

# Integrated Pest Management Plan for Bates School

## Wellesley, Massachusetts

(#1 of 8 Wellesley Public Schools)

12/19/2001

### **OUTDOORS**

#### **1) General School Information**

Bates School  
116 Elmood Rd  
Wellesley, MA 02482  
781-446-6260

Prepared by Sarah Little  
Dec 19, 2001

#### **2) IPM Coordinator**

Dana Cotto  
Director of Buildings and Grounds (of Schools)  
781-446-6210 x4517  
[dana\\_cotto@wellesley.mec.edu](mailto:dana_cotto@wellesley.mec.edu)

#### **3) School IPM Committee**

Amber Bock  
Principal  
Ted McGlone  
Head Custodian  
Anne Prinn  
Director, Nursing Services (of Schools)  
Lenny Izzo  
Environmental Health Specialist (Health Dept)  
Janet Bowser  
Director, Wellesley Natural Resources Commission  
Judy Curby  
Assistant Director, Department of Public Works

#### **4) School IPM Policy**

The School Board, the Health Department, the Department of Public Works, and the Natural Resource Commission recognize the potentially serious risks inherent in using chemical pesticides in the school environment. It therefore supports the implementation of a comprehensive Integrated Pest Management (IPM) program for all school buildings and grounds with the goal of controlling pests while preventing exposure of children to harmful pesticides.

Integrated Pest Management (IPM) will be defined as the coordinated use of physical, biological and cultural controls, and, in the face of a public health threat or substantial property damage, the use of least-toxic pest control chemicals. The goal of using IPM in Wellesley is to control pests without exposing people, property and the environment to harmful chemicals.

Integrated Pest Management will be understood to involve the monitoring of pest populations, establishment of tolerance thresholds, modifications of habitats (to eliminate sources of food, water and harborage and entry), utilization of least-toxic controls, keeping of records and evaluation of performance on an ongoing basis.

A pesticide will be defined as any insecticide, rodenticide, herbicide, acaricide, algicide, slimicide, disinfectant or other chemical utilized to kill or repel a pest.

Any use of chemicals will be in compliance with Act Protecting Children and Families From Harmful Pesticides (Chapter 85 of the 2000 Massachusetts Acts) (hereafter referred to as the Act), which restricts specific pesticide use on school property; requires that schools, daycare centers and school age child care programs notify employees, pupils or supervised children and their parents or guardians of pesticide application; requires maintaining detailed records of all pest control procedures; and prohibits the use of any chemical pesticide for purely aesthetic purposes.

Further, all necessary chemical applications shall be made such that no child shall be exposed to pesticides except as may be required in life-threatening situations.

Pursuant to state law, no pesticide may be applied except by a licensed pesticide applicator.

### **5) School Outdoor Pest Problems Description**

*Grounds and Playing fields, Poison Ivy, and Wasps, Hornets, Bees*

This program is developed for pests present in the years 1998-2000, and may be updated and modified as new pests, tolerance levels, or methodologies appear.

#### **Grounds and Playing fields**

The playing fields are currently managed with applications of lime and fertilizer only. Grubs are addressed by replacing turf and maintaining proper pH. Going forward we will use the Town's new policy as follows:

School grounds will be covered by the Town of Wellesley's Organic Turf and Landscape Management Policy, which prohibits the use of any chemical pesticides on Town-owned land, except in emergency situations with authorization from the Health Department. If EPA-registered pesticides are to be used (including biological controls), application will be made in accordance with the state regulations for schools, including notification of IPM committee, signage, and full parental notification.

## **Poison Ivy**

Poison Ivy is currently managed by hand pulling. Going forward we will use the following IPM protocol:

### Tolerance level

Poison ivy is indigenous to our region, is able to grow in many types of soil conditions, is useful to birds and in fact is spread by birds carrying seeds. It can never be eradicated completely or permanently, but it can be controlled. On school grounds, poison ivy needs to be controlled if it is along school paths, on the playing fields or playgrounds, or coming through fences demarking playing fields or playgrounds. Poison ivy in the woods on school grounds need not be controlled and it is impractical to control.

### *Control*

Children should be instructed to recognize poison ivy and avoid touching it. The use of chemical defoliant for removal of poison ivy will be avoided in favor of mechanical removal or mulching of the affected area. Small stands can be pulled by hand by using double layers of plastic bags or rubber gloves, a Tyvek suit, and plastic bag covered shoes. Plants should be put in a large plastic bag and disposed of with the trash. The lotion product Tecnu can be applied to any exposed skin before or after exposure to remove the offending oils from skin or clothing. Large stands should be prevented from developing. To treat a large stand, mulch with cardboard and wood chips. Large vines climbing trees can be controlled by cutting the vine at ground level. Chemicals may be used to paint the stump to prevent further sprouting, or in other extreme cases, but must be used in compliance with the Plan, including full parental notification and pre-notification of IPM committee.

## **Wasps, hornets and bees**

Wasps have been managed with Vikor Wasp and Hornet Tetramethrin/permethrin 0.1/0.3% aerosol. Going forward we will use the following IPM protocol:

### Tolerance level

There are many kinds of wasps, hornets and bees. Most of them are beneficial to us, and not all of them sting. Most who do sting will not do so unless they are handled, their nest is disturbed, or their nest is approached too closely. They can be tolerated outdoors unless their nest is readily accessible to children playing in appropriate places such as the playground or paths leading to schools. A nest near the school which is out of reach of children needs to be assessed on a case by case basis. If a child in the school is allergic to bee stings, the nest may be removed. If the nest is giving rise to unusually high numbers of insects on the playground, the nest may be removed. Bear in mind that the insects will be seeking food, not children, and if there is no food source on the playground, a nest out of reach of children may pose little hazard.

### *Control*

The type of wasp, hornet or bee should be identified to determine hazard level. Children should be instructed to move slowly around the insects and not hit them or their nest. The nests are easier to control if discovered early in the spring or summer, when their populations are low. A ground nest can be removed by pouring honey down it in the evening, and waiting for a skunk to dig it out, one or two nights (it's true). An accessible nest may be controlled by bagging it after dark and disposing of it after the insects have died.

Most problems with wasps and yellow jackets will occur in the fall. Some species feed on sugar, meat, or other forms of protein. Wasps will be attracted to garbage cans, pop dispensers, dumpsters and other sources of food. If food is always present the wasps or yellow jackets will continue to come back to the site. In bad years it will be very difficult for children to eat or drink outdoors during the day without attracting yellow jacket workers.

The biggest general threat is if a nest is disturbed because bees and wasps become very defensive. If the nest is in an area of people traffic and is in the ground, wall voids or on low-hanging branches it will need treatment. Bumble bee nests are often in-ground and can be treated like a wasp nest. Bumble bee, yellow jackets and paper wasps will freeze out by late October or early November. These species do not utilize the same nest next spring.

Look for nesting sites under bushes, in old rodent burrows, in hollow trees and other void spaces. Treating nests is more effective than treating individuals. Honey bees will be active in spring and will be in play areas if flowering plants and weeds are present. They are mild mannered and usually only pose a threat if handled. Do not allow children to walk bare footed in these areas. If honeybees are nesting in a building, the comb and honey will need to be cleaned out after the bees have been removed.

- All trash containers need tight-fitting lids or spring loaded doors. Trash should be emptied frequently.
- Dumpsters should be washed on a regular basis to eliminate spilled food and liquids.
- Seal entrances in walls to prevent void-nesting species.
- Individual wasps can be killed with a fly swatter or use a small butterfly net. Captured individuals can be released outdoors or crushed.
- Do not seal the nest entrance of an active nest until the nest is destroyed.
- Foam sprays (Victor brand) can be used on nests. [*Victor Poison-Free® Wasp & Hornet Killer*. Kills wasps, hornets, and yellow jackets in seconds. 15 foot spray does One application lasts 4 weeks. Nozzle sprays easily in corners and tight spaces. Contains: Mint Oil, Sodium Lauryl Sulfate, Water, and Carbon Dioxide.]
- [Nests can be vacuumed. This should only be done by people with experience.]

If the above methods prove ineffective and synthetic chemicals may be used to kill a nest, they must be used in the evening when the insects are in their nest and **when no children are present**. The must be applied in accordance with the Act, including parental notification. All areas accessible to children which have been treated with pesticides must

be washed with soap and water after the nest has been killed and before children are allowed in the treated area.

- Nests in walls may be treated with a dust formulation such as bendiocarb (Ficam), deltamethrin, pyrethrin, or cyfluthrin. Treat in early evening. The nest should be controlled by mid-day.
- Nests high in trees should not be disturbed and do not need to be treated.
- For above ground nests use aerosol sprays containing Pyrethrum or synthetic pyrethroids (allethrin, resmethrin, permethrin).

## **6) School IPM Information Flow and Training**

For pest problems, a school principal will notify the IPM Coordinator of a pest issue. The Coordinator will call in the pest control company (presently Waltham Chemical) to assess the issue.

For turf maintenance, the Town's Department of Public Works will conduct maintenance in accordance with the Town's Organic Turf Policy without using any EPA-registered chemical pesticides.

If pesticides are proposed in either case, the entire Committee shall be notified of, and allowed to comment on, any proposed pesticide use before application, except in emergency situations, in which case a Health Department representative shall be notified beforehand, and the rest of the committee afterwards. A record of the actions taken and outcomes will be maintained in each instance.

The school nurse, PTO safety officer of each school, and the school PTO president will be notified of any decisions made by the IPM Committee, and will also receive prompt notification of any pesticide applications in the school, including those not requiring parental notification under the Act.

The Department of Public Works groundskeepers will be invited to attend training on organic and non-toxic turf maintenance annually. School custodians and staff will be invited to attend a yearly training session on building IPM given by the school's pest control company or other IPM professional.

## **7) School Chemical Pesticide Applied**

Vikor Wasp and Hornet Tetramethrin/permethrin 0.1/0.3% aerosol has been used.

Wasps etc. are the only anticipated emergency problem. We plan to *Victor Poison-Free® Wasp & Hornet Killer*. Kills wasps, hornets, and yellow jackets in seconds. 15 foot spray. One application lasts 4 weeks. Nozzle sprays easily in corners and tight spaces. Contains: Mint Oil, Sodium Lauryl Sulfate, Water, and Carbon Dioxide. This product is not EPA registered.

Pesticide applicators:

Waltham Chemical, Dick Berman 781 893-1810  
817 Moody St  
Waltham, MA 02453

Department of Public Works, Ron Despris. 781 235-7600 x331  
455 Worcester St.  
Wellesley, MA 02481

### **8) School non-chemical actions**

There are no pests currently being treated. The most common problems are wasps, poison ivy and grubs. Wasps are tolerated and trash removed from outside. Poison ivy is hand pulled. Grubs are handled by replacing turf and maintaining pH. Biological controls may be tried in the future. We plan to follow the IPM protocol described in section 5) above to manage these pests as they arise.

### **9) School IPM Program Evaluation**

The IPM Committee will meet twice per year to review the pest issues, evaluate the IPM actions being taken, to identify training opportunities, and to recommend improvements and update the IPM plan.

### **10) School IPM Plan Location**

A copy of the IPM Plan, standard notification and record keeping data sheets, and all records relating to pest issues and pest control activities will be kept on file in the school office.

## **References**

Wisconsin School IPM program available on the web at:  
<http://ipcm.wisc.edu/programs/school/table.htm>

EPA IPM for Schools: A How-to Manual  
<http://www.epa.gov/pesticides/ipm>

IPM Integrated Pest Management Kit for Building Managers, Mass Dept. of Food and  
Agriculture Pesticide Bureau  
[http://www.massdfa.org/pesticides/publications/IPM\\_kit\\_for\\_bldg\\_mgrs.pdf](http://www.massdfa.org/pesticides/publications/IPM_kit_for_bldg_mgrs.pdf)

University of Massachusetts Extension, School IPM program  
<http://www.umass.edu/umext/schoolipm>

**TOWN OF SHERBORN**  
**INDOOR INTEGRATED PEST MANAGEMENT PLAN**  
**FOR**  
**PINE HILL ELEMENTARY SCHOOL**

<b>1). General School Information</b>	
<b>School Name:</b>	Pine Hill Elementary School
<b>Address:</b>	Pine Hill Lane
<b>City/Town/Zip Code:</b>	Sherborn, Massachusetts 01770
<b>Telephone Number:</b>	508-655-0630
<b>E-Mail Address:</b>	
<b>Plan Prepared By:</b>	Ralph Kelley, Supervisor of Plants and Facilities Daryl Beardsley, Sherborn Groundwater Protection Committee Blair Van Brunt, Sherborn Groundwater Protection Committee
<b>Submittal Date:</b>	December 31, 2001

<b>2). School IPM Supervisor</b>	
<b>Name:</b>	Ralph Kelley
<b>Title:</b>	Supervisor of Plants and Facilities, Dover-Sherborn Schools
<b>Telephone Number:</b>	508-785-0036
<b>E-Mail Address:</b>	

<b>3). School IPM Committee or Team</b>	
<b>Name:</b>	Ralph Kelley
<b>Title:</b>	Supervisor of Plants and Facilities, Dover-Sherborn Schools
<b>Name:</b>	Karl Heinz
<b>Title:</b>	Land Management Supervisor, Sherborn Community Maintenance and Development
<b>Name:</b>	Blair Van Brunt
<b>Title:</b>	Sherborn Groundwater Protection Committee Member
<b>Name:</b>	Daryl Beardsley
<b>Title:</b>	Sherborn Groundwater Protection Committee Member

## 4). School IPM Policy

### SUMMARY

The Pine Hill School desires to prevent unnecessary exposure to children and employees to chemical pesticides and avoid the need to rely on chemical pesticides when managing pests. Selection of treatment option or corrective actions will give priority to non-chemical actions whenever possible to provide the desired control of pests. Education of staff, students, employees, and parents about IPM will be included to achieve desired objectives. When it is determined that pesticides cannot be avoided, only those allowed by the Children's and Families Protection Act will be used. Furthermore, only certified and/or licensed individuals will be able to apply pesticides. Our policy prohibits the use of any pesticide by unlicensed staff. It will be this school's policy to make the appropriate notification and posting as well as keep records of all pesticide use. A copy of the school IPM plan will be maintained in the principal's office and be available upon request.

### SHERBORN TOWN POLICY

*The following is excerpted from the Pest Management Policy developed by the Sherborn Groundwater Protection Committee and approved by the Sherborn Board of Selectmen following review and comment by other boards and committees in the Town of Sherborn. That policy applies not only to the schools in Sherborn but also to other public areas in the town used by children and families.*

### **POLICY: PRINCIPLES AND GOALS FOR PEST MANAGEMENT PLANNING IN THE TOWN OF SHERBORN, MASSACHUSETTS**

*Integrated pest management (IPM) is a comprehensive strategy for pest control whose major objective is to achieve desired levels of pest control in an environmentally responsible manner by combining multiple pest control measures and/or using alternative (e.g., organic) measures to eliminate (or at least reduce) the need for reliance on chemical pesticides.*

*This policy makes explicit the Town's desire to protect all citizenry and recognizes that extra precautions must be taken:*

- *when dealing with the uncertainties of health and environmental impacts of some pest management practices; and*



- *to protect all particularly sensitive populations such as the elderly, those already battling disease, and children (for whom the time horizon for exposure is longer and more complex).*

#### 4.1 Purpose

The purpose of the Town of Sherborn's Pest Management Plan is to direct activities pertaining to pest management as concerns the enjoyment and use of public grounds and structures for functional, recreational (both active and passive) and ornamental purposes. Furthermore, this policy recognizes the need to balance pest management objectives with maximization of the health, safety, quality, and sustainability of public landscapes and structures.

This policy establishes principles and goals in the area of pest management, particularly for pesticide use issues, to help ensure the safe management and use of town playing fields and other public spaces into the future. Procedures and guidelines are documented in a separate section –the “living document” for pest management– in accordance with the policy's directives, specifying actions to take in accordance with changing conditions, technologies, information, understanding and abilities. Periodic review of those procedures and guidelines is necessary to maintain an up-to-date, effective and robust pest management program.

#### 4.2 Policy Goals

The Town of Sherborn commits to pursuing environmentally sound and safe pest management practices, incorporating them into all landscape and building maintenance and construction and thereby:

- Providing healthy, high-quality, and supportable parks, open spaces and structures.
- Preventing the contamination of soil, air, and water and thus protecting people, animals, plants and insects from toxic exposures.
- Providing a model of responsible stewardship of environmental and community resources.

To attain these goals, the Town has determined that the organic pest management (OPM) aspect of IPM is the most appropriate to implement. OPM recognizes that pesticides inherently carry risks (of varying degrees, but especially for synthetic chemicals) to human health and/or the environment and thus should be avoided.

#### 4.3 Definitions

**Pests:** Pests are undesirable weeds, insects, and fungi. They may be undesirable because they create hygiene and safety problems, cause damage to landscapes or structures, and/or are a nuisance. Common examples in the Sherborn landscape are grubs, bluegrass billbugs, crabgrass, knotwood, and a variety of plant diseases. Common pests in buildings include bees, wasps, rats, mice, ants, lice, cockroaches, termites, molds, mildew and various fungi.

**Insecticides, Herbicides, Fungicides:** These types of pesticides are typically thought of as the chemicals used to kill insects, plants and fungi, respectively. It is possible that other agents or activities could be

construed to fall into these categories, such as introduced predators or chemicals used to change environmental factors that support pests (e.g., soil pH altering).

***Integrated Pest Management (IPM):*** IPM is an approach to landscape management designed to prevent and control undesirable weeds, insects and fungi (i.e., pests). IPM relies on the use of site-specific information about environmental conditions and the dynamics of human characteristics and activities, plus pest biology and behavior, to prevent, resist and control pests that interfere with the purpose and use of a specific site. When a certain pest has exceeded a predetermined threshold at a particular site, all appropriate pest control strategies are used, including modifying the habitat, changing maintenance practices, and modifying user behavior. If all else fails, lower risk pesticides will be used only when:

- warranted by an emergency situation,
- part of an IPM program in which all options are considered, and
- within specific guidelines for selection and use.

The U.S. Environmental Protection Agency's definition of IPM is: "IPM programs use current comprehensive information on 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, 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."

***Organic Pest Management (OPM):*** OPM is an ecological pest management system that promotes natural biological cycles, soil activity, biodiversity, and human health. It relies on management practices that restore, maintain and enhance ecosystem harmony rather than using synthetic, polluting or toxic inputs. The principal guidelines for OPM are to use materials and practices that strengthen the balance of natural systems, integrating human-made elements into an ecological whole. OPM seeks to optimize the health of our community including its people, soils, water resources, flora and fauna.

Furthermore, OPM is a management strategy that focuses on long-term prevention or suppression of pest problems by systematically eliminating life support systems or conditions required by unwanted pests in indoor or outdoor environments. It incorporates regular maintenance and cultural practices that promote the health of the plant in the case of outdoor management. OPM dictates that synthetic chemical controls be used only in emergency situations.

***Pest Management Procedures:*** Whereas this policy establishes the framework within which pest management is to be pursued by the town, Pest Management Procedures (such as in the Pine Hill School's IPM Plan) provide written details on the current methods to be used to manage pests in a manner consistent with the policy. Current methods are those that:

- reflect the best, latest information available, and
- build upon accumulated experience.

In order to keep abreast of changes over time, both in town conditions and technological/scientific advances in the field of pest management, a procedure must be a "living document". As a living document, a procedure may be ever-changing (i.e., frequent updates, corrections, modifications, additions) to reflect the status of our understanding of OPM and our best ability to implement it.

#### 4.4 Discussion Of Need For A Pest Management Plan

Insects, weeds, and fungi are periodic problems on the town's athletic fields and public grounds, and in structures. For example, pests can destroy or overtake large areas of turf, resulting in large renovation costs as well as poor and/or unsafe playing conditions for players and other users (due to lack of turf). Pesticides have, at times, seemed a necessary tool for dealing with various landscaping problems, notably when research yields no guaranteed natural alternatives for certain insect and disease problems. Fortunately, OPM has been proving successful in other towns as alternatives to pesticides evolve.

The Town of Sherborn recognizes that citizens deserve to be protected from exposure to chemicals and pesticides which may be hazardous now or in the future. Exposure to toxics may occur directly (e.g., via dermal contact, inhalation, or ingestion) or be delayed (e.g., following migration from the surface to groundwater and then via drinking water, from residuals on sports equipment). Of particular concern is the impact chemical applications for landscape and building maintenance may have on the quality of the groundwaters Sherbornites rely upon for drinking and other uses.

The Town also recognizes that its public agencies are in a position to set examples of environmentally responsible practices that can and ought to be adopted throughout our community. Outreach to the community about experience and other information acquired on OPM and IPM is part of this plan.

Employing an OPM policy allows the Town to gain the financial benefits of planning, prevention and responsible management while moving to eliminate the use of pesticides that may pose a health risk to people. OPM allows the Town to control pests in a manner that does not contaminate buildings, soil, air, or water with toxic chemicals. The incidence of scientific evidence linking pesticide exposure to health and environmental problems is accelerating and there are many potential risks of exposure that are not yet fully understood. Thus, under this policy, if a chemical is not known to be safe, then it must be assumed to pose a threat to health (human, wildlife, biota) or environmental quality.

#### 4.5 Implementation Guidelines

Details regarding how this policy is to be implemented will be contained in the Pest Management Plans developed for the schools and in other procedures manuals, as necessary. Pest management procedures will be updated as new or changed information becomes available in order to keep abreast of the most safe, practical and effective pest management methods suited to Sherborn and its goals for OPM. For example, these procedures will indicate who is responsible for pest management decision-making, what resources are needed and/or sought for support of the Town's pest management, and what specific steps may be taken to address a particular pest problem.

There are a variety of considerations to be given to the implementation of this pest management policy:

- Although the Town observes IPM principles for pest management, there continues to be a fairly strong reliance upon potentially hazardous chemical pesticides. Thus, a transition period is likely to be needed to develop the confidence to implement OPM effectively. OPM may require:
  - research (e.g., by Town of Sherborn, students, EPA, consultants, agricultural agencies, research institutes, other towns);
  - consultant resources (e.g., OPM experts, lab services);
  - experimentation with pest management methods, including a mixture of OPM and IPM for some period of time;
  - re-education (e.g., of Town authorities, residents);

- time for improving general health, foundations, and maintenance methods of public landscapes (e.g., for soil reconditioning, new types of plantings).
- Balancing between community needs and expectations regarding public landscapes and OPM principles and methods may be difficult initially. Tradeoffs between OPM and IPM may be faced, including:
  - change in appearance of or expectations for landscapes or buildings;
  - cost differences;
  - time differences (amount of time required to achieve pest management and timing/scheduling);
  - availability of alternatives;
  - familiarity with alternatives;
  - known versus unknown risks;
  - immediate versus long-term risks.
- In cases where OPM is of lesser or equal cost to pesticide use, OPM will be selected. It is recognized that OPM may be more expensive than pesticide use in other cases but, in order to avoid costs that may be less tangible but of equal or greater importance (e.g., ill health resulting from chemical exposure, degraded surface and groundwater quality), OPM may still be selected. Cost will not be the sole determining factor for selecting a pest management strategy. While potentially difficult to quantify, consideration shall be given to balancing short term costs (e.g., turf reconstruction) with longer term costs (e.g., contaminated water supply).
- Criteria for selecting pest control interventions shall include:
  - least hazardous to people, non-target insects, animals, plants and the environment;
  - most species specific;
  - highest level of anticipated effectiveness;
  - greatest need for on-going use and maintenance of fields and facilities.

## 5). Description of Indoor School Pest Problems

History of Pests Observed				
Identity	Location	When/Why	Management	Effectiveness
Bees, wasps	Inside building general; mechanical equipment on roof; dumpsters; playgrounds	Warm weather; nesting; flying	Screens installed on all air intake ports; extension rod with scraper for manual removal; periodic checking of roof equipment	Screens excellent for prevention; manual removal has proved effective and safe (when implemented carefully)
Ants	Kitchen area	Periodic	Traps; cleanliness; tightness of food storage	Problems minimized
Mice	Storage area	Rare; door open	Exclusion; traps	Effective
Ladybugs	Doorways	Recent	None	Left on their own
Flies	Gymnasium; kitchen	Random	Screens on kitchen; check for flies in morning and sweep up before use of gym	Kitchen problem solved; gym use not interrupted

On-going pest identification is accomplished through:

- a monitoring program using sticky traps to detect and pinpoint infestations or hot spots (traps are installed and checked monthly by the pest control contractor);
- reports by school occupants;
- routine facility inspections by maintenance staff.

## 6). School IPM Information Flow and Training

### Communication Strategy

#### I. Random

- a) Person discovering problem reports to head custodian (staff, teachers and students are prohibited from taking action on their own);
- b) an on-site report is filled out;
- c) licensed pest management contractor is contacted;
- d) problem is evaluated further (e.g., observation, traps);
- e) recommendations for corrective actions are provided to the School IPM Supervisor, with priority given to non-pesticide methods;
- f) if a pesticide of any type is to be applied, school nurse to be provided with the appropriate Material Safety Data Sheets (MSDSs);
- g) notification of parents, students and staff made according to regulatory requirements of the Children and Families Protection Act (CFPA).

#### II. Routine

- a) Pest management contractor places monitoring devices at school (locations determined by contractor expertise and past experience at school);
- b) contractor checks devices monthly;
- c) contractor reports any findings to the School IPM Supervisor;
- d) if problem warrants corrective action, recommendations are reviewed by the School IPM Supervisor, with priority given to non-pesticide methods;
- e) if a pesticide of any type is to be applied, school nurse to be provided with the appropriate Material Safety Data Sheets (MSDSs);
- f) notification of parents, students and staff made according to regulatory requirements of the Children and Families Protection Act (CFPA).

## Training Content and Schedule

### I. School IPM Coordinator

- Ralph Kelley, School IPM Supervisor, received IPM training at a UMass Extension Program (including refresher course)
- future course offerings should be evaluated for appropriateness, relevance, feasibility

### II. Maintenance Staff

- written policy exists stating that staff is not to use pesticides nor bring any on-site
- basic job training includes instruction in exclusion methods, building inspections, and how facility maintenance contributes to pest control (e.g., timely trash removal)
- staff is instructed to document and refer any pest problems to the pest management contractor

### III. School Nurses, Other Medical Staff

- information about the health effects of any pesticide used at the school will be provided to school medical staff
- future options for relevant continuing education will be considered

### IV. Food Service Staff

- the Town of Lexington is currently studying the use of disinfectants (treated as pesticides by the CFPA) as pertains to school IPM plans; the results of that study will be publicly available and will be reviewed for possible input into this plan

### V. Teachers, Administrative Staff

- a memorandum is distributed to teachers and staff at the start of each new year explaining that no pesticides are to be brought on-site and that all pest problems are to be referred to the head custodian

### VI. Students and Parents

- no training as-of-yet
- possibility of sending information home with students for both students and parents

## 7). Chemical Pesticide Applications

Chemical pesticide applications will be documented and appropriate notification will be made to staff, school nurse, students and parents.

Anticipated emergency problems and product names (and EPA numbers):

A dust for bees has occasionally been used; alternatives should be investigated.

No other emergency problems foreseen.

Material Safety Data Sheets of potential pesticides are on file.

Currently Contracted Pesticide Applicator:

Needham Woburn Pest Control, Inc.

781-891-5313

Certification/License Number – must be obtained before any applications are made

Other pesticide applicators:

None yet



## 8). Non-Chemical Actions

For years, the key strategy for pest management at the school has been exclusion –that is keeping the pests out of the building– and minimizing food, water, and environmental conditions required for pest survival. Structural and procedural mechanisms for exclusion include:

- weather stripping
- screens on air intakes
- door seals
- air filters
- maintenance of structural mechanisms (e.g., is weather stripping intact)
- keeping doors and window screens closed

Other non-chemical, preventive methods routinely used include:

- secure storage of foodstuffs
- good housekeeping practices, such as cleaning up spills
- removal of selected trash containers near key building access points (e.g., frequently used doors)
- removal of dead trees near the building or play areas (i.e., where a concentration of pests may reside)

Once pest problems have been identified, the key methods used to date have included:

- use of glue traps or other traps
- physical removal of nests or the pests themselves

## **9). School IPM Program Evaluation**

The IPM Team will hold an annual meeting to review implementation of the school's IPM plan and to determine whether updates are needed. Recommendations for corrective actions may be provided by the team.

If major changes are made to the school's physical structure or if other out-of-the-ordinary events take place that impact IPM implementation, the school's plan will be modified as appropriate.

## 10). School IPM Plan Documentation Location

The Pine Hill School's IPM Plan will be:

- maintained on-site in the office of the Head Custodian;
- made available to the public;
- bound in a binder with supplemental information including (but not limited to):
  - a copy of the Children's and Families' Protection Act (CFPA),
  - blank (and eventually also completed) pest incident report forms,
  - blank (and possibly also completed) pesticide notification forms,
  - Material Safety Data Sheets (MSDSs) for potential pesticides,
  - facility diagrams,
  - memorandum provided to staff regarding pesticide prohibition policy,
  - IPM guidance documents,
  - IPM resources and contacts.

Recordkeeping procedures:

- pest incident reports – duplicates of reports – one in the binder; one in a file in an accessible location