Preparing Your School Integrated Pest Management (IPM) Plan

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This document is intended to help you develop an implementable IPM Plan for your school/school district. We have provided a modifiable template which can be downloaded at: http://cals.arizona.edu/apmc/westernschoolIPM.html#pubs

Detailed information on the EPA IPM in Schools program is available on the Internet at: http://www2.epa.gov/managing-pests-schools

This template is a combination of instructions, sample text and references. Completion instructions are highlighted by italicized blue text. Please add the required information for your school or district as per the instructions and remove the blue text.

Prepare a Title Sheet for the School Integrated Pest Management Plan that includes the:

- Name of document e.g., Progress School District IPM Plan
- Name and address of the school/school district
- Date
- Version number of the document

Prepare a Signature Sheet for the School IPM Plan: This will include title and date of document, the names and titles of all parties who must approve the document to confirm that it is has been reviewed, accepted and officially adopted. The following format is suggested as an example. This will include a copy of the signed signature page on the final School IPM Plan.
I. INTRODUCTION

Add a background paragraph here, including the following information: where the school/school district is located, acreage and total enrollment, number and types of schools (elementary, middle or high), number of students in each school, who is responsible for operations and making budgetary decisions for each school.

IPM or integrated pest management is the most sensible, economical and sustainable method of managing pests in any situation with the least possible risk to people, property and the environment. IPM can be defined in numerous ways according to the situation, but common aspects in most definitions are prevention, regular monitoring and use of multiple suitable and compatible techniques (as opposed to relying on one single method) to reduce pest populations and maintain them at levels that do not cause injury or concern.

At (Name of school/school district), pests such as (name the most common pests that are a problem in the schools in your community) pose significant problems in the school environment.

The pesticides sometimes used to eliminate these and other pests may be useful as part of an IPM program. However, pesticides designed to kill or repel pests pose potential risks to people, animals, and the environment. Pesticides pose special health risks to children. Youngsters are more vulnerable to effects than adults due to different metabolic demands, developing organ systems, anatomical differences and behavioral habits. The health and safety of students and staff is a priority and a prerequisite to effective teaching and learning; therefore, it is the policy of (Name of school/school district) to approach pest management using the most effective strategy that carries the least possible risk to students and staff.

II. REVIEW OF INTEGRATED PEST MANAGEMENT PLAN GOALS

The IPM plan is a proactive strategy that:

1) Focuses on the long-term prevention and suppression of pest problems through economically sound measures that:
   - Protect the health and safety of students, staff and faculty.
   - Focus on maintenance practices that protect school buildings and grounds from pest invasions.
   - Maintain a healthy teaching and learning environment.
   - Protect local ecosystem health.
   - Support pollution prevention efforts and sustainable initiative commitments.

2) Emphasizes the prevention of pest problems by working to reduce or eliminate conditions that promote or allow the establishment, feeding, breeding and proliferation of pest populations.
3) Incorporates the use of best management practices such as sanitation, maintenance of structures and habitat modification as well as mechanical, biological and chemical pest management measures that are low risk and low impact (except under pest emergencies). This includes regular monitoring and inspections to detect pests, pest damage, and pest-conducive conditions as early as possible.

4) Evaluates the need for pest management by identifying acceptable pest population density levels and ensures that specific pest management measures are appropriate for the type of pest. For example, if an insect that does not breed indoors is found as an occasional intruder, it is unlikely to require major pest control measures.

5) Monitors and evaluates the effectiveness of pest management measures.

6) Uses alternative methods for preventive purposes (i.e., in the absence of any signs of pest activity), other than applications of pesticides designed to manage predictable venomous pests or disease-vectoring pests such as wasps or mosquitoes.

7) Excludes the application of pesticides for only aesthetic or cosmetic purposes.

8) Includes education of school staff on common pests and their management, including the importance of early detection, sanitation, and pest management measures.

9) Gives preference to the use of non-chemical pest management measures.

10) Allows the use of low-impact pesticides if non-chemical pest management measures are ineffective.

11) Allows the application of a pesticide that is not a low-impact product only in the case of a declared pest emergency. Examples include bees or wasps setting up a colony or if the application is at the direction or order of a public health authority.

III. DISTRIBUTION LIST

Complete the following table to indicate the names, titles, and addresses of individuals who will receive a copy of the IPM in Schools Plan.

The following individuals will receive a copy of the (Name of school/school district) approved School IPM Plan and also any revisions and/or updates:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Address</th>
<th>Phone Number</th>
<th>Email</th>
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IV. IMPLEMENTING THE INTEGRATED PEST MANAGEMENT PLAN

Integrated Pest Management (IPM) is a process that will achieve long-term, environmentally and economically sound pest management through a wide variety of tactics. IPM is grounded in knowledge of pests and their behaviors (including the causes of pest problems) and in education of all stakeholders about best practices. Control strategies in an IPM program include identifying structural and maintenance improvements to reduce the food, water, and shelter needed by pests. Since IPM focuses on correction and removal of the fundamental reasons why pests are present, pesticides are used only when necessary. Only the least-risk products and application methods are used. Due to concerns about the use of pesticides around children, the school/school district has chosen to adopt Integrated Pest Management strategies as a way to reduce pesticide and pest-related risks in schools.

The school/school district intends to use a variety of tools and strategies to facilitate the practice of IPM including the following:

**Education and Communication on:**

1) The concept of Integrated Pest Management.

2) Pest biology: identification, life cycles and behavior of common pests.

3) Effective inspection and monitoring for pests.

4) Preventive measures: understanding the conditions that can cause pest problems and how to stop pests through prevention. Communication and documentation, using a protocol for reporting pests and/or conditions enabling pest infestation.

5) Maintaining records of actions taken to address these issues and incidents.

**Inspections and Pest Monitoring:**

1) Conducting periodic campus inspections is imperative. Regular inspections for pests, pest signs, and conditions that can cause pest problems form the backbone of many IPM programs. Campus inspections include indoor and exterior (grounds) areas. Inspections should be done at least on an annual basis, although more often is better, especially during periods when pests are more common.

2) Monitoring for pests using insect monitoring traps in vulnerable, high risk areas such as kitchens and pantry areas is imperative. Light traps using different kinds of light sources may also be used in kitchen areas to attract and trap flying insects. Some light traps (‘bug zappers’) contain electrical grids that kill the attracted insects on contact; these are not recommended in food preparation areas. Rodent detection devices such as Detex Blox non-toxic rodent monitoring bait are advisable if rodents are a common problem.
Preventative Maintenance and Pest-proofing:

1) Maintaining school facilities in good operating condition, undertaking systematic planned inspections, and identifying and correcting any deficiencies and / or equipment maintenance issues on a pro-active basis. This should be in the form of a plan with key elements identified in a checklist format.

2) Ensuring that best practice food storage and waste management protocols are in place.

3) Ensuring that critical points of entry are properly pest-proofed (e.g. against rodent entry) and potential hiding places indoors are reduced.

Improved Sanitation:

Good sanitation is a key pest-prevention measure as well as a critical factor in best food service practices. A master sanitation plan outlining key practices and frequencies, used with a checkpoint list is ideal. Cleaning with an understanding of pest-related factors is important, with special emphasis on potential points of food waste accumulation such as at kitchen perimeters, as well as undisturbed dark and / or warm areas, under fixed equipment, cracks / crevices and hard-to-reach recesses in food preparation areas. These are ideal pest habitats. Proper cleaning at these critical points will prevent problems before they start.

Habitat Modification:

Making the school environment less attractive to pests, indoors and outdoors. For example, maintaining uncluttered classrooms reduces pest harborage opportunities and maintaining healthy turf in playgrounds deters pests such as southern fire ants that prefer to colonize poor, bare, and exposed soil.

Non-Chemical Control:

Using physical and mechanical practices and controls to reduce pests. These include using traps to kill rodents and insects, ensuring correct drainage (to prevent mosquitoes), and mulching of flowerbeds and maintaining lawns to inhibit weeds. Keeping vegetation properly trimmed and away from buildings by establishing “no vegetation” perimeters with gravel or mulch deters rodents from living next to buildings.

Chemical and Biological Pesticides:

1) Pesticides should only be used when necessary against specific pests, not as a non-specific preventive scheduled application.

2) Only the least-toxic effective pesticide products and application methods should be used for non-emergency applications.

3) Awareness of pesticide labels prior to purchasing and using as well as prior approval of pesticide products proposed by contractors will help ensure that they will be used according to the label requirements. If in doubt, get the advice of an appropriate authority such as university cooperative extension or state pest management authorities.

IPM Plan Review (ongoing)

1) Periodically review the IPM Plan to evaluate its effectiveness and determine if there is a need for updates or revisions to meet the school community needs and goals.

2) Undertake annual evaluations of pesticide use in participating schools to monitor trends in pesticide use including incidence of particular pests, and amounts of pesticide used.

V. PROGRAM AND TASK ORGANIZATION: ROLES AND RESPONSIBILITIES

In the section below, include a description of various roles and responsibilities. Add individuals as necessary.

SCHOOL IPM PROGRAM COORDINATOR

The facility manager, lead custodian, lead technician, maintenance supervisor, or similar person who is involved and interested in IPM often assumes this position. It is not required for school districts to create a new or unique position to perform these duties, unless they wish to do so. Although many responsibilities are listed for this position, they may be designated to other personnel when the need arises, but there should be a point person for pest issues in every school district.

Responsibilities

A. Attend IPM training and participate in educational events each year. The IPM Coordinator must be knowledgeable about IPM principles and practices. This includes expertise regarding exclusion practices, monitoring and inspection techniques, and management strategies for common pests. It is advisable that the IPM Coordinator has or obtains a state pest control license and be actively involved in keeping up-to-date on IPM Best Practices recommended by the U.S. Environmental Protection Agency (EPA), Centers for Disease Control and Prevention (CDC), National Environmental Health Agency (NEHA), land grant universities and other agencies, through attending local conferences and webinars, reviewing pertinent resources and by developing contacts with state IPM extension specialists.

B. Conduct outreach to the school community (public works, custodians, maintenance, construction, grounds, faculty, kitchen staff and parents) about the school IPM plan. The IPM Coordinator (or designee) should be able and willing to provide training and act as a resource to these key stakeholders as outlined in Section V below.
C. **Oversee pest prevention efforts.** The IPM Coordinator will work with administration, teachers and staff to reduce clutter and food in the classrooms as well as with maintenance staff to seal and pest-proof entry points such as doors, pipe penetration points, and other locations. Prevention activities will include ongoing review of building perimeters, as well as other potential pest harborage and breeding locations.

D. **Ensure the decision-making process for implementing IPM in the district (section VI) is followed.** The IPM Coordinator will assess and improve the pest monitoring/reporting/action protocol on an ongoing basis.

E. **Ensure all notification, posting, and record-keeping requirements in section VII are met when a decision to approve a pesticide application is made.**

F. **Maintain approved pesticides list as per section VIII.**

G. **Respond to inquiries and/or complaints about noncompliance with the plan.** The IPM Coordinator will respond to inquiries and complaints in writing, and these will be documented and kept on record both in hard copy and an electronic format to enable analysis and review as needed.

H. **Place and check insect monitoring sticky traps around facility as necessary in addition to reviewing monitoring data provided by contractors.**

I. **Keep records of pest complaints using pest logs located in (Add name of location).**

J. **Develop protocols and provisions for pest management and prevention during construction and renovation projects.** The IPM Coordinator will be involved in drafting any bids, and will have the authority to halt construction projects if protocols and provisions for pest management and prevention are not being met. This may include design elements that could encourage pest problems (e.g. bird prevention, termite prevention).

K. **Evaluate the IPM plan and track trends in amounts of pesticides used and any updated toxicity risk issues of products.**

L. **When questions arise it is a good idea to coordinate with the State/District/Environmental Office to ensure compliance with state and federal laws.**

CUSTODIAL / MAINTENANCE STAFF / PUBLIC WORKS STAFF

Training/Education

**Custodial** – The IPM Coordinator (or a designee) will train custodial staff on sanitation, monitoring, inspection, and reporting, and their responsibilities. **This training will be updated at least annually.** Training shall also be organized when new staff has been hired.

**Maintenance** – When appropriate, maintenance staff may be trained at the same time. Key elements of the training will include identifying pest-conducive conditions and mechanical control priorities (such as maintaining effective door sweeps on external doors, and sealing holes around conduits entering the building).

**Responsibilities**

- Attend annual IPM training provided by the IPM Coordinator (or designee).
- Monitor regularly for pest-conducive conditions during daily work. Reduce risk of pest entry through sealing small holes and cracks whenever possible.
- Report pest problems and pest-conducive conditions that cannot be resolved in the short term to the IPM Coordinator.
- Identify and document pest-conducive conditions in classrooms (such as clutter or food disposal issues) to the IPM Coordinator.
- Ensure that the use of any unregistered or unapproved pesticides discovered in their regular duties or during inspections is immediately reported to school administration and to the IPM Coordinator. Advise users of such items to stop inappropriate applications. The IPM Coordinator will work with state and local experts to ensure that any such illegal or unapproved pesticides reported by custodial staff are removed and disposed of properly in compliance with applicable law or if possible, returned to the retailer from which they were obtained.
- Ensure that all pesticides are stored in lockable storage areas or secure custodial closets.
- Assist the IPM Coordinator in the resolution of pest management issues identified in annual inspection reports.
- Work with the IPM Coordinator to develop a protocol for sealing holes, installing external door sweeps, and other pest exclusion techniques. For items that cannot be corrected immediately, develop a priority list with the IPM Coordinator with target dates for completion.

GROUND DEPARTMENT

Training/Education

The head of grounds maintenance (or designee) will train grounds staff in IPM as it applies to this area. Each year in advance of the training, the head of grounds maintenance will meet with the IPM Coordinator to review the annual report of pesticide applications and plan training for all grounds staff. The annual training will review the IPM Plan, especially grounds department responsibilities outlined below, and data from the annual report related to pesticide applications by grounds crew. Grounds staff will also be trained in basic monitoring for common pests on grounds.

**Responsibilities**

- Attend annual IPM training provided by the IPM Coordinator (or designee).
▪ Work with the IPM Coordinator to reduce conditions conducive to weeds, rats, gophers, ground hogs, fire ants, and other outdoor pests.
▪ Keep vegetation (including tree branches and bushes) at least 18 inches away from building surfaces.
▪ Use good mulching techniques on landscaped areas to reduce weeds.
▪ Employ proper fertilization, over-seeding, mowing height, edging, drainage, aeration, and irrigation scheduling in turf areas to strengthen turf and reduce weeds.
▪ Follow notification, posting, record-keeping and reporting protocols as in Section VII if the decision is made to apply a pesticide.

KITCHEN STAFF

Training/Education

The IPM Coordinator (or a designee) will train kitchen staff at least once per year on the basic principles of IPM and their responsibilities as outlined below. Ideally, this training should be conducted in conjunction with training on safe food-handling practices and the master sanitation plan.

Responsibilities
▪ Attend annual IPM training provided by the IPM Coordinator (or designee).
▪ Ensure that floor area under serving counters and movable equipment is cleaned on an appropriate cycle (daily, weekly) and is kept free of food and other debris.
▪ Inspect floor drains to ensure they are maintained clear and clean of organic matter; arrange for contracted drain cleaning as necessary.
▪ Avoid long-term storage or use of cardboard boxes for storage.
▪ Remove recyclable products daily.
▪ Keep outside doors closed at all times (except during deliveries and emptying trash).
▪ Keep all food items in sealed containers.
▪ Report any sightings of pests or pest evidence such as rodents, rodent droppings, cockroaches, flies, or other food-infesting pests to appropriate supervisor or to the IPM Coordinator immediately. The Kitchen supervisor must follow up by email with the IPM Coordinator to document any incident, as well as enter it into a pest management (IPM) logbook.
▪ Report any conditions favorable to pests that require maintenance (e.g., leaky faucets, dumpsters placed too close to buildings, drains in need of proper cleaning, build-up of grease that requires spray-washing, etc.). These should be entered in the IPM logbook, and communicated to the IPM Coordinator by email.

FACULTY

Training/Education

The IPM Coordinator (or a designee) will train new faculty and principals during the school year on the basic principles of IPM and their responsibilities as outlined below. During the training, the IPM Coordinator will review the following:
▪ Identification of conditions that encourage pests such as clutter, food debris, moisture, cracks, holes, etc., and the importance of reporting these in a timely manner.
▪ The importance of keeping their classrooms and work areas free of clutter.
▪ The importance of students cleaning up after themselves when food or drink is consumed in the classroom and how this relates to pest issues such as mice, fruit flies, ants and others.
▪ Basic IPM concepts and their practical application in the classroom.

Responsibilities
▪ Attend annual basic IPM review and update training provided by the IPM Coordinator (or designee).
▪ Ensure that classrooms and work areas are kept free of clutter so classrooms can be cleaned efficiently.
▪ Ensure that students clean up after themselves when food or drink is consumed in the classroom.
▪ Report any pest sightings and/or pest-conducive conditions to the IPM Coordinator, and to appropriate staff (custodial or administrative staff), either in-person/by email/letter, or, in emergency situations, by phone.

SCHOOL PRINCIPAL

Training/Education (Same as Faculty)

Responsibilities
▪ Schedule time for teachers to receive annual IPM review/update training provided by the IPM Coordinator (or designee).
▪ Attend annual IPM review/update training for teachers.
▪ Ensure that teachers keep their rooms tidy and free of clutter in accordance with the IPM Coordinator’s instructions.
▪ Ensure that all faculty, administrators, staff, students and parents receive the annual notice (provided by the IPM Coordinator) of potential pesticide products that could be used on school property as per Section VII.
▪ Work with the IPM Coordinator to make sure all notifications of pesticide applications reach all faculty, administrators, staff, students and parents through posting in the front office, email, the district’s website, letter home, or other form of communication.
• Support the IPM Coordinator, pest management professionals, custodial staff, and maintenance staff efforts in implementing IPM and in appropriate communications to teachers and staff regarding any IPM related issues.

OTHER STAFF
Training/Education
School nurses, administrative staff, the superintendent, and students should also be made aware of the basic principles of IPM. School nurses should be provided with up-to-date information on pertinent public health pests (mosquitoes, bed bugs, lice, ticks, wasps, etc.). Coaches who use athletic fields should be given an overview and updates of basic monitoring and IPM practices for turf as well as other outdoor pests so they understand key pest problems to look out for and when to report them.

Responsibilities
All staff must be aware of their responsibility to keep their work areas free of clutter, and to report pests and pest-conducive conditions to the IPM Coordinator and appropriate staff. Students must be encouraged to report any pest sightings to their teachers.

Modify the following table to reflect the roles and responsibilities of individuals who will implement the School’s IPM Plan. List all individuals who are responsible for making decisions and implementing the Plan and others, as necessary. Remember to update the table after personnel changes.

<table>
<thead>
<tr>
<th>Title</th>
<th>Responsibilities</th>
<th>Name</th>
<th>Phone and Email</th>
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<tbody>
<tr>
<td>Superintendent/ Facility Manager/ Environmental Health Committee Chair</td>
<td>Reviews and approves Plan on recommendation of School IPM Coordinator and extension support.</td>
<td></td>
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<tr>
<td>School IPM Coordinator</td>
<td>Bears overall responsibility for details and implementation of the school IPM plan; trains participants; declares pest emergencies; keeps records; reports to school district governing body.</td>
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<tr>
<td>School Director of Maintenance or Custodians</td>
<td>List out</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Maintenance and Custodial staff</td>
<td>List out</td>
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<td></td>
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<tr>
<td>Schools Groundskeeper(s)</td>
<td>List out</td>
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<tr>
<td>Other</td>
<td>List out</td>
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VI. PLAN IMPLEMENTATION
A. Monitoring – Reporting – Action Protocol

Monitoring is an important requirement and the backbone of the (Name of school/school district) IPM Program. IPM monitoring is defined as regular and ongoing inspection of areas where pest problems may occur. Information gathered from these inspections shall be documented and reported. The documentation shall be maintained by appropriate stakeholders as described below and in other relevant sections of this document.

Pest activity monitoring inspections shall be incorporated into the daily activities of school staff both as a planned practice, and as an awareness event. Staff training on monitoring practices includes what to look for, where to look, locations under risk, and well defined and outlined methods to record and report the information.

An acceptable pest threshold is the number of pests that can be tolerated before taking action. The acceptable threshold for some common pests that can thrive indoors such as German cockroach, mice, rats, ants, food infesting pests and stinging insects is zero.

There is generally no need for action in response to occasional invaders such as earwigs, crickets, or ground beetles, as these insects do not breed indoors. If such occasional invaders recur regularly then a review of the exterior habitat, additional pest proofing, and/or use of sticky traps may be sufficient to stop the problem.

The IPM Coordinator will determine acceptable thresholds for these and other occasional pests and for wildlife near or on school grounds.

Monitoring and Reporting – All Staff

After a basic introductory training by the IPM Coordinator (or designee) on pests and pest-conducive conditions, staff will be expected and encouraged to report pests and/or conditions they may observe during the normal course of their daily work. Any pests or pest-conducive conditions are to be reported to the IPM Coordinator orally, by email, or as written note/memorandum to the IPM Coordinator. These items shall also be documented in pest Logbooks and/or by an appropriate reporting form that can be included in the Logbook.

Monitoring and Reporting – IPM Coordinator and Custodial / Maintenance Staff

As part of their work responsibilities and during the normal course of their daily planned work, the IPM Coordinator and custodial/maintenance staff shall monitor:

  1) Building perimeters for pest-conducive conditions inside and outside (such as structural deterioration, holes or penetrations through walls that might allow pests to enter, and potential pest harborage/resources such as vegetation close to exterior walls).
2) The level of sanitation inside and out (such as food waste disposal procedures, level of cleanliness, and any conditions that might provide food, water or shelter to pests).

3) The extent of pest damages and the number, types and location of signs that pests are present (such as rodent droppings, cockroach fecal spotting, fly spotting, cockroaches or other insects caught in sticky traps, ant sightings, termite shelter tubes, etc.).

4) Human activities that attract and encourage pests (such as food preparation procedures, concessions procedures, classroom food storage, etc.).

5) Preventive and corrective activities (such as cleaning, sealing cracks and crevices, cleaning procedures, setting out traps, and pesticide treatments), as well as their results in terms of pest reduction.

6) Placement of, and noting pest evidence on, sticky traps. In addition to monitoring for pests and signs of pests, the IPM Coordinator and/or custodial/maintenance or public works staff (after proper training by IPM Coordinator) will be responsible for setting out and checking sticky traps in the kitchen and any other “pest vulnerable location”, once per month, and replacing these as needed. The IPM Coordinator shall provide guidance in placement methods and locations. All staff will be made aware of these monitoring trap placements, their purpose, and the importance of not damaging them. See Appendix 1 (http://cals.arizona.edu/apmc/westernschoolIPM.html#pubs) for more information on monitoring for insects.

7) Snap traps for mice: In addition to monitoring for signs of mice (droppings, gnawing, hair, etc.), the IPM Coordinator and/or custodial or maintenance staff may place snap traps in the kitchen with guidance from the IPM Coordinator. Snap traps must be checked daily by assigned staff until they are no longer needed and are removed.

NOTE: The duty of setting out traps may be assigned to an external contractor. However, arranging and assigning follow-up and checking of such devices should be part of the role of the IPM Coordinator. Custodial/maintenance and/or public works staff should be involved as appropriate in relation to their daily duties.

**Monitoring and Reporting - Grounds Staff**

Grounds staff will monitor for weeds, rodents, venomous pests, and other outdoor pests or pest-conducive conditions during normal daily activities and document any findings and inform the IPM Coordinator if appropriate (for example, if an emergency situation such as a wasp nest was discovered).

**Reporting “Pests of Concern” or pests posing a risk**

A pest posing a risk is one that is a public health risk or a significant nuisance pest. This category includes cockroaches (disease vectors, asthma triggers), rodents such as mice and rats (disease vectors, asthma triggers), venomous pests such as bees, wasps, ants (stings that may cause pain, allergic reactions and/or anaphylactic shock), bats, raccoons, cats, dogs, opossums, and skunks (whose bites may transmit rabies), and bed bugs and lice (which are significant nuisance and public health pests).

When pests posing risk (or their droppings, nests, etc.) are observed, staff should contact the IPM Coordinator immediately.

**Recommended Actions**

**Structural**

Any structural problems noticed by custodial/maintenance staff that can be addressed immediately (such as sealing up holes), should be acted on and reported to the IPM Coordinator. The IPM Coordinator should document these actions using pest logs or a similar reporting system.

If the actions needed cannot be accomplished immediately, the IPM Coordinator will meet with staff to develop a plan of action with an agreed deadline for completion based on the urgency of the risk or nuisance.

The IPM Coordinator will inform the superintendent of actions planned and/or work performed, and monitor the completion of all work. The IPM Coordinator will document actions taken/work performed using pest logs or a similar reporting system.

The IPM Coordinator will keep records of actions performed, including time and money spent to manage pests.

**Grounds**

Action will be initiated when pests on grounds reach a threshold established by the IPM Coordinator.

Any pest issues that grounds staff observe and that can be resolved immediately or without significant delay, should be corrected and reported to the IPM Coordinator. The IPM Coordinator will document these actions using pest logs or a similar reporting system.

If the actions needed cannot be resolved immediately, the IPM Coordinator will meet with staff to develop a plan of action with a proposed deadline for completion based on the urgency of the risk or nuisance.

The IPM Coordinator will inform the superintendent of actions being taken/work performed, and monitor the completion of all work. The IPM Coordinator will document actions taken/work performed, including time and money spent using Pest Logs or similar reporting system.

**B. Inspections (IPM Audits)**

The IPM Coordinator will conduct an annual inspection using the annual IPM inspection form (Appendix 2, http://cals.arizona.edu/apmc/westernschoolIPM.html#pubs). The annual inspection will include documentation of:
1) Human behaviors or working conditions that encourage pests (e.g. food preparation procedures that provide food for pests, etc.).

2) Management activities (sealing, cleaning, setting out traps, treating pests, etc.) and their impacts on resolving pest problems.

3) Amounts and types of pesticides applied at various sites, and the annual total, to enable comparison of usage between years. The goal is to reduce pesticide usage through best practices, keeping in mind that the need for pesticides may vary due to various factors (e.g. wasp populations can be linked to factors such as rainfall, abundance of fruit crops, etc.).

C. Forms

<table>
<thead>
<tr>
<th>Form or Report Name</th>
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<th>Completed By</th>
<th>Submitted to</th>
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</thead>
<tbody>
<tr>
<td>Pest Monitoring Form</td>
<td>To be used when conducting routine pest monitoring</td>
<td>Any staff member</td>
<td>IPM Coordinator</td>
</tr>
<tr>
<td>Pest Sightings and Pest Favorable Conditions</td>
<td>To report pests or pest favorable conditions</td>
<td>Any staff member</td>
<td>IPM Coordinator</td>
</tr>
<tr>
<td>Pest Log</td>
<td>To report pests</td>
<td>Any staff member</td>
<td>IPM Coordinator</td>
</tr>
<tr>
<td>Request to Correct Pest Favorable Conditions</td>
<td>To inform and seek action to remediate pest favorable conditions</td>
<td>Any staff member</td>
<td>IPM Coordinator</td>
</tr>
<tr>
<td>Annual Report (Appendix 2)</td>
<td></td>
<td>IPM Coordinator</td>
<td>School District/Governing body</td>
</tr>
<tr>
<td>Additional forms (list)</td>
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</tbody>
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D. Filing Procedures (Paper Files, Documentation Procedures)

Provide a general description of filing procedures that will be used for the above-listed forms. You may use the following text as a guideline. If forms and reports will be filed electronically, please provide a general description of where the electronic files will be kept, how they will be filed (alphabetically/by year), and who will have access to them.

The IPM Coordinator collects and files hard and/or electronic copies of all of the above forms. When a case is closed (a pest management action is completed or a pest issue is resolved), the report along with the appropriate forms may be filed alphabetically, by facility or site name, or by year in the filing cabinet, which is located at/in (describe report location in school/school district office).

E. Handling Pest Emergencies (see also Section VII B, below)

IMPORTANT: When a pest emergency is declared, the area must be evacuated and cordoned off before taking any other steps.

The IPM Coordinator may declare a PEST EMERGENCY, after consultation with school faculty and administration that the presence of a pest(s) poses an immediate threat to the health or safety of students, staff, faculty members or members of the public using the campus, or to the structural integrity of campus facilities. Examples include (but are not limited to) venomous insects swarming in areas frequented by children, a potentially rabid animal in an area frequented by children, sightings of rodents running through occupied areas of a school building where there is a risk of bites. The IPM Coordinator will document actions taken in response to a pest emergency using Pest Logs or similar reporting system and will immediately notify appropriate parties, such as the school district administration/governing body, of the evacuation.

F. Annual IPM Review (Completed by IPM Coordinator)

In January of each year, the IPM Coordinator will provide an Annual IPM in Schools Report (Appendix 2, http://cals.arizona.edu/apmc/westernschoolIPM.html#pubs). The report will include a summary of data gathered from pest logs, emails, IPM Coordinator notes, and/or other reporting system, as well as costs for pest management professionals (PMPs) and pesticides (including turf and landscape pesticides). Costs for preventive items such as sealants, fixing screens, door sweeps and other items that would not normally be considered part of pest control would not be documented in the report.

Prevention and management steps that enhanced the IPM program and resulted in benefits will be described. In addition, the report will include a description of approaches that proved to be ineffective and resulted in the necessity of pesticide applications. These items will be incorporated into the annual report of pesticide applications (see section VII).

The report shall also include detailed information on pesticide usage such as any reduction or increase in the amount of pesticides used as well as a review of toxicity of pesticides used, compared to the previous year. This information shall assist the IPM Coordinator and the governing body to determine the outcomes and evaluation of the IPM in School Plan and program.
VII. PESTICIDE APPLICATIONS: MANDATORY NOTIFICATION, POSTING, RECORD KEEPING, AND REPORTING REQUIREMENTS

Any pesticide application (this includes weed and insect control products, baits, and all professional and over-the-counter products) on school property must be made by a licensed commercial or public pesticide applicator, sanctioned by the IPM Coordinator in consultation with the (Name of school district/governing body). At the beginning of each school year, all faculty, administrators, staff, and parents/guardians will be given a list of authorized/approved pesticide products that might be used. They will also be informed of the procedures for notification and posting of individual applications, including those for pest emergencies. This information will be provided to all the above via the method most likely to reach the intended recipients. See the sample notification form in Appendix 3 available at the following website http://cals.arizona.edu/apmc/westernschoolIPM.html#pubs.

A. Notification and Posting for Non-emergencies

When prevention and/or management of pests by non-pesticidal measures prove to be ineffective, the use of a low-impact pesticide is permissible. Documentation of these measures is a prerequisite to the approval of any application of a low-impact pesticide. This documentation will remain on file with the IPM Coordinator.

Non-emergency pesticide applications may occur in or around a school when students are not present, unless the IPM Coordinator authorizes an exception with cause.

If the product label of a pesticide product specifies a re-entry time, a pesticide may not be applied to an area of campus where the school expects students, staff, or faculty to be present before expiration of that re-entry time.

If the product label does not specify a re-entry time, a pesticide may still not be applied to an area of campus where the school expects students, staff, or faculty to be present before expiration of a re-entry time that the IPM Coordinator determines to be appropriate; based on the times at which students, staff, or faculty would normally be expected to be in the area, how ventilated the area is, and whether the area will be cleaned before students are present. Re-entry periods that go beyond label recommendations may be specified by the IPM Coordinator in consultation with (Name of school district/governing body), and may be subject to subject to annual review.

The IPM Coordinator (or a designee) will give written notice of a proposed pesticide application to the school office and to persons in charge of the specific proposed application area (via the method most likely to reach the intended recipients) at least 24 hours before the application occurs.

The notice must identify the trade name of the product and active ingredient, the type of pesticide product (chemical group and mode of action) and formulation, the EPA registration number of the product, the expected location of the application, the expected date of application and the reason for the application.

The IPM Coordinator (or a designee) shall place warning signs around the pesticide application areas no later than 24 hours before the application occurs, and the signs shall be removed no earlier than 72 hours after the application occurs.

A warning sign must bear the words “Warning: pesticide-treated area”, and give the expected or actual date and time for the application, the reentry time, and provide the name and telephone number of a contact person (the person who is to make the application and/or the IPM Coordinator).

B. Notification and Posting for Emergencies

Important Notes:

1) The IPM Coordinator may not declare the existence of a pest emergency without consultation with school faculty and administration.

2) If a pesticide is applied at a campus due to a pest emergency, the IPM Coordinator shall review and determine whether any modifications of the IPM plan will enable the prevention or reduction of similar pest emergencies in the future and provide a written report of such to (Name of school district/governing body).

3) The (Name of school district/governing body) shall review and take formal action on any recommendations in the report.

The declaration of the existence of a pest emergency is the only time a non-low-impact pesticide may be applied, if it is deemed absolutely necessary.

If a pest emergency is declared, the area must be evacuated and cordoned off before taking any other steps.

If a pest emergency makes it impractical to provide a pesticide application notice no later than 24 hours before the pesticide application occurs, the IPM Coordinator shall send the notice to the school principal no later than 24 hours after the application occurs.

The IPM Coordinator or designee shall place notification signs around the area as soon as practical but no later than just before the application occurs.
C. Documenting and Record Keeping of Pesticide Applications

The IPM Coordinator or designee shall ensure that a copy of the pesticide product information is kept on file at the head custodian’s office at the school where the application occurred, and at the office of the IPM Coordinator for at least four years following the application date. Include the following:

- A copy of the product label
- A copy of the SDS (Safety Data Sheet) – formerly known as MSDS (Material Safety Data Sheet)
- The brand name and signal word of the product
- US EPA registration number of the product
- The approximate amount and concentration of product applied
- The date and location(s) of the application
- The pest that prompted the application
- The type of application
- The effectiveness of the application
- The pesticide applicator’s license or certification numbers and pesticide trainee or certificate numbers of the person applying the pesticide
- The name(s) and contact information of the person(s) applying the pesticide
- The dates on which notices of the application were given
- The dates and times for the placement and removal of warning signs
- Copies of all required notices were given, including the dates the notices were given.

D. Annual Report of Pesticide Applications

In January of each year, the IPM Coordinator will provide (Name of school district/governing body) an annual report of all pesticide applications made the previous year. The report will contain the following for each application:

1) The brand name, signal word, and US EPA registration number of the product applied
2) The amount and concentration of product applied
3) The location(s) and date(s) of the application
4) A summary of the history of any pest incidents, successful actions, and /or what steps could be taken in future to prevent reoccurrence or to handle this more effectively.

VIII. APPROVED LIST OF PESTICIDES FOR ROUTINE (NON-EMERGENCY) USE UNDER THIS PLAN

Note: All pesticides used must meet all applicable EPA requirements and be used in strict accordance with label instructions.

As part of this plan, the IPM Coordinator, in consultation with the (Name of school district/governing body) may adopt a list of low-impact pesticides for use with their Integrated Pest Management Plan.

For routine (non-emergency use), only the following pesticides can be used:

1) Pesticides that have the signal word “caution” or no signal word (products that are not required to display a signal word are those that fall into the lowest toxicity category) on the label;
2) Pesticides that do not contain an active ingredient classified as a human carcinogen or probable human carcinogen in the United States;
3) Pesticides that do not contain an active ingredient classified as a human carcinogen or probable human carcinogen under the United States Environmental Protection Agency 1986 Guidelines for Carcinogen Risk Assessment;
4) Pesticides that do not contain an active ingredient classified as carcinogenic to humans or likely to be carcinogenic to humans under the United States Environmental Protection Agency 2003 Draft Final Guidelines for Carcinogen.

Risk Assessment

The EPA Office of Pesticide Programs (OPP) classifies pesticide active ingredients (a.i.) according to their potential to cause cancer in humans as part of the pesticide registration process under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), and of re-registration as required by the Food Quality Protection Act (FQPA). The classification system used may differ as described above depending on when the pesticide active ingredients were last evaluated.

The National Pesticide Information Center (http://npic.orst.edu/) can be contacted at 1.800.858.7378 or npic@ace.orst.edu for assistance in determining a pesticide a.i. cancer classification.

If your community plans to, or currently partners with a pest management service provider, guidance on pesticides can be found in Appendix 4 (Hiring an Outside Contractor) available at http://cals.arizona.edu/apmc/westernschoolIPM.html#pubs. While there is an expectation and dependence on a contractor to use appropriate products, it is also a due diligence requirement...
to have SDS/MSDS documents available, and to review the products that are recommended.

**Risk Assessment**

All Appendices are available at the following website http://cals.arizona.edu/apmc/westernschoolIPM.html#pubs.

Appendix 1: Monitoring for Pest Insects
Appendix 2: Annual IPM Inspection Review Form
Appendix 3: Notification of Pesticide Application Form
Appendix 4: Recommendations on Hiring a Pest Management Contractor

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This information has been reviewed by University faculty.  
extension.arizona.edu/pubs/az1669-2015.pdf

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