the application. Signs shall include the information listed in Section 3 (Banned Use Products) above.

For more information on school pest control that protects children's health, contact the Healthy Schools Campaign at 888-CPR-4880 or http://www.calhealthyschools.org.