

Model Integrated Pest Management Plan for Oregon Schools

Tim Stock
OSU School IPM Program Coordinator
Integrated Plant Protection Center, Oregon State University

Notes:

Contributions by: Office of Environmental Public Health, Oregon Health Authority; Vonnie Good, Salem-Keizer School District; Patrick Wolfe, Portland Public School District; Doug Lemley, Eugene School District; Rick Stucky, Oregon School Boards Association; Paul Jepson, Oregon State University; Jeff Jenkins, Oregon State University; Jennifer Snyder, Oregon State University.

Periodic updates will be posted at www.ipmnet.org/tim as experience gained through implementation is used to improve this plan.

Sections **highlighted in yellow** are generic text that must be modified by the specific district or entity using this plan.

Contents

I. INTRODUCTION	4
II. WHAT IS INTEGRATED PEST MANAGEMENT?	4
III. WHAT IS AN INTEGRATED PEST MANAGEMENT PLAN?	5
IV. SCHOOL DISTRICT IPM PLAN COORDINATOR	6
V. IPM DECISION-MAKING PROCESS	7
A. Responsibilities of School District Employees	
1. IPM Plan Coordinator	7
2. Custodial Services	7
3. Maintenance/Construction	8
4. Grounds Department	9
5. Kitchen Staff	9
6. Faculty	9
7. Principal	10
B. Monitoring – Reporting – Action Protocol	10
1. Three levels of monitoring	11
2. Sticky monitoring traps for insects	12
3. Reporting (pests, signs of pests, and conducive conditions)	12
4. Reporting “Pests of Concern”	13
5. Action!	13
6. Acceptable Thresholds	14
C. Inspections	15
D. Pest Emergencies	15
E. Annual IPM Report (completed by IPM Plan Coordinator)	15
VI. REQUIRED TRAINING/EDUCATION	16
A. IPM Plan Coordinator	16

B. Custodial Staff	16
C. Maintenance and Construction Staff	16
D. Grounds Staff	16
E. Kitchen Staff	17
F. Faculty and Principal	17
G. Other Training	17
VII. PESTICIDE APPLICATIONS: REQUIRED NOTIFICATION, POSTING, RECORD KEEPING, AND REPORTING	17
A. Notification and Posting for Non-emergencies	17
B. Notification and Posting for Emergencies	18
C. Record Keeping of Pesticide Applications	19
D. Annual Report of Pesticide Applications	19
VII. APPROVED LIST OF LOW-IMPACT PESTICIDES	19
LIST OF APPENDICES	20

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 also pose health risks to people, animals, and the environment. These same pesticides may pose special health risks to children due in large part to their still-developing organ systems. Because the health and safety of students and staff is our first priority – and a prerequisite to learning – it is the policy of XXXXXX 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. For this reason, the **governing body** (board of directors, agency or other body or person having policymaking and general oversight responsibility for a community college district, education service district, school district, other unit of education governance, private school or other educational entity) adopts this integrated pest management plan for use on the campuses of our district.

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. Since IPM focuses on remediation of the fundamental reasons why pests are here, pesticides are rarely used and only when necessary.

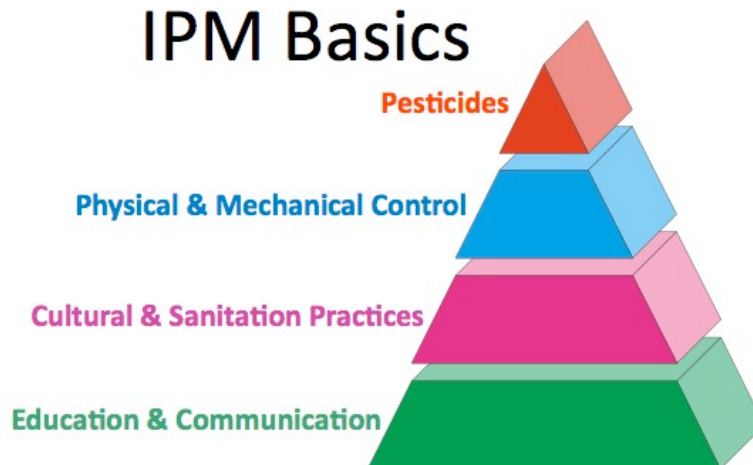
IPM Basics

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 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.

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.



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 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;

(D) Includes regular 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 if nonchemical pest control measures are ineffective; and

(L) 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 **our school district's** IPM plan. This plan fleshes out the required strategy from ORS 634.700 – 634.750 for **our school district**.

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, several steps must be taken before **any** “routine” applications are allowed:

- 1) Staff must be educated on sanitation, monitoring, and exclusion as the primary means to control the pest.
- 2) An acceptable pest population density level must be established.
- 3) The use of sanitation, structural remediation or habitat manipulation, or of mechanical or biological control methods must be incorporated into the management strategy of the pest.
- 4) Documentation that the above steps were ineffective.
- 5) The pesticide label must be read thoroughly to make sure the pesticide will be used in strict compliance with all label instructions.

IV. SCHOOL DISTRICT IPM PLAN COORDINATOR

Note: ORS 634.720 states that the Coordinator “must be an employee of the governed district, unit, school or entity, unless the governing body delegates pest management duties to an independent contractor.”

The **governing body** designates **XXXX** as the IPM Plan 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 shall include at least a general review of IPM principles and the requirements of ORS 634.700 – 634.750.

B. Conducting outreach to the school community (custodians, maintenance, construction, grounds, faculty, and kitchen staff) about the school's IPM plan;

The IPM Plan Coordinator (or designee) will provide training as outlined in Section VII below.

C. Overseeing pest prevention efforts;

The Coordinator will work with custodians, teachers, and maintenance 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 V) is followed;

The Coordinator will continually assess and improve the pest monitoring/reporting/action protocol.

E. Assuring that all notification, posting, and record-keeping requirements in section VI are met when the decision to make a pesticide application is made;

F. Maintaining the approved pesticides list as per section VIII; and

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.

V. IPM DECISION-MAKING PROCESS

A. Responsibilities of School District Employees

1. IPM Plan Coordinator Responsibilities

See Section IV above

2. Custodial Services Responsibilities

Custodial Services staff are responsible for the following:

1) Attending annual IPM training provided by the IPM Plan Coordinator (or designee).

2) Placing and checking sticky insect monitoring traps in staff lounge, cafeteria, and kitchen as per the IPM Plan Coordinator's instructions.

- 3) Keeping records of pest complaints using pest logs placed in the staff lounge, cafeteria, and kitchen.
- 4) Assuring floor under serving counters is kept free of food and drink debris.
- 5) Sealing up small cracks or holes when reported by teachers or noticed by custodian when this can be done in a short time (e.g. less than 15 minutes).
- 6) Recording his/her pest management actions in the pest logs.
- 7) Reporting pest problems that he/she cannot resolve in less than 15 minutes to the IPM Plan Coordinator.
- 8) Reporting teachers to the IPM Plan Coordinator who repeatedly refuse to reduce clutter and other pest-conducive conditions in their classrooms.
- 9) Reporting pest-conducive conditions to the IPM Plan Coordinator if the custodian cannot fix them in less than 15 minutes.
- 10) Confiscating any unapproved pesticides (such as aerosol spray cans) discovered during inspections or regular duties and delivering them to the IPM Plan Coordinator.
- 11) Following up on issues found in annual inspection report as instructed by the IPM Plan Coordinator (IPM Plan Coordinator will determine which schools receive annual inspections based on pest and pesticide use history).

3. Maintenance/Construction Responsibilities

Staff involved in facilities maintenance and construction is responsible for working with the IPM Plan Coordinator to ensure their daily tasks, projects and operations enhance effective pest management. This includes:

- 1) Receiving training from the IPM Plan Coordinator (or designee of the Coordinator) on the basic principles of IPM, sealing pest entry points, and sanitation during construction projects.
- 2) Continually monitoring for pest conducive conditions during daily work, and sealing small holes and cracks when noticed (if they can be sealed in a short period of time – e.g. 15 minutes).
- 3) Working with the 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 (e.g. 15 minutes).
- 4) Developing protocols and provisions for pest avoidance and prevention during construction and renovation projects. The IPM Plan Coordinator has the authority to

halt construction projects if these protocols and provisions are not being met.

4. Grounds Department Responsibilities

Grounds crews are responsible for:

- 1) Attending annual IPM training provided by the IPM Plan Coordinator (or designee).
- 2) Keeping vegetation (including tree branches and bushes) at least three feet from building surfaces.
- 3) Proper mulching in landscaped areas to reduce weeds.
- 4) Proper fertilization, over-seeding, mowing height, edging, drainage, aeration, and irrigation scheduling in turf areas to reduce weeds (see OSU turf management publications [EC 1521](#), [EC 1278](#), [EC 1550](#), [EC 1638-E](#), and [PNW 299](#) - available free online at <http://extension.oregonstate.edu/catalog/>).
- 5) When the decision is made to apply a pesticide, following notification, posting, record-keeping and reporting protocols in Section VI.

5. Kitchen Staff Responsibilities

Kitchen staff are responsible for:

- 1) Attending annual IPM training provided by the IPM Plan Coordinator (or designee).
- 2) Assuring floor under serving counters is kept free of food and drink debris.
- 3) Promptly emptying and removing corrugated cardboard materials.
- 4) Keeping exterior kitchen doors closed.
- 5) Reporting pest conducive conditions that require maintenance (e.g., leaky faucets, dumpster too near building, build-up of floor grease requiring spray-washing, etc.) to proper staff either orally or using pest logs.
- 3) Participating in any inspections conducted by custodian or IPM Plan Coordinator.
- 4) Checking sticky trap monitors once per month for cockroaches or drain flies. Immediately reporting these pests and any sightings of rodents or rodent droppings to custodian and marking them in pest log.

6. School Faculty Responsibilities

School faculty are responsible for:

- 1) Attending annual basic IPM training provided by the IPM Plan 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 custodian, either orally or via the pest logs.
- 5) Following first steps of protocol for ant management before notifying the custodian (clean up any food the ants are eating, kill visible ants, wipe down area where ants were with soapy water, notify custodian only if ants continue to be found after following these steps).

7. School Principal Responsibilities

The School Principal is responsible for:

- 1) Scheduling time for teachers to receive annual training provided by the IPM Plan Coordinator (or designee).
- 2) Attending annual IPM training for teachers.
- 3) Assuring that teachers keep their rooms clean and free of clutter in accordance with the IPM Plan Coordinator's instructions.
- 4) Assuring that all faculty, administrators, staff, adult students and parents receive the annual notice (provided by the IPM Plan Coordinator) of potential pesticide products that could be used on school property as per Section VI.
- 5) Working with the IPM Plan Coordinator to make sure all notifications of pesticide applications reach all faculty, administrators, staff, adult students and parents **(via the method most likely to reach the intended recipients)**.
- 6) Assuring that all staff fulfill their role as outlined in the district's IPM plan (reducing pest conducive conditions, participation in monitoring and pest log recording, attendance at IPM training(s), cooperation with the district's IPM Plan Coordinator).

B. Monitoring – Reporting – Action Protocol

Monitoring is the most important requirement of ORS 634.700 – 634.750. It is the backbone of **our school 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.

1. Three levels of monitoring

There are three levels of monitoring:

- 1) Casual observing/looking with no record keeping is not helpful
- 2) Casual observing/looking with written observations can be useful
- 3) Careful inspections with written observations is always useful

Level 2 monitoring (all staff)

All staff will be trained to improve their “casual observing/looking” to level 2, and to report any pests and pest-conducive conditions they observe. Level 2 monitoring is conducted by faculty, administration, maintenance/construction, kitchen staff, school nurses, etc.

After a brief (15 – 20 minute) training by the IPM Plan Coordinator (or designee) on pests and pest conducive conditions, staff will be expected to report pests or pest conducive conditions they observe during the normal course of their daily work. Reporting will be done by jotting observations down in a Pest Log (placed in staff lounge or other) or reporting them to the custodian for him/her to write them down. Custodial, maintenance, and kitchen staff are expected to set and/or check sticky monitoring traps as per the district’s IPM plan.

Level 3 monitoring (Coordinator and Custodial staff)

The IPM Plan Coordinator (or designee) and Custodians will periodically conduct monitoring at level 3. Coordinator and Custodial staff will monitor structures:

- Pest conducive conditions inside and outside the building (structural deterioration, holes that allow pests to enter, conditions that provide pest harborage)
- The level of sanitation inside and out (waste disposal procedures, level of cleanliness inside and out, conditions that supply food and water to pests)
- The amount of pest damage and the number and location of pest signs (rodent droppings, termite shelter tubes, cockroaches caught in sticky traps, etc.)
- Human behaviors that affect the pests (working conditions that make it impossible to close doors or screens, food preparation procedures that provide food for pests, etc.)
- Their own management activities (caulking/sealing, cleaning, setting out traps, treating pests, etc.) and their effects on the pest population.

Level 3 monitoring (Grounds staff)

Grounds staff will monitor Turf and Landscape:

- The condition of the plants (vigor and appearance)
- The amount of plant damage
- pH, phosphorus, and potassium levels of turf (soil test every 3-4 years in **XXXX locations**)
- Kind and abundance of pests (weeds, insects, mites, moles, etc.) as well as natural enemies (ladybugs, spiders, lacewing larvae, syrphid fly larvae, etc.)
- Weather conditions (record any unusually dry, hot, wet, or cold weather in the past few weeks)
- Proper drainage
- Human behaviors that affect the plants or pests (foot traffic that compacts the soil, physical damage to plants caused by people, insistence on having certain plants grow in inappropriate situations, etc.)
- Management activities (pruning, fertilizing, mulching, aeration, treating pests, etc.) and their effects on the plants and the pest population.

2. 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.

All staff will be made aware of the traps and their purpose so they don't disturb them. Custodians will be responsible for setting them out and checking them once per month (approximately 10 minutes), and replacing them once every four months (approximately 30 minutes). Kitchen staff will be responsible for checking those in the kitchen primarily for cockroaches and drain flies once per week (approximately 4 minutes).

After receiving training in the use of pest monitoring sticky traps by the IPM Plan Coordinator (or designee), custodial staff will be responsible for checking traps placed in pre-determined "pest-vulnerable areas" in the staff room, kitchen, and cafeteria (**other areas that are often pest-vulnerable are: special education or kindergarten classrooms, home economics/life skills classrooms, concession stands, classrooms with animals/plants, custodial closets/storage**) on a monthly basis, and replacing them every four months. If custodial staff cannot interpret what they find in the monitors they will contact the IPM Plan Coordinator for assistance (E-mailing a close-up digital photo of the unfolded sticky trap would help!).

3. Reporting (pests, signs of pests, and conducive conditions)

When staff observe pests or pest conducive conditions they should jot them down in a

Pest Log or report them to the custodian for him/her to write them down.

4. 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 immediately tell the building custodian. The custodian must contact the IPM Plan Coordinator immediately.

5. Action!

a) Structural

Any items (such as sealing up holes) that maintenance/construction staff or custodial staff observe (or see on Pest Logs) that they can resolve in less than **15 minutes** should be taken care of and this follow up action should be noted in the Pest Log.

Custodial staff will review Pest Logs **twice** per week. Any items he/she cannot resolve **in less than 15 minutes** should be marked in order of priority.

Pest Logs will be faxed to the IPM Plan Coordinator once per week. The Coordinator will determine further actions to be taken and when.

If the actions needed are not something the Coordinator can accomplish alone or with minimal assistance, the Coordinator will meet with **maintenance/construction and/or the Pest Management Professional (PMP)** to develop a protocol and priority list with deadlines for sealing holes, installing external door sweeps, and other pest exclusion or pest management needs. The Coordinator will then generate a work order with a proposed deadline for completion based on the severity of the risk or nuisance.

The Coordinator will monitor the completion of the work order. If the work is not completed by the proposed deadline, the Coordinator will write a follow-up e-mail to **maintenance/construction and/or the Pest Management Professional (PMP), with a Cc to the governing body.** Upon completion of the work, the Coordinator and the school custodian will be notified.

The Coordinator will keep records of time and money spent to manage the pest, including copies of original receipts.

Small Ants:

When staff observe a small number of ants (**e.g. under 10 ants**) they must:

- 1st) Spend two minutes trying to find out where the ants are coming from
- 2nd) Kill the ants with a paper towel or similar

- 3rd) Remove any food or liquid the ants were eating
- 4th) Wipe down the area with soapy water or disinfectant to remove pheromone trails
- 5th) Jot down the above in the Pest Log

If the ants come back or there are more than a small number (e.g. under 10 ants) of them:

- 1st) Spend two minutes trying to find out where the ants are coming from
- 2nd) Jot down the above in the Pest Log
- 3rd) Ask the custodian to come with vacuum and sealant as soon as he/she is able

The custodian will:

- 1st) Spend two minutes trying to find out where the ants are coming from
- 2nd) Vacuum up the ants and any food debris nearby (vacuum up a tablespoon of cornstarch to kill most of the ants in the vacuum bag, then put the vacuum bag inside plastic garbage bag, seal it, and dispose of it properly)
- 3rd) Seal up the crack or hole where the ants were coming from (do what can be done in less than 15 minutes)
- 4th) Wipe down the area with soapy water or disinfectant to remove pheromone trails
- 5th) Jot down the above in the Pest Log

To avoid a proliferation of small ants and/or unnecessary applications of pesticides, the routine use of ant baits is not permitted without first:

- 1st) Educating staff on sanitation, monitoring, and exclusion as the primary means to control the ants.
- 2nd) Establishing an acceptable pest population density (e.g. 10 ants).
- 3rd) Improving sanitation (e.g. cleaning up crumbs and other food sources) and structural remediation (sealing up cracks or holes where the ants are coming from).

For more detailed information on small ants, see Appendix 1a.

b) Grounds

When pests on grounds reach a threshold established by the Grounds staff lead and the IPM Plan Coordinator, action will be taken as per the matrices in Appendix 1-f.

6. Acceptable Thresholds (pest population density levels)

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.

Acceptable thresholds for other pests will be determined by the IPM Plan Coordinator and the governing body.

C. Inspections

1) Routine Inspections

The IPM Plan Coordinator will conduct routine inspections of different schools throughout the year (schedule and schools to be determined by the governing body and the Coordinator). Site custodians are required to accompany the Coordinator during the inspections. The inspections will typically last one to two hours and will focus on compliance with this plan and an inspection of the kitchen, staff room, and any other place of concern. After each routine inspection the Coordinator will write a one-page report on findings and recommendations. The report will be submitted to the school principal and custodian.

2) Annual Inspections

The IPM Plan Coordinator will conduct annual inspections at individual schools. Site custodians are required to assist the Coordinator with the annual inspection. The annual inspections will be more thorough than the routine inspections, and will use the Annual IPM Inspection Form (see Appendix 2) to guide the inspections. The specific schools to be inspected will be determined by the IPM Plan Coordinator and governing body based on a review of the annual number of pest problems and pesticide applications reported in the Annual IPM Report and Annual Report of Pesticide Applications.

D. 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.

E. 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, 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. See Appendix 9 for a template for the annual IPM report.

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)

VI. REQUIRED TRAINING/EDUCATION

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 Training

ORS 634.720 (2) requires that the IPM Plan Coordinator “shall complete not less than six hours of training each year. The training shall include at least a general review of IPM principles and the requirements of ORS 634.700 to 634.750.”

Content should include health and economic issues associated with pests in schools, exclusion practices, pest identification and biology for common pests, common challenges with monitoring-reporting-action protocols, proper use of sticky monitoring traps for insects, and hands-on training on proper inspection techniques.

Contact your Education Service District or the OSU School IPM Program for information on OSU-approved training courses.

B. Training for Custodial Staff

The IPM Plan Coordinator (or a designee of the Coordinator) will train custodial staff at least annually on sanitation, monitoring, inspection, and reporting, and their responsibilities as outlined in Section V. A.

C. Training for Maintenance and Construction Staff

The IPM Plan Coordinator (or a designee of the Coordinator) will train maintenance staff at least 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 in Section V. A.

D. Training for Grounds Staff

The head of grounds staff (or designee) will train grounds staff at least once per year. Each year before the training, the head of grounds staff will meet with the IPM Plan Coordinator to review the annual report of pesticide applications and plan training for all grounds staff. The annual training will review this IPM Plan (especially grounds department responsibilities outlined in Section V.A.) and data from the annual report related to pesticide applications by grounds crew. It will also review the OSU turf management publications [EC 1521](#), [EC 1278](#), [EC 1550](#), [EC 1638-E](#), and [PNW 299](#) (available free online at <http://extension.oregonstate.edu/catalog/>), and the matrices in Appendix 1-g. Grounds staff will also be trained in basic monitoring for common pests on grounds.

E. Training for Kitchen Staff

The IPM Plan Coordinator (or a designee of the Coordinator) will train kitchen staff at least once per year on the basic principals of IPM and their responsibilities as outlined in Section V. A.

F. Training for Faculty and Principal

The IPM Plan Coordinator (or a designee of the Coordinator) will train faculty and principals at least once per year on the basic principals of IPM and their responsibilities as outlined in Section V. A. These short (15 – 20 minutes) training are arranged by the Coordinator with individual principals when openings in their school Faculty Meeting schedules permit.

G. Other Training

Basic training on the principals of IPM and the main points of this IPM Plan should also be provided to school nurses, administrative staff, superintendents, and students. Coaches who use athletic fields should be given an overview of basic monitoring and IPM practices for turf so they understand key pest problems to look out for and when to report them.

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. 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 e-mail 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 pre-requisite to the approval of any application of a low-risk pesticide. This documentation will remain on file with the IPM Plan Coordinator and at the office of the head custodian where the application takes place.*

No non-emergency pesticide applications may occur in or around a school until **after 3:30 PM on a Friday 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:

- 1) *The IPM Plan Coordinator may not declare the existence of a pest emergency until after consultation with school faculty and administration.*
- 2) *If a pesticide is applied at a campus due to a pest emergency, the Plan 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 the governing body.*
- 3) *The 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 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 IPM Plan 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 head custodian's office at the school where the application occurred, and at the office of the IPM Plan Coordinator:

- A copy of the label
- A copy of the MSDS
- The brand name and USEPA registration number of the product
- The approximate amount and concentration of product applied
- The location of the application
- The pest condition that prompted the application
- The type of application and whether the application proved effective
- The pesticide applicator's license numbers and pesticide trainee or certificate numbers of the person applying the pesticide
- The name(s) 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 given, including the dates the IPM Plan Coordinator gave the notices

The above records must be kept on file at the head custodian's 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 OSU School IPM Program Coordinator an annual report of all pesticide applications made the previous year. The report will contain the following for each application:

- The brand name and USEPA registration number of the product applied
- The approximate amount and concentration of product applied
- The location of the application
- The prevention or management steps taken that proved to be ineffective and led to the decision to make a pesticide application
- The type of application and whether the application proved effective

VII. 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 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 available on our website at [XXXXXXXXXX](#)

The process for creating and updating [our school district's](#) approved list is available at this link [XXXXXXXXXX](#)

LIST OF APPENDICES

Appendix 1 Pest Management for Specific Pests [\(STILL TO COME\)](#)

(Lifecycle, What-Where-How they Eat/Drink/Shelter, Monitoring, Prevention, Threshold Levels, Management Options, Evaluation of Options Chosen for Specific Pests)

- a-Ants (Small Ants)
- b-Ants (Carpenter Ants)
- c-Bats
- d-Bed Bugs
- e-Nesting birds (starlings, sparrows, swallows, pigeons)
- f-Geese
- g-Grounds Pests
- h-Mice (House Mouse)
- i-Rats (Norway Rat)
- j-Yellow Jackets and European Paper Wasps

Appendix 2 Annual Inspection Form

Appendix 3 Pest Logs

Appendix 4 Outlines of Training for Custodians, Maintenance/Construction Staff, Grounds Staff, Kitchen Staff, and Faculty

Appendix 5 Template for annual fall notification of potential pesticides to be used
(STILL TO COME)

Appendix 6 Pesticide Application Notification Form

Appendix 7 Pesticide Application Posting Sign

Appendix 8 Pesticide Application Recordkeeping Form

Appendix 9 Template for Annual IPM Report

Appendix 10 Template for Annual Pesticide Application Report **(STILL TO COME)**

Appendix 11 Hiring an Outside Contractor

- In-House vs. Contractor

- Bid Specifications – Important Things to Remember

- Sample Bid

Appendix 12 References and Source Materials