

Estacada School District Integrated Pest Management Plan (IPM)

- 1. INTRODUCTION**
- 2. WHAT IS INTEGRATED PEST MANAGEMENT?**
- 3. WHAT IS AN INTEGRATED PEST MANAGEMENT PLAN?**
- 4. SCHOOL DISTRICT IPM PLAN COORDINATOR**
- 5. RESPONSIBILITIES + TRAINING/EDUCATION of SCHOOL EMPLOYEES**
 - a. *IPM Plan Coordinator*
 - b. *Custodial/Maintenance Staff*
 - c. *Grounds Department*
 - d. *Kitchen Staff*
 - e. *Faculty*
 - f. *School Principal*
 - g. *Other*
- 6. IPM PROCESS**
 - a. Monitoring – Reporting – Action Protocol
 - i. Monitoring & Reporting – All Staff
 - ii. Monitoring & Reporting – Coordinator and Custodial/Maintenance Staff
 - iii. Monitoring & Reporting – Grounds Staff
 - iv. Sticky monitoring traps for insects
 - v. Monitoring for mice
 - vi. Reporting (pests, signs of pests, and conducive conditions)
 - vii. Reporting “Pests of Concern”
 - viii. Action!
 - ix. Acceptable Thresholds
 - b. Inspections
 - c. Pest Emergencies
 - d. Annual IPM Report (completed by IPM Plan Coordinator)
- 7. PESTICIDE APPLICATIONS: REQUIRED NOTIFICATION, POSTING, RECORD KEEPING, AND REPORTING**
 - a. Notification and Posting for Non-emergencies
 - b. Notification and Posting for Emergencies
 - c. Record Keeping of Pesticide Applications
 - d. Annual Report of Pesticide Applications
- 8. APPROVED LIST OF LOW-IMPACT PESTICIDES**

Directory:

- **IPM Coordinator: Scott Fish, fishs@estacada.k12.or.us**
- **Facility/Maintenance Coordinator: John Simpson, simpsonj@estacada.k12.or.us**

1. 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 and many children are allergic to yellow jacket stings. The pesticides used to remediate these and other pests can also pose health risks to people, animals, and the environment. These same pesticides may pose special health risks to children due largely to their still-developing organ systems. The health and safety of students and staff is our first priority – and a prerequisite to learning – Estacada School District's policy is 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. For this reason, the **governing body** (board of directors, agency or other body or person having policy-making and general oversight responsibility for the District) adopts this integrated pest management plan for use on our district's campuses.

2. WHAT IS INTEGRATED PEST MANAGEMENT?

Integrated Pest Management, also known as IPM, is a process for achieving long-term, environmentally sound pest suppression through various tactics. Control strategies in an IPM program include structural and procedural improvements to reduce the food, water, shelter, and access used by pests. Since IPM focuses on remediation of the fundamental reasons why pests are here, pesticides are rarely used and only when necessary.

IPM Basics

- **Education and Communication:** The foundation for an effective 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 before we can begin to manage pests effectively. Communication about pest issues is essential. *A protocol for reporting pests or pest-conducive conditions and a record of what action was taken is the most important part of an effective IPM program.*
- **Cultural & Sanitation:** Knowing how human behavior encourages pests helps you prevent them from becoming a problem. Small changes in cultural or sanitation practices can significantly reduce pest populations. Cleaning under kitchen serving counters, reducing clutter in classrooms, putting dumpsters further from the 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.
- **Physical & Mechanical:** 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.
- **Pesticides:** IPM focuses on remediation of the fundamental reasons why pests are here; pesticides should be rarely used and only when necessary.



3. WHAT IS AN INTEGRATED PEST MANAGEMENT PLAN?

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

1. 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;
2. 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;
3. Incorporates the use of sanitation, structural remediation or habitat manipulation or of mechanical, biological, and chemical pest control measures that present a reduced risk or have a low impact and, for the purpose of mitigating a declared pest emergency, the application of pesticides that are not low-impact pesticides;
4. Includes regular monitoring and inspections to detect pests, pest damage and unsanctioned pesticide usage;
5. Evaluates the need for pest control by identifying acceptable pest population density levels;
6. Monitors and evaluates the effectiveness of pest control measures;
7. 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;
8. Excludes the application of pesticides for purely aesthetic purposes;
9. Includes school staff education about sanitation, monitoring, and inspection, and about pest control measures;
10. Gives preference to the use of nonchemical pest control measures;
11. Allows the use of low-impact pesticides if nonchemical pest control measures are ineffective; and
12. Allows the application of a pesticide that is not a low-impact pesticide only to mitigate a declared 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 Estacada School District IPM plan. This plan fleshes out the

required strategy from ORS 634.700 – 634.750. Estacada School District 108

Note: 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. Inform staff in the area where the pests are located that sanitation and exclusion are the primary means of controlling the pests.
2. Establishing an acceptable pest population density.
3. Cleaning up any food debris in the area.
4. Sealing up any cracks or crevices from which we know the pests are coming.
5. Setting out sticky insect monitoring traps in the area using the sticky insect monitoring trap protocol.

4. SCHOOL DISTRICT IPM PLAN COORDINATOR

The *District* designates the Leads Ground Keeper as the IPM Coordinator. The Coordinator is key to successful IPM implementation in our 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. Conducting outreach to the school community (custodians, maintenance, construction, grounds, faculty, and kitchen staff) about the school's IPM plan:** 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 will continually assess and improve the pest monitoring/reporting/action protocol.
- E. Ensure all notification, posting, and recordkeeping requirements in section VII are met when making a pesticide application.**
- F. Maintaining the approved pesticides list as per section VIII.**
- G. Responding to inquiries and complaints about noncompliance with the plan:** Responses to inquiries and complaints will be in writing and kept on record with the Coordinator.

- H. **Placing and checking sticky insect monitoring traps around buildings.**
- I. **Keeping records of pest complaints using pest logs located in the Operations Department office.**
- J. **Developing protocols and provisions for pest avoidance and prevention during construction and renovation projects:** The Coordinator will be involved in drafting any bids, and will have the authority to halt construction projects if protocols and provisions for pest avoidance and prevention are not being met.

The District will also contract with outside pest management companies to support mitigation efforts toward pest management. Any selected company must be an approved Pest Management applicator as well, follow District Policy, District IPM Plan, and State Law. Procurement of services is conducted annually.

5. RESPONSIBILITIES + TRAINING/EDUCATION of SCHOOL EMPLOYEES

ORS 634.700 (3) (i) requires staff education “about sanitation, monitoring and inspection and 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

- **Training (see section IV above)**
- **Responsibilities (see section IV above)**

b. Employee Training: All District employees are required to complete the annual IPM training. The District coordinates through a third-party Learning Management System Organization, who is approved to provide training. IPM training is assigned each school year.

c. Employee Responsibilities

Custodial / Maintenance Staff:

- Attending and completing annual IPM training
- Continually monitoring for pest-conducive conditions during daily work and sealing small holes and cracks when noticed (if this can be done in a short amount of time)
- Reporting pest problems and pest-conducive conditions that he/she cannot resolve in a short amount of time to the IPM Coordinator.
- Reporting to IPM Coordinator on staff who need assistance to reduce clutter and other pest-conducive conditions in their classrooms.
- Confiscating - 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.
- Assisting IPM Coordinator with resolving issues found in annual inspection reports.
- Collaborate with the IPM Coordinator to develop a protocol and priority list with deadlines for sealing holes, installing external door sweeps, and other pest exclusion needs which cannot be done in a short period of time.

Grounds Department

- Attending and completing annual IPM training

- Collaborate with the IPM Coordinator to reduce conditions conducive to weeds, gophers, moles, yellow jackets, and other
- Keep vegetation (including tree branches and bushes) at least 18 inches from building surfaces.
- Proper mulching in landscaped areas to reduce weeds.
- To reduce weeds, proper fertilization, over-seeding, mowing height, edging, drainage, aeration, and irrigation scheduling in turf areas.
- When the decision is made to apply a pesticide, following notification, posting, record-keeping, and reporting protocols in Section VII.

Kitchen Staff

- Attending and completing annual IPM training
- Assuring floor under serving counters and movable equipment is kept free of food and drink debris.
- Avoiding long-term storage or use of cardboard boxes.
- Removing recycled products daily.
- Keeping outside doors closed at all times (except during deliveries and emptying trash).
- Keeping all food items in sealed containers.
- Immediately reporting any sightings of rodents or rodent droppings to the IPM Coordinator, and following up with an email to the Coordinator (for records).
- 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.)

Faculty:

- Attending and completing annual IPM training
- Keeping their classrooms and work areas free of clutter.
- Making sure students clean up after themselves when food or drink is consumed in the classroom.
- Reporting pests and pest-conducive conditions to the IPM Coordinator in person, in-person - by email - In emergency situations, by phone or radio.

School Principal:

- Attending and completing annual IPM training
- Assure that teachers keep their rooms clean and free of clutter in accordance with the IPM Coordinator's instructions.
- Assure 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.
- Collaborate 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 - e-mail - the district's website or other communication platforms.

Other

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

6. IPM PROCESS

A. Monitoring – Reporting – Action Protocol: Monitoring is the most important requirement of ORS 634.700 – 634.750. It is a critical process within the District's IPM Program. It provides recent and accurate information to make intelligent and effective pest

management decisions. It can be defined as the regular and ongoing inspection of areas where pest problems do or might occur. Information gathered from these inspections is always written down.

As much as possible, monitoring should be incorporated into the daily activities of school staff. Staff training on monitoring should include what to look for and how to record and report the information.

All staff will be made aware of the traps and their purpose so they don't disturb them. The IPM Coordinator and/or Custodial/maintenance staff (after proper training by Coordinator) will be responsible for setting them out, checking them once monthly, and replacing them once every four months. Sticky monitoring traps will be placed in the kitchen and any other "pest-vulnerable areas" the Coordinator deems necessary. Kitchen sticky insect traps will be checked monthly (primarily for drain flies, ants, and cockroaches).

During the normal course of their daily work, the IPM Coordinator and custodial/maintenance staff will 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. Any pests or pest-conducive conditions will be reported to the IPM Coordinator either orally, or by email, or using Pest Logs.
6. **Grounds Staff-** During normal daily activities, grounds staff will monitor for invasive weeds, gophers, moles, yellow jackets, and other outdoor pests. These will be reported to the IPM Coordinator orally, or by email, or using Pest Logs.

Sticky monitoring traps for insects: Sticky traps are neither a substitute for pesticides nor an alternative for reducing pest populations, but rather 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.

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 monthly by the Coordinator.

Reporting (pests, signs of pests, and conducive conditions): When staff observes pests or pest-conducive conditions, they should notify Scott Fish by email, jot down in Pest Logs, and call the IPM Coordinator.

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.

Action!

- a. **Structural:** Any items (such as sealing up holes) that custodial/maintenance staff observe that they can resolve should be taken care of and reported to the IPM Coordinator. The Coordinator will keep records of these actions using Pest Logs. If the actions needed are not something that can be accomplished alone with minimal time, the Coordinator will meet with them to develop a plan of action with a proposed deadline for completion based on the severity of the risk or nuisance.

The IPM Coordinator will inform the Facilities/Maintenance Coordinator of actions being taken/work performed and monitor the completion of all work. The Coordinator will keep records of actions taken/work performed using Pest Logs. The Coordinator will keep records of time and money spent to manage pests.

- b. **Grounds:** When pests on grounds reach a threshold established by the IPM Coordinator, action will be taken as per guidelines developed by the Coordinator and Grounds Crew. The Grounds Crew or Coordinator will keep records of actions, time, and money spent to manage pests on grounds.

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 0. The IPM Coordinator will determine acceptable thresholds for other pests

B. Inspections

The IPM Plan Coordinator will conduct an annual inspection using the annual IPM inspection form. 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, after consultation with school faculty and administration, 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, a half a dozen mice or rats running through occupied areas of a school building. The Coordinator will keep records of actions taken using Pest Logs.

D. Annual IPM Report (completed by IPM Plan Coordinator)

In January of each year, the IPM Plan Coordinator will provide the governing body and the OSU School IPM Program Coordinator an annual IPM report. The report will include a summary of data gathered from Pest Logs, or e-mails, or Coordinator notes, as well as costs for PMPs and pesticides (including turf and landscape pesticides). Costs for items such as sealants, fixing screens, door sweeps and other items that would not normally be considered part of pest control will not be recorded.

Prevention and management steps taken that proved to be ineffective and led to the decision to make a pesticide application will be copied and pasted or incorporated into the annual report of pesticide applications (see section VII. D)

7. 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. At the beginning of each school year, all faculty, administrators, staff, adult students and parents will be given a list of potential pesticide products that could be used in the event that other pest management measures are ineffective. 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 email as well as hard copy to adult students and parents.

- 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 prerequisite 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 at, during, before, after time while 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 (via the method most likely to reach the intended recipients) at least 24 hours before the application occurs.

The notice must identify the name, trademark or type of pesticide product, the EPA registration number of the product, the expected area of the application, the expected date of application and the reason for the application.

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.

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

b. Notification and Posting for Emergencies-Important Notes:

- i. *The IPM Plan Coordinator may not declare the existence of a pest emergency until after consultation with the District Administration.*
- ii. *If a pesticide is applied at a campus due to a pest emergency, the Coordinator shall review the IPM plan to determine whether modification of the plan might prevent future pest emergencies, and provide a written report of such to Facility/Maintenance Coordinator.*
- iii. *The Facility/Maintenance Coordinator 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 a pest emergency is declared, the area must be 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 the 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 office at the school where the application occurred and at the office of the IPM Plan Coordinator:

- i. A copy of the label
- ii. A copy of the MSDS
- iii. The brand name and USEPA registration number of the product
- iv. The approximate amount and concentration of product applied
- v. The location of the application
- vi. The pest condition that prompted the application
- vii. The type of application and whether the application proved effective
- viii. The pesticide applicator's license numbers and pesticide trainee or certificate numbers of the person applying the pesticide
- ix. The name(s) of the person(s) applying the pesticide
- x. The dates on which notices of the application were given
- xi. The dates and times for the placement and removal of warning signs
- xii. Copies of all required notices given, including the dates the IPM Plan Coordinator gave the notices

The above records must be kept on file at the office at the school where the application occurred, and at the office of the IPM Plan Coordinator, for at least four years following the application date.

- d. **Annual Report of Pesticide Applications:** In January of each year, the IPM Plan Coordinator will provide the governing body and the ESD School IPM Program Coordinator an annual report of all pesticide applications made the previous year. The report will contain the following for each application:
- i. The brand name and USEPA registration number of the product applied
 - ii. The approximate amount and concentration of product applied
 - iii. The location of the application
 - iv. The prevention or management steps taken that proved to be ineffective and led to the decision to make a pesticide application
 - v. The type of application and whether the application proved effective

9. 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 governing body of a school district shall adopt a list of low-impact pesticides for use with their integrated pest management plan. The governing body may include any product on the list except products that:

- a. Contain a pesticide product or active ingredient that has the signal words “warning” or “danger” 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; or
- 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's active ingredient was last evaluated the classification system used may differ as described above.

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.

The most current list of approved low-impact pesticides is or included as an appendix to this IPM plan.