

## PESTICIDE USE ON SCHOOL CAMPUSES

### I Pesticide Risks to Children

The use of pesticides and chemicals has become increasingly common in our schools when dealing with such problems as pests and weeds. Many of the pesticides currently in use our society pose risks to human health and the environment, with special risks to children. Some pesticides cause adverse health effects in humans such as cancer, neuralgic disruption, birth defects, genetic alteration, reproductive harm, immune system dysfunction, and acute poisoning. Therefore it is incumbent upon the school district to have a policy and procedure for managing pests on school campuses in a manner, which is safe for humans.

It is the goal of the District to provide the safest and lowest risk approach to controlling pest problems while protecting people, the environment and property.

District personnel have investigated the appropriate use of pesticides/herbicides on school campuses with other school Districts, pesticide experts, toxicology experts and environmental experts. The purpose of such research was to determine how the District should deal with the problem of using pesticides/herbicides on school campuses and maintaining staff and children's health and safety at school. In doing so the District concludes that the best approach to use of pesticides/herbicides on school campuses is through Integrated Pest Management (IPM).

### II What is IPM?

"Integrated Pest Management (IPM) is a pest management program that uses life history information and extensive monitoring to understand a pest and its potential for causing economic damage, or human health concerns. Control is achieved through multiple approaches including prevention, cultural practices, pesticide applications, exclusion, natural enemies, and host resistance. The goal is to achieve long-term suppression of target pests with minimal impact on non-target organisms and the environment.

IPM programs are *proactive* rather than *reactive*. Proactive programs tend to have a much bigger payback and benefit than programs that simply react to events. The primary benefit of an IPM program is the ability to achieve reduced exposure to pests as well as pesticides. IPM programs are also beneficial in achieving long-term pest management and control. Reduced exposures and effective pest control can help reduce liability to the district. A properly implemented IPM program effectively manages pests without compromising.

Selection of control methods should be based on those factors that are most effective but least harmful to human health and the environment. There are usually several ways to manage pests or pest colonies; which is the thrust of IPM. Whenever possible, a combination of several compatible methods should be used which include:

1. **Cultural:** Cultural practices are among the most important methods of controlling weeds and are also used for some insects and other soil-inhabiting pests. Mowing, irrigation, aeration, fertilization, plant selection and rotation are some of the methods used to control pest growth and disrupt conditions suitable for their survival. Building and landscape design are also included in this category. Cultural practices also include food storage practices. Product isolation and inspection can also be used to insure pests are not brought in from an outside source.
2. **Mechanical:** Mechanical control includes exclusion and trapping. Exclusion consists of using barriers to prevent pests from getting into an area. Examples of exclusion include window screens, and sealing or patching cracks, crevices and small openings in buildings. Sticky material can be painted onto tree trunks, posts, wires, and other objects to prevent crawling insects from crossing.

Traps physically catch pests within an area or building. Several types of traps are commonly used; some kill animals that come in contact with them, while others trap animals so they can then be relocated or destroyed. There are also battery-operated traps that are available, which emit a lethal electrical current that can be used for rodent control.

Mechanical control also includes manual hoeing, weeding, mulching, and use of weed trimmers for weed suppression and management.

3. **Biological:** Most pests have natural enemies that control or suppress them effectively. Parasites and predators are commercially available which help control certain pests. Some microorganisms are also commercially available that provide natural control of some pest species. They include: plant pathogens, nematodes, and insects.
4. **Chemical:** Any substance that is applied to plants, soil, water, structures and furnishings to kill, attract, repel, regulate or interrupt growth and mating of pests, or for the regulation of plant growth, is considered a pesticide. Herbicides, insecticides, sanitizers, disinfectants, fungicides, rodenticides, nematocides and miticides are common types of pesticides. All pesticides must be registered with the US Environmental Protection Agency and California Department of Pesticide Regulation.

When used properly, chemical controls are appropriate within the school environment. According to the University of California Statewide IPM Project, "When using an IPM approach, the use of pesticides is generally reserved for situations when decision making guidelines and field collected data indicates that it is economically and environmentally justified."

### III Pest Management Objectives

It is the District's goal to provide the safest and lowest risk approach to control pest problems while protecting people, the environment, and property. The District will implement IPM aiming at long-term prevention of pest problems and will give non-chemical methods first consideration when selecting appropriate pest control techniques.

The District's implementation of Integrated Pest Management has four aspects to it:

- Training
- Decision making
- Implementation and
- Annual reporting to the Board of Education.

#### **IV Definitions:**

Integrated Pest Management: (IPM) is a decision making process by which decisions are made regarding when and under what circumstances pesticides or alternatives to pesticides are used at the various school sites.

IPM Coordinator: The IPM Coordinator shall be a District classified employee appointed by the Superintendent or his designee. The IPM Coordinator shall be trained in the principles of low risk IPM, safe application of pesticides, and alternatives to pesticide use at schools. The IPM Coordinator shall have at least a qualified application certification with the State of California.

The IPM Coordinator shall be responsible for implementation of this Administrative Regulation, as well as the accompanying Board Policy. Such responsibilities shall include, but not be limited to, the following:

1. Making decisions on pesticide use in the District in accordance with the District Approved Pesticide List.
2. Organizing and chairing IPM Committee meetings.
3. Taking notes at IPM Committee meetings and distributing those notes to the people required by this regulation.
4. Maintaining the Approved List for pesticide/herbicides used in the District.
5. Serving as a resource within the District to discuss the District IPM program with employees and the public.
6. Communicating with site administrators regarding their responsibilities in implementing the IPM program.
7. Coordinating training programs for school district staff.
8. Tracking and documenting pesticide/herbicide use at school sites and ensuring that such documentation is available to the public.
9. Coordinating school district efforts to adopt IPM techniques.

10. Presenting an annual report to the School Board evaluating the progress of the IPM program.
11. Seeing to it that this Administrative Regulation is given to all outside individuals or firms which do pesticide/herbicide application at any school site, and seeing to it that both this regulation and the Approved List are made a part of the service contracts with such individuals or firms.
12. Provide existing outside contractors who spray pesticides/herbicides at school sites with the Approved Pesticide/Herbicide List whenever that list is compiled and whenever changes are made to the list.
13. Seeing to it that those persons in charge of designing new school construction, reconstruction, or replacement of facilities in the District, consider alternative designs for fencing, entrances, kitchens and landscaping which would make IPM pest and weed management more feasible.
14. Maintaining current knowledge in the matters of pesticide use at schools and Integrated Pest Management through readings, journals, newsletters, and in-service opportunities.

#### **V Pest Management Committee**

The Pest Management Committee shall also be responsible for the implementation of this administrative regulation and accompanying Board Policy and shall help in determining what pesticides/herbicides shall be on the District Approved Pesticide List. The Committee shall also investigate lowest risk methods of pest control and explore their feasibility for implementation in the District.

The Committee shall be made up of three (3) District employees:

1. The IPM Coordinator
2. A District Food Services employee, and
3. A District employee appointed by the Superintendent or his/her designee.

Two non-district members shall be appointed by the Superintendent or his/her designee. The IPM Coordinator shall be appointed by the Superintendent or his designee. The Child Nutrition Service employee shall be the Director of Child Nutrition Services or his/her designee.

## **VI Approved Pesticide/Herbicide List**

The IPM Coordinator shall maintain a list of all pesticides/herbicides, which have been approved for use in the schools, along with any restrictions for their use. This list shall be referred to as the "Approved Pesticide List". The Approved List shall include, but not be limited to insecticide or rodenticide baits and traps; herbicides; borates, silicates, and diatomaceous earth; soap-based products; products on the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) 25(b) list [40 C.F.R. § 152.25 (g) (1)] or the California Certified Organic Farmers organic list; cryogenics, electronic products, heat, and lights; biological controls such as parasites and predators; microbial pesticides; insect growth regulators and physical barriers.

Exemptions: School district staff may request permission from the Committee to use pesticides/herbicides that are banned under the provisions of this policy or are not on the Approved Pesticide List. Exemptions to the policy may be given for limited uses, for a limited time, based on staff documenting (1) the nature of the pest problem; (2) a description of the alternative methods explored to solve the problem, as well as results with such alternatives and (3) an explanation why the banned product should be used.

## **VII Training**

All members of the Pest Management Committee shall receive training in low risk IPM and alternatives to pesticide use. The IPM Coordinator shall be responsible for organizing and/or providing such training on an annual basis. From time to time experts on pesticides, IPM, and alternatives shall be brought in as consultants to provide the training.

## **VIII Notification**

The Superintendent shall inform all school principals of this Administrative Regulation and the accompanying Board Policy, and inform principals of their responsibilities under the regulations and policy. Such responsibilities will include communicating to all employees at least once a year, orally and through staff handbooks, that no pesticides/herbicides may be used at school sites, except in accordance with this regulation and policy. Staff will not be permitted to do their own pesticide spraying.

## **IX Decision Making**

Authority: The IPM Coordinator shall, in consultation with an IPM Consultant, make all decisions in the District regarding the use of pesticides/herbicides at school sites, including but not limited to identification of pesticides/herbicides, which may or may not be used and how those pesticides may be used, so long as such decisions are in accordance with the law. The IPM Coordinator shall make pesticide/herbicide use decisions consistent with the District Approved List. The IPM Coordinator shall keep a record of all pesticide/herbicide use in the District as set forth below.

The Committee, with direction from the IPM coordinator shall be responsible for compiling the District Approved Pesticide List.

Meeting Notice: Notice of meetings shall be given to Committee members as far in advance as possible. No decisions shall be made by the Committee, unless at least three members are present. The Brown Act shall not apply to Committee Meetings.

Selection of Committee Members/Meetings: Committee members shall be appointed within forty-five (45) calendar days of the passage of this policy. The initial meeting of the Committee shall be attended by all members and convened within thirty (30) calendar days of the Committee members' appointment. The Committee shall meet bimonthly during the first year of its operation. At its sixth bimonthly meeting it shall then establish a regular schedule of future meetings, which may be amended from time to time, based on its experience of when Committee meetings are necessary. In addition, the Committee shall meet whenever a Committee meeting is "required".

Meeting Minutes: The IPM Coordinator, or his designee at each meeting, shall record minutes of all matters discussed at each meeting, as well as all decisions that are reached. These minutes shall be put into typed form by the IPM Coordinator and distributed to each Committee member, each school site Principal, the Superintendent, the Assistant Superintendent of Business Services, the Risk Manager, and Board members. These minutes shall be made available to the public through the Superintendent's Office.

## **X Product and Use Approval**

Effective immediately, the School District shall not use any Toxicity Category I products. The district shall not use any pesticide identified by the State of California known to cause cancer or reproductive harm pursuant to the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop. 65) or any pesticide identified as a known probable or possible carcinogen by the United States Environmental Protection Agency (U.S. E.P. A. carcinogenicity categories A, B, and C), Office of Prevention, Pesticides and Toxic Substances.

The Committee shall investigate, research, and review safer, low-risk alternative methods of pest and weed control for all pesticides/herbicides currently in use, including Round-Up, Tempo. When the Committee approves of the use of a particular product for pest control or weed abatement, the Committee minutes shall so note and such products will be put onto the Committee's Approved Pesticide List.

### **Implementation**

Purchasing The District shall only purchase pesticide/herbicide products, which are on the District Approved Pesticide List unless the exemption process set forth above is followed.

Storage All pesticides/herbicides shall be stored in a manner consistent with manufacturer recommendations and in a location away from children, behind locked doors, where children are not allowed.

SECTION 3000  
BUSINESS AND NONINSTRUCTIONAL OPERATIONS

BOARD POLICY  
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IPM Methodology The following is the preferred order by which the Committee shall implement IPM methodology:

1. Establish area pest management objectives, e.g., kitchens, playgrounds, classrooms, etc.
2. Establish pest action threshold levels.
3. Initiate behavioral modification, including improved sanitation.
4. Utilize pest prevention methods, such as structural modification, and/or employ progressive non-chemical methods and techniques, including pest monitoring and trapping.
5. Employ reduced risk progressive pesticide/herbicide selection as a penultimate resort.
6. Following the exemption process.

Pesticide/herbicide Application: No pesticide/herbicide shall be used at a District school site unless that pesticide is on the Approved Pesticide List. The only exception to this rule is if the exemption process set forth above is followed.

No employee of the District shall apply pesticides/herbicides on any District school campus unless that person has a pesticide applicator license or makes such application under the supervision of a person with a pesticide applicator license.

Notification of Pesticide Use: The District shall notify parents, teachers, and students of all pesticide applications at their relative school sites wherein pesticides not on the Approved Pesticide List will be used. Such notification shall include: (1) A written notice will be mailed to families or delivered to students at least 72 hours prior to any application; and (2) A sign shall be posted around the area where pesticides will be applied at least 72 hours before and after any pesticide application. The sign shall include the name and active ingredient of the pesticide, the target pest, the date of pesticide use, the signal word indicating the toxicity category of the pesticide, and a contact for more information.

Identification and Notification of Sensitive Individuals: The school site will maintain a registry of chemically sensitive students, staff, or others requesting special consideration in the event of the use of pesticides. The site will provide personal notification to these individuals 72 hours prior to any planned pesticide/herbicide use.

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Outside Applicators: If an outside individual or firm is employed to apply pesticides/herbicides at any school site, that outside individual or firm shall be given copies of the Approved List, and shall make any pesticide/herbicide application in accordance with that list and this Administrative Regulation. The IPM Coordinator shall be responsible for seeing to it that this Administrative Regulation is also given to the outside individual or firm, and both this regulation and the Approved List are made a part of the service contract with that individual or firm. Outside applicators shall be knowledgeable in the principles of IPM and willing to work within this Administrative Regulation and the Approved List.

Within thirty days of the enactment of this policy, the IPM Coordinator shall provide any outside contractors who do pesticide/herbicide spraying for the District that such spraying must be done in accordance with this Administrative Regulation. The IPM Coordinator will provide such contractors with the Approved Pesticide/Herbicide List whenever that list is compiled and whenever changes are made to that list. No outside person shall apply pesticides/herbicides on any District school campus unless under the supervision of a person holding a pesticide applicator license from the State of California.

Record keeping of Pesticide/Herbicide Applications: The IPM Coordinator shall keep records of each pesticide/herbicide application. Such records shall be Public Records, available for inspection by the public. Each application record shall include the following information:

1. Pest surveillance data sheets that record the number of pests or other indicators or pest populations that verify the need for treatments.
2. The type and quantity of the pesticide/herbicide used.
3. The site of the pesticide/herbicide application.
4. The date the pesticide/herbicide was used.
5. The name of the pesticide/herbicide applicator.

Material Safety Data Sheets (MSDS) for all materials used at a site will be maintained in the Principal's Office and will be available to staff and public.

Design of New Schools: The IPM Coordinator shall see to it that those persons in charge of designing new school construction, reconstruction or replacement in the District, consider alternative designs for fencing, entrances, kitchens and landscaping, which would make IPM pest and weed management more feasible. .

**XI Annual Reporting to the Board of Education**

The IPM Coordinator shall report to the Board of Education on an annual basis, beginning one year after the first Committee meeting. Such a report shall occur at a regularly scheduled Board Meeting and shall give an overview of the amount and frequency of pesticide/herbicide use at District school sites, as well as successes and any problems the District is having in implementing the IPM policy as well as proposed solutions to any problems.

Legal Reference:

**FOOD AND AGRICULTURE CODE**

11410-15206.6 Pest Control Operations and Agricultural Chemicals

**CALIFORNIA STATE CONSTITUTION**

"Right to Safe Schools" Article 1, Section 29 (c)

**CODE OF REGULATIONS, TITLE 8**

340-340.3 Employer's obligation to provide safety information

1532.1 Construction safety orders, lead standard

**UNITED STATES CODE, TITLE 7**

136 et seq. Insecticide, Fungicide and Rodenticide Act

Management Resources

**CDE PUBLICATIONS**

Indoor Air Quality, A guide for Educators, 1995

**U.S. ENVIRONMENTAL PROTECTION AGENCY**

Pest Control in the School Environment: Adopting Integrated Pest Management, 1993

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