

Integrated Pest Management

I.P.M. BOOKLET

*STAFF, STUDENTS, PARENTS &
RESIDENTS OF OUR COMMUNITY*



**BALDWIN
SCHOOLS**

This booklet was developed by the District's Integrated Pest Management Committee. It is the intention of the District to update and review pesticide usage in schools on a yearly basis. The Committee encourages your input and involvement in reducing the usage of pesticides in our schools.

Please direct all inquiries by telephone to the Director of Facilities & Operations at (516) 377-9312, and in writing to:

Baldwin Union Free School District
Office of Facilities & Operations
960 Hastings Street
Baldwin, New York 11510

Thank you.

I.P.M. Committee Members July 1994

Michael Sheehan, Director of Facilities & Operations – *Chairperson*

Lee Chapman, Ed. D., Assistant Superintendent for Business

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The Committee Members would like to extend their appreciation to:

Dr. Kathy Weiss, Superintendent of Schools

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Gunther Fishgold, N.Y.C.A.P.

INTRODUCTION

This booklet has been developed to encourage and assist the staff, students, parents and residents of our community in reviewing and improving the District's pest management practices. It identifies ways to reduce dependence on pesticides in school buildings and grounds, and discusses alternative methods for managing pests found in schools. This plan is consistent with the District's Chemical Hygiene Plan. This booklet was developed in conjunction with the New York Attorney General's Report, *Pesticides in Schools -Reducing the Risks*, March 1993, the E.P.A.'s Report, *Pest Control in the Schools, Adopting Integrated Pest Management*, August 1993, and the *Pesticide Neighbor Notification Laws of New York #8223*, December 2000.

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What is Integrated Pest Management?

IPM is an effective and environmentally sensitive approach to pest management that relies on a combination of commonsense practices. IPM programs use current, comprehensive information on the life cycles of pests and their interactions with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment. IPM programs take advantage of all pest management options, possibly including, but not limited to, the judicious use of pesticides. Understanding pest needs is essential to implementing IPM effectively. Pests seek habitats that provide basic needs such as air, moisture, food, and shelter. Pest populations can be prevented or controlled by creating inhospitable environments by removing some of the basic elements pests need to survive or by simply blocking their access into buildings. Pests may also be managed by other methods such as traps, vacuums, biological controls, or pesticides. An understanding of what pests need in order to survive is essential before action is taken.

Designating Pest Management Roles

The concepts and methods of IPM were developed originally in agricultural settings. Later, it was found that IPM had great value in urban settings, i.e., schools. The interaction of the people involved in a school's pest management system, and an increased knowledge base, are the key to the success or failure of the program. When the respective roles of all the people in the pest management system are identified and agreed upon, and, when these people communicate well with each other, effective and less expensive protection of the site and the people can be achieved with fewer risks.

In successful urban pest management systems, people function effectively as occupants, pest managers, or decision makers, gaining the information they need, giving the information that others need, cooperating with each other, and meeting their special responsibilities to achieve the unique pest management objectives of the site. These functions and responsibilities are identified below.

Students and Staff- The Occupants

Occupants are concerned about the safety of the pest control methods used, about their effectiveness, and about possible adverse health effects. School staff, students, and their parents will receive information addressing these concerns and their roles in the school's pest management system. The two most important responsibilities of the students and staff are sanitation and communication. Much of the prevention and reduction of pest infestation at the school site depends on whether or not students and staff clean up food leftovers, food in lockers, gum under desks, paper clutter, etc. In addition, because people at the school site may observe the presence of pests, they should report any evidence of pest activity to their Principal or Head Custodian. Other actions may be required of students and staff, or undertaken by them, depending on their interest in the site and the pest management system.' The more occupants who "buy in" to this, the better the pest management system will work.

Parents' Special Roles

Parents have the most responsibility for their children, and they are their children's natural advocates. Parents can assist greatly in the transition to an IPM program.

Parents' first school pest management responsibility is to learn about IPM practices and follow them at home so that pests are not carried to school in notebooks, lunch boxes, clothing, or in children's hair. Second, parents should be aware of the current pest management practices in their children's schools. The schools will welcome questions by the parents and encourage the parents to seek information. Visible interest and concern on the parents' part is a valuable resource and stimulus for the implementation of a school IPM program. Parents may express their views to the School Superintendent, School Board, School District Management, and the School Parent Teacher Associations (PTA). Parents may also participate on the District's IPM Advisory Committees.

Applying IPM Strategies

Pest prevention measures can be incorporated into existing structures. Such preventive measures reduce the need for pesticide applications and include sanitation and structural repair, employing physical, and mechanical controls such as screens, traps, weeders, air doors, etc. Specific IPM strategies for specific school sites are provided below. (Note: Every school will experience slightly different combination of pests).

IPM Strategies for Indoor Sites

Typical Pests: Mice, rats, cockroaches, ants, flies, wasps, hornets, yellow jackets, spiders, microorganisms, stinging insects, termites, Bedbugs, and other wood-destroying insects. Although beneficial as predators, wasps, hornets, yellow jackets, and spiders can pose public health emergencies, and be a disturbance to building occupants.

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 base of doors providing no greater than 1/4 inch of space from floor.
- Caulk and seal openings in walls.
- Install or repair screens.

- Install air curtains.
- Keep vegetation, shrubs, and wood mulch at least 1 foot away from structures.

Classrooms and Offices

(classrooms, laboratories, administrative offices, auditoriums, gymnasiums, and hallways):

- Allow food and beverages only in designated areas.
- If indoor plants are present, keep them healthy. When small insect infestations appear, remove them manually.
- Keep areas as dry as possible by removing standing water and water damaged or wet materials.
- Store animal foods in tightly sealed containers and regularly clean cages. In all areas, remove dust and debris.
- Routinely clean lockers and desks.
- Frequently vacuum carpeted areas.
- If students get head lice, consult with your local health department and have their parents contact a physician. Discourage students from exchanging hats or caps at school.

Food Preparation and Serving Areas

(dining room, main kitchen, teachers' lounge, home economics kitchen, snack area, vending machines and food storage rooms):

- Store food and waste in containers that are inaccessible to pests. Containers must have tight lids and be made of plastic, glass, or metal. Waste should be removed at the end of each day.
- Place screens on vents, windows, and floor drains to prevent cockroaches and other pests from using unscreened ducts or vents as pathways.
- Eliminate pest harborage areas and create inhospitable living conditions for pests by reducing availability of food and water- remove food debris, sweep up all crumbs, fix dripping faucets and leaks, and dry out wet areas.

- Improve cleaning practices, including promptly cleaning food preparation equipment after use and removing grease accumulation from vents, ovens, and stoves. Use caulk or paint to seal cracks and crevices.
- Capture rodents by using mechanical or glue traps. (Note: Place traps in areas inaccessible to children. Mechanical traps, including glue boards used in rodent control, must be checked daily. Dispose of killed or trapped rodents within 24 hours.) Follow Hantavirus training guidelines.

Rooms and Areas with Extensive Plumbing

(bathrooms, rooms with sinks, locker rooms, dishwasher rooms, home economics classrooms, and science laboratories):

- Promptly repair leaks and correct other plumbing problems to deny pests access to water.
- Routinely clean floor drains, strainers, and grates. Seal pipe chases.
- Keep areas dry. Avoid conditions that allow formation of condensation. Areas that never dry out are conducive to molds and fungi. Increasing ventilation may be necessary.
- Store paper products or cardboard boxes away from moist area and direct contact with the floor or the walls. This practice also allows for ease in inspection.

Maintenance Areas

(boiler room, mechanical room, janitorial-housekeeping areas, and pipe chases):

- After use, promptly clean mops and mop buckets; dry mop buckets and hang mops vertically on rack above door drain.
- Allow eating only in designated eating areas.
- Clean trashcans regularly, use plastic liners in trashcans, and use secure lids.
- Keep areas clean and as dry as possible, and remove debris.

IPM Strategies for Outdoor Sites

Typical Pests: Mice and rats. Turf pests-broad-leaf and grassy weeds, insects such as beetle grubs or sod webworms, diseases such as brown patch, and vertebrates such as moles. Ornamental plant pests, plant diseases, and insects such as thrips, aphids, Japanese beetles, and bag worms.

Playgrounds, Parking Lots, Athletic Fields, Loading Docks, and Refuse Dumpsters

- Regularly clean trash containers and gutters and remove all waste, especially food and paper debris.
- Secure lids on trash containers.
- Repair cracks in pavement and sidewalks.
- Provide adequate drainage away from the structure and on the grounds.

(lawns, athletic fields, and playgrounds):

- Maintain healthy turf by selecting a mixture of turf types (certified seed, sod, or plugs) best adapted for the area.
- Raise mowing height for turf to enhance its competition with weeds; adjust cutting height of mower, depending on the grass type; sharpen mower blades; and vary mowing patterns to help reduce soil compaction.
- Water turf infrequently but sufficiently during early morning hours to let turf dry out before nightfall; let soil dry slightly between watering's.
- Provide good drainage, and periodically scout turf for evidence of pests or diseases.
- Allow grass clippings to remain in the turf (use a mulching mower or mow often) or compost with other organic material.
- Use a de-thatcher to remove thatch. Do this in early fall or early spring when the lawns can recover and when over seeding operations are likely to be more successful.
- Time fertilizer application appropriately, because excessive fertilizer can cause additional problems, including weed and disease outbreaks. Apply lime if necessary. Use aeration to place soil on top of thatch so that microbes from soil can decompose thatch.
- Seed over existing turf in fall or early spring.

Ornamental Shrubs and Trees

- Apply organic fertilizer and nutrients to annuals and perennials during active growth and to shrubs and trees during dormant season or early in the growing season.
- When using a fertilizer, use the correct one at the suitable time, water properly, and reduce compaction.
- Prune branches to improve plants and prevent access by pests to structures.
- Use the appropriate pest-resistant native variety, and properly prune for growth and structure.
- Correctly identify the pest in question. When in doubt, send several specimens to your local Cooperative Extension Service. Once the pest is identified, recommendations can be made.
- Select replacement plant material from among the many disease-resistant types being developed by plant breeders throughout the country.
- Remove susceptible plants if a plant disease recurs and requires too many resources, such as time, energy personnel, or money. Some ornamental plants, trees, and turf are so susceptible to plant diseases that efforts to keep them healthy may be futile.

Applying Pesticides Tudiciously

Many different kinds of pesticides are currently available for use against exterior and structural pests. An appropriate application uses the least toxic and most effective and efficient technique and material. Due to their potentially toxic nature, these materials must be applied by a New York State Certified Applicator in a manner to ensure maximum efficiency, with minimal hazard. Pesticides will be applied only when occupants are not present in areas where they may be exposed to materials applied. Although EPA registers pesticides for use within the United States, the fact that a particular product is registered does not mean that it is "safe" under all conditions of use. All pesticides used in the U.S. must be EPA registered, and the registration number must be listed on the label. Read and follow the pesticide label directions, know how to apply and handle these chemicals, and try to minimize the exposure to children, adults, and other non-target species. The following general recommendations should minimize exposure to people and other non-target species when the application of pesticides is being considered:

- Read and follow all label instructions.

- Choose a pesticide that is labeled for the specific site, intended for the pest you are trying to control, and as target specific as possible, rather than broad spectrum.
- Use a spot-treatment method of application when pesticide treatments are required. Treat only the obviously infested plants in an area. This procedure helps conserve predators and parasites needed to reduce future pest populations and increase the time between pest outbreaks.
- Limit the use of sprays, foggers, or volatile formulations. Instead, use bait and crack and crevice application when possible. Look for crack and crevice label instructions on how to apply the pesticide. These treatments maximize the exposure of the pest to the pesticide while minimizing pesticide exposure for the occupants.
- Place all pesticides either in locations not accessible to children and non-target species, or in tamper-resistant bait boxes. Outdoors, place bait inside the entrance of an active rodent burrow, and then collapse the burrow entrance over the bait to prevent non-target species' access. Securely lock or fasten shut the lids of all bait boxes. Place bait in the baffle-protected feeding chamber of the box. Never place bait in the runway of the box.
- Apply only when occupants are not present or in areas where they will not be exposed to the material applied. Note any re-entry time limits listed on the label, and be aware that some residues can remain long after application.
- Use proper protective clothing or equipment when applying pesticides.
- Properly ventilate areas after pesticide application.
- Notify students, staff, and parents of upcoming pesticide application as part of the school pest management policy. Pay particular attention to those individuals that may be at higher risk.
- Keep copies of current pesticide labels, consumer information sheets, and Material Safety Data Sheets (MSDS) easily accessible.

Posting and Notification

When good IPM practices are followed, concerns raised by notification and posting activities may be minimized. Notification will be accomplished by posting notices in the main office(s) as noted, and at the place of occurrence.

INTEGRATED PEST MANAGEMENT

The Board of Education recognizes that nothing is of more importance than the safety of students, staff and residents who utilize the facilities and grounds of the school district. To this end, the Board authorizes the prudent and limited use of pesticides and insecticides necessary to ensure environmentally safe buildings and grounds.

The district shall:

- a) Implement an integrated pest management program as recommended by the New York State Attorney General's Office (Pesticides in Schools; Reducing the Risks dated 2/94).
- b) Comply with New York State Pesticide Neighbor Notification Law, Education Law 409-h.
- c) Use the least toxic and most effective pesticide available, in the judgment of the District's Health and Safety Officer.
- d) Post notices before pesticides are applied.
- e) Post warning signs indicating that pesticides will be applied around specific areas.
- f) Use only New York State Certified Pesticide Applicators.
- g) Maintain detailed records about pesticides which have been applied.
- h) Prohibit the use of pesticides for aesthetic purposes, such as lawn care, that contain known or probable carcinogens.
- i) Incorporate into the district's emergency management plan actions to be taken in the event of an accidental spill or over-application of pesticides/insecticides.

Reference

N.Y.S. Attorney General Publication

E.P.A. Publication

N.Y.S. Education Department Neighbor Notification Law

Education Law 409-h

Approved

Board of Education

August 10, 1994

Revised October 10, 2001

INTEGRATED PEST MANAGEMENT

The following steps are examples of practices that will be followed to reduce exposure to chemicals:

- Observation traps will be regularly used in problem areas to monitor the situation.
- Elimination of routine spraying/fogging.
- Selection of the least toxic chemicals for applications.
- The use of New York State certified contractors.
- Elimination of fogging and spraying for head lice.
- Implementation of engineering controls to prevent pests from entering the building.
- Removal of all spray insecticides/pesticides from the building.

I. Notification Procedures

- A. Staff, students, parents/guardians, and residents of the community will be notified annually in writing of the district's policy:

"The Baldwin Union Free School District has adopted an Integrated Pest Management (IPM) Program in accordance with the New York State Education Department's Recommendation. This program dictates that the least toxic pesticide will be used only when absolutely necessary. Any student, parent, or staff member may register to receive written notification 48 hours prior to a regulated pesticide application. Individuals may request their name be added to the school registry at any time during the school year.

All interested parties should contact the District's Health and Safety Officer at 516-377-9312, Monday through Friday, 8:00 am to 4:00 pm.

This notice will appear in the District's yearly calendar, which is mailed to every District resident, and provided to every staff member and new registrant.

- B. Building occupants will be notified by the following means:

"Pesticide Application Notice"- This notice will, along with the Material Safety Data Sheet and product label, be posted in the main offices at least 24 hours before any application and remain posted for 48 hours after the application.

"Warning Pesticide Application" -This notice will be posted in the immediate area of the application and will remain posted for a minimum of 24 hours.

"48-Hour Prior Notification"- Any staff member, student, or parent/guardian may request 48-hour prior notification before a regulated pesticide/insecticide is applied. Such persons must complete a 48-hour Notice Request Form and return it to the District's Health and Safety Officer. The District will notify all parties on the Pesticide Registry within 48 hours.

"Pesticide Neighbor Notification" -The District will notify all staff members and parents /guardians three times per year of all regulated insecticides/pesticides applied using a Pesticide Application Summary Report. This notice will be sent within two days after the end of winter recess, spring recess, and the school year. If no pesticides were applied, the notice will be sent. Staff will receive such notice via in-district mail. At the elementary level, the notice will be sent home to parents/guardians with the children. At the secondary level, the notice will be mailed home to parents/guardians.

II. Procedures for the Use of Pesticides/Insecticides

An IPM application will be considered only when:

- A Staff has notified building of a possible problem.
- B. Facilities staff has checked the problem area and determined remedial action is necessary. In many cases, eliminating the source and entrance route may eliminate the problem.
- C. If the need for a New York State Certified Applicator exists, he/she will check the area and recommend appropriate action to the district.
- D. These recommendations will be reviewed by the Director of Facilities and Operations and the building principal and will only take place when they agree no other alternatives are available. The alternate for the Director of Facilities and Operations will be the Supervisor of Operations and for the Principal will be the Head Custodian. The second alternate for both parties will be the Deputy Superintendent for Administration.

In cases where an agreement cannot be reached, the District's Health and Safety Officer will be consulted.

- E. All posting notice procedures have been followed.

- F. Applications will take place during non-school hours, preferably Friday evenings.
- G. In the event of unusual or emergency conditions, it may be necessary to take immediate corrective action to ensure the safety of building occupants. In these cases, the Safety Officer or his/her designee will be consulted for the course of action to be taken.

III. Record Keeping

The Director of Facilities and Operations will maintain detailed records of any pesticide/insecticide applications. This information will include location, date, chemical used applicator's name and license number, M.S.D.S. and posting notification.

The Material Safety Data Sheet (M.S.D.S.) and/or product label will contain the following:

- The material's physical properties or fast acting health effects that make it dangerous to handle.
- The level of protective gear recommended.
- The first aid treatment to be provided if you are exposed to a hazard.
- The pre-planning necessary for handling spills, fires, and day-to-day operations.
- Procedures for responding to an accident.

The District will require the IPM contractor to supply monthly logs of all regulated pesticides/insecticides that are applied.

Reference

N.Y.S. Attorney General Publication

E.P.A. Publication

N.Y.S. Education Department Neighbor Notification Law

Education Law 409-h

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