

# Integrated Pest Management Plan

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#### I. INTRODUCTION

Structural and landscape pests can pose significant problems in schools. Pests such as mice and cockroaches can trigger asthma. Mice and rats are vectors of disease. Many children are allergic to yellow jacket stings. The pesticides used to remediate these and other pests can pose health risks to people, animals, and the environment. Because the health and safety of students and staff is our first priority – and a prerequisite to learning –, it is the policy of Sisters School District to approach pest management with the least possible risk to students and staff. In addition, Senate Bill 637 (incorporated into ORS Chapter 634 upon finalization in 2009) requires all school districts to implement integrated pest management in their schools.

#### II. WHAT IS INTEGRATED PEST MANAGEMENT?

Integrated Pest Management, also known as IPM, is a process for achieving long-term, environmentally sound pest suppression through a wide variety of tactics. Control strategies in an IPM program include structural and procedural improvements to reduce

the food, water, shelter, and access used by pests. IPM focuses on remediation of the fundamental reasons why pests are here at times, pesticides are used when necessary.

#### **IPM Basics**

<u>Education and Communication</u>: IPM program is education and communication. We need to know what conditions can cause pest problems, why and how to monitor for pests, proper identification, pest behavior and biology. Communication about pest issues is essential.

<u>Cultural & Sanitation</u>: Knowing how human behavior encourages pests helps you prevent them from becoming a problem. Small changes in cultural or sanitation practices can have significant effects on reducing pest populations. Cleaning under kitchen serving counters, reducing clutter in classrooms, putting dumpsters further from kitchen door/loading dock, proper irrigation scheduling, and over-seeding of turf areas are all examples of cultural and sanitation practices that can be employed to reduce pests.

<u>Physical & Mechanical</u>: Rodent traps, sticky monitoring traps for insects, door sweeps on external doors, sealing holes under sinks, proper drainage and mulching of landscapes, and keeping vegetation at least 24 inches from buildings are all examples of physical and mechanical control.

<u>Pesticides:</u> IPM focuses on remediation of the fundamental reasons why pests are here; pesticides are used when necessary.



## III. WHAT IS AN INTEGRATED PEST MANAGEMENT PLAN?

ORS 634.700 defines an IPM plan as a proactive strategy that:

- (A) Focuses on the long-term prevention or suppression of pest problems through economically sound measures that:
- a) Protect the health and safety of students, staff and faculty;
- b) Protect the integrity of campus buildings and grounds;
- c) Maintain a productive learning environment; and
- d) Protect local ecosystem health;
- (B) Focuses on the prevention of pest problems by working to reduce or eliminate conditions of property construction, operation and maintenance that promote or allow for the establishment, feeding, breeding and proliferation of pest populations or other conditions that are conducive to pests or that create harborage for pests.
- (C) Incorporates the use of sanitation, structural remediation, habitat manipulation, mechanical, biological and chemical pest control measures. To reduce the use of pesticides and emergency situations.
- (D) Includes monitoring and inspections to detect pests, pest damage and unsanctioned pesticide usage.
- (E) Evaluates the need for pest control by identifying acceptable pest population density levels.
- (F) Monitors and evaluates the effectiveness of pest control measures.
- (G) Excludes the application of pesticides on a routine schedule for purely preventive purposes, other than applications of pesticides designed to attract or be consumed by pests.
- (H) Excludes the application of pesticides for purely aesthetic purposes.
- (I) Includes school staff education about sanitation, monitoring and inspection and about pest control measures.
- (J) Gives preference to the use of nonchemical pest control measures.
- (K) Allows the use of low-impact pesticides.
- (L) Allows the application of a pesticide that is not a low-impact pesticide to mitigate a pest emergency, or if the application is by, or at the direction or order of, a public health official.

The above definition is the basis for the school district's IPM plan. This plan fleshes out the required strategy from ORS 634.700 – 634.750 for the school district.

<u>Note:</u> As mentioned above, ORS 634.700 allows for the routine application of pesticides designed to be consumed by pests. To avoid a proliferation of pests and/or unnecessary applications of pesticides, we will not set out any ant or cockroach baits until first:

- 1) Informing staff in the area where the pests are that sanitation and exclusion are the primary means to control the pest.
- 2) Cleaning up any food debris in the area.
- 3) Sealing up any cracks or crevices where we know the pests are coming from.

#### IV. SCHOOL DISTRICT IPM PLAN COORDINATOR

The Sisters School District Superintendent designates the Director of Operations as the IPM Plan Coordinator. The Coordinator is key to successful IPM implementation in Sisters School District, and is given the authority for overall implementation and evaluation of this plan. The Coordinator is responsible for:

## A. Attending not less than six hours of IPM training each year.

The training will include a general review of IPM principles and the requirements of ORS 634.700 – 634.750. It will also include hands-on training on updated exclusion practices, monitoring & inspection techniques, and management strategies for common pests.

Note: ORS 634.720 requires IPM plan coordinators to complete six hours of training each year. Contact your property and liability insurance provider, your Education Service District, or the OSU School IPM Program for information on IPM coordinator training courses that cover the above.

**B. Safe Schools IPM.** The IPM Coordinator (or designee) will provide training as outlined in Section V. below.

## C. Overseeing pest prevention efforts.

The Coordinator will work with administration, custodian/maintenance, teachers and staff to reduce clutter and food in the classrooms, and seal up pest entry points.

# D. Assuring that the decision-making process for implementing IPM in the district (section VI) is followed.

The Coordinator assesses and improves the IPM program.

- E. Assuring that all notification, posting, and record-keeping requirements in section VII, are met when the decision to make a pesticide application is made.
- F. Approved low impact pesticide list is updated and available on OSU's IPM website. Low-Impact Pesticides List
- G. Responding to inquiries and complaints about noncompliance with the plan.

Keeping records of pest complaints using pest logs located in the Operations Directors Office.

#### V. RESPONSIBILITIES + TRAINING/EDUCATION of SCHOOL EMPLOYEES

Note: ORS 634.700 (3) (i) requires staff education "about sanitation, monitoring and inspection and about pest control measures". All staff should have at least a general review of IPM principles and strategy as outlined in Sections II and III.

#### A. IPM Plan Coordinator

- 1. Training (see section IV above)
- 2. Responsibilities (see section IV above)

#### B. Custodial / Maintenance Staff

## 1. Training/Education

Custodial - The IPM Plan Coordinator (or a designee of the Coordinator) provides custodial staff IPM training through Safe Schools annually on sanitation, monitoring, inspection, and reporting, and their responsibilities as outlined below.

Maintenance - The IPM Plan Coordinator (or a designee of the Coordinator) provides maintenance staff with IPM training through Safe Schools annually on identifying pest-conducive conditions and mechanical control methods (such as door sweeps on external doors and sealing holes under sinks), and their responsibilities as outlined below.

#### 2. Responsibilities

- 1) Complete IPM training provided by the IPM Coordinator (or designee).
- 2) Monitor for pest-conducive conditions during daily work, and sealing small holes and cracks.
- 3) Reporting pest problems and pest-conducive conditions that cannot be resolved in a short amount of time to the IPM Coordinator.

- 4) Reporting teachers to the IPM Coordinator who repeatedly refuse to or need assistance to reduce clutter and other pest-conducive conditions in their classrooms.
- 5) Reporting any unapproved pesticides (such as aerosol spray cans) discovered in their regular duties or during an inspection and delivering them reporting them to the IPM Coordinator.
- 6) Assisting IPM Coordinator with resolving issues found in inspection report.
- 7) Works with the IPM Coordinator to for sealing holes, installing external door sweeps, and other pest exclusion needs which cannot be done in a short period of time.

## C. Grounds Department

## 1. Training/Education

Grounds staff will be complete Safe Schools IPM training annually. During the year, Operations staff will meet with the IPM Coordinator to review pesticide applications. Review the IPM Plan. We also review the OSU turf management publications EC 1521, EC 1278, EC 1550, EC 1638-E, and PNW 299 (available free online at OSU Extension Catalog | Oregon State University.)

## 2. Responsibilities

Grounds crews are responsible for:

- 1) Completion of IPM training.
- 2) Work with the IPM Coordinator to reduce conditions conducive to weeds, gophers, moles, yellow jackets, and other outdoor pests
- 3) Remove vegetation (including tree branches and bushes) at least 18 inches from building surfaces and as far as 5 feet from the building.
- 4) When feasible mulching in landscaped areas to reduce weeds.
- 5) When feasible proper fertilization, over-seeding, mowing height, edging, drainage, aeration, and irrigation scheduling in turf areas to reduce weeds.
- 6) When the decision is made to apply a pesticide, following notification, posting, record keeping and reporting protocols in Section VII.

#### D. Kitchen Staff

#### 1. Training/Education

Safe Schools IPM training will be completed by kitchen staff annually.

## 2. Responsibilities

Kitchen Staff are responsible for:

- 1) Completing IPM training provided by the IPM Coordinator (or designee).
- 2) Assuring floor under serving counters and movable equipment is kept free of food and drink debris.
- 3) Avoiding long-term storage or use of cardboard boxes.
- 4) Removing recycle products and garbage at the end of service daily.
- 5) Keeping floors sanitary; swept and cleaned.
- 6) Keeping outside doors closed at all times (except during deliveries and emptying trash).
- 7) Keeping all food items in sealed containers.
- 8) Immediately reporting any sightings of rodents or rodent droppings to the IPM Coordinator, and following up with an email to the Coordinator.
- 9) Reporting to the Coordinator any pest-conducive conditions that require maintenance (e.g., leaky faucets, dumpster too near building, drains need scrubbing, build-up of floor grease requiring spray-washing, etc.)

## E. Faculty

#### 1. Training/Education

The IPM Plan Coordinator (or a designee of the Coordinator) will provide Safe Schools IPM training for all staff annually on the basic principles of IPM and their responsibilities as outlined below. The training will cover:

- 1) What pest-conducive conditions are (clutter, food debris, moisture, cracks, holes, etc.), and the importance of reporting these in a timely manner.
- 2) The importance of keeping their classrooms and work areas free of clutter.

3) The importance of having students clean up after themselves when food or drink is consumed in the classroom.

## 2. Responsibilities

Faculty are responsible for:

- 1) Annual basic IPM training provided by Safe Schools and set up by the IPM Coordinator (or designee).
- 2) Keeping their classrooms and work areas free of clutter.
- 3) Making sure students clean up after themselves when food or drink is consumed in the classroom.
- 4) Reporting pests and pest-conducive conditions to the IPM Coordinator.

## F. School Principal

## 1. Training/Education

(Same training/education as Faculty)

## 2. Responsibilities

The School Principal is responsible for:

- 1) Scheduling time for teachers to receive annual training provided by the IPM Coordinator (or designee).
- 2) Completing annual IPM training for teachers.
- 3) Assuring that teachers keep their rooms clean and free of clutter in accordance with the IPM Coordinator's instructions.

#### G. Other

## 1. Training/Education

Safe Schools IPM training is provided to school nurses, coaches, administrative staff, and the superintendent.

## 2. Responsibilities

All staff are responsible for keeping their work areas free of clutter, and reporting pests and pest-conducive conditions to the IPM Coordinator.

#### VI. IPM PROCESS

## A. Monitoring – Reporting – Action Protocol

Monitoring is the most important requirement of ORS 634.700 - 634.750. It provides information to make pest management decisions. It can be defined as the regular and ongoing inspection of areas where pest problems do or might occur.

## 1. Monitoring & Reporting - All Staff

Staff are encouraged to report pests or pest-conducive conditions they observe during the normal course of their daily work.

## 2. Monitoring & Reporting - Coordinator and Custodial / Maintenance Staff

The IPM coordinator, custodial and maintenance staff monitor structures and building perimeters for:

- 1) Pest-conducive conditions inside and outside the building (structural deterioration, holes that allow pests to enter, conditions that provide pest harborage).
- 2) The level of sanitation inside and out (waste disposal procedures, level of cleanliness inside and out, conditions that supply food and water to pests)
- 3) The amount of pest damage and the number and location of pest signs (rodent droppings, termite shelter tubes, cockroaches caught in sticky traps, etc.)
- 4) Human behaviors that affect the pests (food preparation procedures, concessions procedures, classroom food, etc.)
- 5) Their own management activities (caulking/sealing, cleaning, setting out traps, treating pests, etc.) and their effects on the pest population.
- 6) Any pests or pest-conducive conditions will be reported to the IPM Coordinator.

## 3. Monitoring & Reporting – Grounds Staff

Grounds staff monitor for invasive weeds, gophers, moles, yellow jackets, and other outdoor pests. Staff report these to the IPM Coordinator.

#### 4. Sticky monitoring traps for insects

Sticky traps are a diagnostic tool to aid in identifying a pest's presence, their reproductive stage, the likely direction pests are coming from, and the number of pests.

Staff are informed of the traps and their purpose so they do not disturb them. Operations staff are responsible for setting them out and checking them. Replacing them about every four months.

Sticky monitoring traps may be placed in the kitchen and any other "pest-vulnerable areas" the Coordinator deems necessary.

Kitchen sticky insect traps can be checked monthly for drain flies, ants, and cockroaches.

## 5. Monitoring for Mice

In addition to monitoring for signs of mice (droppings, gnawing, hair, etc.), snap traps will be placed in the kitchen (and any other area the IPM Coordinator deems necessary), and checked by staff.

## 6. Reporting (pests, signs of pests, and conducive conditions)

When staff observe pests or pest-conducive conditions, they should report to IPM Coordinator.

## 7. Reporting "Pests of Concern"

"A pest of concern" is a pest determined to be a public health risk or a significant nuisance pest. These include cockroaches (disease vectors, asthma triggers), mice & rats (disease vectors, asthma triggers), yellow jackets (sting can cause anaphylactic shock), cornered nutria, raccoons, cats, dogs, opossums, skunks (they can bite), and bed bugs (significant nuisance pest).

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

#### 8. Action

## a) Structural

Any items (such as sealing up holes) that staff observe should be reported to IPM Coordinator.

#### b) Grounds

When pests on grounds reach a threshold established by the IPM Coordinator, action will be taken. The Grounds staff or Coordinator will keep records of actions.

#### 9. Acceptable Thresholds

A threshold is the number of pests that can be tolerated before taking action. The acceptable threshold for cockroaches, mice, rats, raccoons, cats, dogs, opossums, skunks, and nutria is zero.

Acceptable thresholds for other pests will be determined by the IPM Coordinator.

## **B.** Inspections

The IPM Plan Coordinator (or designee) conducts inspections using the School Dude preventative maintenance work request system. During the inspection, he or she will also inspect or review:

- 1). Human behaviors that affect the pests (working conditions that encourage or support pests, food preparation procedures that provide food for pests, etc.)
- 2). Management activities (caulking/sealing, cleaning, setting out traps, treating pests, etc.) and their effects on the pest population.

## C. Pest Emergencies (see also Section VII. B. below)

IMPORTANT: If a pest emergency is declared, the area must be evacuated and cordoned off before taking any other steps. When the IPM Plan Coordinator determines that the presence of a pest or pests immediately threatens the health or safety of students, staff, faculty members or members of the public using the campus, or the structural integrity of campus facilities, he or she may declare a pest emergency. Examples include (but are not limited to) yellow jackets swarming in areas frequented by children, a nutria in an area frequented by children, mice or rats running through occupied areas of a school building. The Coordinator records actions taken.

#### D. IPM Records

Records includes a summary of data gathered from any of the following pest logs, or e-mails, or pest companies, or Coordinator notes.

Prevention and management steps taken that proved to be ineffective and led to the decision to make a pesticide application can be incorporated into the record of pesticide applications (see section VII. D)

# VII. PESTICIDE APPLICATIONS: REQUIRED NOTIFICATION, POSTING, RECORD KEEPING, AND REPORTING

Any pesticide application (this includes weed control products, ant baits, and all professional and over-the-counter products) on school property must be made by a licensed commercial or public pesticide applicator. A list of potential pesticide products are available on the school district website. Staff complete IPM Safe Schools training to inform them 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 school district website.

## A. Notification and Posting for Non-emergencies

When prevention or management of pests through other measures proves to be ineffective, the use of a low-risk pesticide is permissible. Documentation of these

measures is a pre-requisite to the approval of any application of a low-risk pesticide. This documentation will remain on file with the IPM Plan Coordinator.

Non-emergency pesticide applications may occur in or around a school before and after school is in session, unless the IPM Plan Coordinator authorizes an exception. If the labeling of a pesticide product specifies a reentry time, a pesticide may not be applied to an area of campus where the school expects students to be present before expiration of that reentry time. If the labeling does not specify a reentry time, a pesticide may not be applied to an area of a campus where the school expects students to be present before expiration of a reentry time that the IPM Plan Coordinator determines to be appropriate based on the times at which students would normally be expected to be in the area, area ventilation and whether the area will be cleaned before students are present.

The IPM Plan Coordinator (or a designee of the Coordinator) will give written notice of a proposed pesticide application on the district website at least 24 hours before the application occurs. <a href="Pesticide Application Notification Form">Pesticide Application Notification Form</a> (.PDF). The notice form is also attached in the Forms / Links section.

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

Pesticide Application Posting Poster (.PDF)

## B. Notification and Posting for Emergencies

Important Notes:

- 1) The IPM Coordinator may not declare the existence of a pest emergency until after consultation with the school superintendent (or designee).
- 2) If a pesticide is applied at a campus due to a pest emergency, the Coordinator can review the IPM plan to determine whether modification of the plan might prevent future pest emergencies, and provide a verbal or written review to the Superintendent.
- 3) The Superintendent (or designee) shall review and take formal action on any recommendations in the review.

The existence of a pest emergency is the only time a non low-impact pesticide may be applied.

One mouse is enough to declare an emergency. Mice can carry several infectious diseases. Mice also reproduce at a very high rate. Therefore, the school district has established bait stations to control mice populations. Other methods are not as sanitary, feasible or effective.

In most cases when a pest emergency is declared, the area is evacuated and cordoned off before taking any other steps.

If a pest emergency makes it impracticable to give a pesticide application notice no later than 24 hours before the pesticide application occurs, the IPM Plan Coordinator shall send the notice no later than 24 hours after the application occurs.

The Coordinator or designee shall place notification signs around the area as soon as practicable but no later than at the time the application occurs.

Note: ORS 634.700 also allows the application of a non-low-impact pesticide "by, or at the direction or order of, a public health official". If this occurs, every effort must be made to comply with notification and posting requirements above.

## C. Record Keeping of Pesticide Applications

The IPM Plan Coordinator or designee shall keep a copy of the following pesticide product information on file at the Operation Directors Office.

Records are kept on file at the office of the IPM Plan Coordinator, for at least four years following the application date.

## **ODA Pesticide Application Recordkeeping Forms** (.PDF)

## D. Record of Pesticide Applications Contractors

A record of all pesticide applications made contain the required information in the Oregon Department of Agriculture Pesticide Record Keeping form. Attached link in the Forms / Links Section at the bottom of the page or in the Forms / Links section. Form is completed for all applications; contractors can use their own form if it covers the same information.

**ODA Pesticide Application Recordkeeping Forms** (.PDF)

#### VIII. APPROVED LIST OF LOW-IMPACT PESTICIDES

Note: All pesticides used must be used in strict accordance with label instructions.

According to ORS 634.705 (5), the school district shall adopt the low-impact pesticides list for use with their integrated pest management plan. The district may include any product on the list except products that:

- (a) Contain a pesticide product or active ingredient that has the signal words "danger or warning" on the label.
- (b) Contain a pesticide product classified as a human carcinogen or probable human carcinogen under the United States Environmental Protection Agency 1986 Guidelines for Carcinogen Risk Assessment.
- (c) Contain a pesticide product 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.

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

The National Pesticide Information Center (<a href="http://npic.orst.edu/">http://npic.orst.edu/</a>) can be contacted at 1.800.858.7378 for assistance in determining a pesticide a.i. cancer classification.

The most current list of approved low-impact pesticides is available on the OSU IPM website at <u>Low-Impact Pesticides List</u> (.PDF) also guidance for low impact pesticides. <u>ODA Guidance on Low-Impact Pesticides</u> (.PDF)

#### Pesticides:

- Do not apply pesticides to classrooms, athletic fields, or any other space while it is being used.
- Store all pesticides in a cool, dry place with limited access.
- At the very least, wear long pants, long sleeves, shoes and socks when handling or using any pesticide product.
- Do not apply products in a way that will contact people, either directly or through drift.

## Forms / Links

Low-Impact Pesticides List (.PDF)

**ODA Guidance on Low-Impact Pesticides** (.PDF)

Pesticide Application Notification Form (.PDF)

Pesticide Application Posting Poster (.PDF)

<u>Pesticide Application Posting Poster/Template with Notification & Record-Keeping</u> (Word)

**ODA Pesticide Application Recordkeeping Forms (.PDF)** 

ODA Checklist for Contracted Pesticide Applicators (.PDF)

ODA Checklist for School Staff Who Apply Pesticides (.PDF)

**Grounds Education** 

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National Pesticide Information Center (http://npic.orst.edu/)