

PORTLAND COMMUNITY COLLEGE

Integrated Pest Management Plan



I. INTRODUCTION

Structural and landscape pests can pose significant problems in schools and colleges. Pests such as mice and cockroaches can trigger asthma. Mice and rats are vectors of disease. Many people 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 and younger students due in large part to their still-developing organ systems. The health and safety of students and staff is our first priority and a prerequisite to learning. The policy of Portland Community College is to approach pest management with the least possible risk to students and staff. In addition, Senate Bill 637 incorporated into ORS Chapter 634 requires all school districts to implement integrated pest management in their schools. For this reason, the PCC Board of Directors adopts this Integrated Pest Management plan for use on the campuses and centers throughout its 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 Plan 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 only used when necessary.



Education & Communication: The foundation for an effective IPM Plan is education and communication. It is essential to know what conditions can cause pest problems, why and how to monitor for pests, proper identification, and pest behavior and biology *before* pests can be managed 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 Plan.

Cultural and Sanitation Practices: Knowing how human behavior encourages pests helps to 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 the kitchen door or 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 Control: 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 controls.

Pesticides: IPM focuses on remediation of the fundamental reasons why pests are here; and that pesticides should be used only when necessary.

III. WHAT IS AN INTEGRATED PEST MANAGEMENT PLAN?

The College's IPM Plan incorporates all required strategies from ORS 634.700-634.750 that define 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:
 1. Protect the health and safety of students, staff, and faculty;
 2. Protect the integrity of campus buildings and grounds;
 3. Maintain a productive learning environment; and
 4. Protect the health of the local ecosystems;
- (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) Educates and trains staff 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.

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, the following steps must be taken before **any** “routine” application is 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 of mechanical or biological control methods must be incorporated into the management strategy of the pest;
4. The pesticide label must be read thoroughly to make sure the pesticide will be used in strict compliance with all label instructions; and
5. Documentation must be on file that the above steps were ineffective.

The PCC IPM Plan **does not apply** to the application of a germicide, disinfectant, sanitizer, deodorizer, antimicrobial agent, or insecticidal soap that are pesticides as long as the application of these products is not inconsistent with the goals of the PCC IPM Plan.

The PCC IPM Plan **does not apply** to off-campus/center buildings, structures, or property, notwithstanding any incidental use for instruction.

IV. IPM PLAN COORDINATOR

NOTE: ORS 634.720 states that the IPM 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 College Board of Directors designates the Facilities Management Services Grounds

Manager as the College's IPM Plan Coordinator. The Coordinator is the key to a successful IPM Plan implementation at the College, and is given the authority for overall implementation and evaluation of this IPM Plan. The IPM Plan Coordinator:

- (A) **Attends not less than six hours of IPM training each year** - training shall include at least a general review of IPM principles and the requirements in ORS 634.700 - 634.750.
- (B) **Conducts outreach to the College community (e.g., custodians, maintenance, construction, grounds, faculty, and kitchen staff) about the College's IPM Plan** – and the IPM Plan Coordinator (or designee) provides for the training outlined in Section VI below.
- (C) **Oversees pest prevention efforts** - the IPM Plan Coordinator (or designee) works with custodians, faculty, and maintenance staff to reduce clutter and food in the classrooms, and to seal up pest entry points.
- (D) **Assures that the decision-making process in Section V for implementing the College's IPM Plan is followed** - the IPM Plan Coordinator (or designee) continually assesses and improves the pest monitoring, reporting, and action protocols.
- (E) **Assures that all notification, posting, and record-keeping requirements in Section VI are met when a decision to make a pesticide application is made:**
- (F) **Maintains the approved pesticides list as per Section VIII;** and
- (G) **Responds in writing to inquiries and complaints about noncompliance with the College's IPM Plan;** these are kept on file with the IPM Plan Coordinator.

V. IPM PLAN DECISION-MAKING PROCESS

(A) RESPONSIBILITIES:

1. **IPM Plan Coordinator** – see Section IV above.
2. **Custodial Services Staff** – are responsible to:
 - a. Attend annual IPM training provided by the IPM Plan Coordinator (or designee).
 - b. Check sticky insect monitoring traps in staff lounges/break rooms, cafeteria, and kitchen as per the IPM Plan Coordinator's instructions.
 - c. Initiate work orders for pest complaints using FMS-CMMS through the Service Request Center (SRC).
 - d. Assure that floors under serving counters are kept free of food and drink debris.
 - e. Identify and report small cracks or holes when noticed using the FMS SRC.

- f. Record his or her pest management actions on the work order using the FMS-CMMS-Aim program through the SRC.
 - g. Report pest problems to the IPM Plan Coordinator using the FMS SRC.
 - h. Report staff who repeatedly refuse to reduce clutter and other pest-conductive conditions in their areas to the IPM Plan Coordinator.
 - i. Report pest-conductive conditions to the IPM Plan Coordinator using the FMS SRC.
 - j. Report any pesticides (such as aerosol spray cans) discovered during an inspection or during regular duties using the FMS SRC, and also report them to the IPM Plan Coordinator.
 - k. Follow up on issues found in an annual inspection report as instructed by the IPM Plan Coordinator. IPM Plan Coordinator will determine which campuses are to receive annual inspections based on pest and pesticide use history.
3. **Maintenance/Construction Staff** – are involved in facilities maintenance and construction and are responsible for working with the IPM Plan Coordinator to ensure that their daily tasks, projects, and operations enhance the College's effective IPM Plan by:
- a. Training received from the IPM Plan Coordinator (or designee) on the basic principles of the IPM Plan, sealing pest entry points, and sanitation during construction work.
 - b. Continually monitoring for pest conducive conditions during their daily work, and seal small holes and cracks when noticed; larger openings are to be reported for scheduled repairs through the FMS Service Request Center.
 - c. Working with the IPM Plan Coordinator to develop a protocol and priority list with deadlines for sealing holes, installing external door sweeps, and other pest exclusion needs that cannot be done in a short period of time.
 - d. Developing protocols and provisions for pest avoidance and prevention during construction and renovation projects. Note: The IPM Plan Coordinator has the authority to stop construction projects if these protocols and provisions are not being met.
4. **Grounds Staff** – are responsible to:
- a. Attend annual IPM training provided by the IPM Plan Coordinator (or designee).
 - b. Keep vegetation (including tree branches and bushes) at least two feet from building surfaces.

- c. Use proper mulching in landscaped areas to reduce weeds.
- d. Reduce weeds with proper fertilization, over-seeding, mowing height, edging, drainage, aeration, and irrigation scheduling in turf areas. (See 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/>).
- e. Follow notification, posting, record-keeping, and reporting protocols as indicated in Section VI when a decision is made to apply a pesticide.

5. **Kitchen Staff** – are responsible to:

- a. Attend annual IPM training provided by the IPM Plan Coordinator (or designee).
- b. Assure that floors under serving counters are kept free of food and drink debris.
- c. Promptly empty and remove corrugated cardboard materials.
- d. Keep exterior kitchen doors closed.
- e. Report pest conducive conditions that require maintenance (e.g., leaky faucets, dumpster is too near building, build-up of floor grease requiring spray- washing, etc.) to the proper staff using the FMS SRC.
- f. Participate in inspections conducted by the IPM Plan Coordinator (or designee).
- g. Routinely check sticky traps for cockroaches or drain f lies, and immediately report these pests and any sightings of rodents or rodent droppings using the FMS SRC.

6. **Faculty** – are responsible to:

- a. Review the IPM Plan communications sent at the beginning of each term.
- b. Keep their classrooms and work areas free of clutter.
- c. Assure that students clean up after themselves when food or drink is consumed in the classroom.
- d. Report pests and pest conducive conditions using the FMS SRC.

7. **Campus Administration** – are responsible to:

- a. Assure that staff keeps their rooms clean and free of clutter in accordance with the IPM Plan Coordinator's instructions.

- b. Work with the IPM Plan Coordinator and Campus Community Relations Managers to facilitate notifications of pesticide applications using email and the College website to reach faculty, administrators, staff, and students.
- c. Assure that all staff meet their responsibilities as outlined in the College's IPM Plan by reducing pest conducive conditions, participating in monitoring and pest reporting, attending IPM training(s), and cooperating with the College's IPM Plan Coordinator.

(B) MONITORING AND REPORTING

Monitoring is the most important requirement of ORS 634.700 - 634.750. It is the backbone of the College's IPM Plan. Monitoring 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 monitoring is always recorded in writing.

As much as possible, monitoring should be incorporated into the daily activities of College staff. Staff training on monitoring should include what to look for and how to report the information in writing using the FMS SRC.

1. Monitoring Levels:

- **Level 1:** Casual observing or looking with no record keeping; this is not useful. ○
- **Level 2:** Casual observing or looking with written observations; this can be useful.
- **Level 3:** Careful inspections with written observations; this is always useful.

Level 2 monitoring is for most staff (faculty, administration, FMS staff, kitchen staff, etc.) – staff will be trained to improve their “casual observing or looking” monitoring to a Level 2, and to report any pests and pest-conducive conditions that they observe by using the FMS SRC.

Level 3 monitoring is done by:

- a. IPM Coordinator and FMS staff who will periodically monitor structures for:
 - Pest conducive conditions inside and outside the building (e.g., structural deterioration, holes that allow pests to enter, conditions that provide pest harborage, etc.);
 - The level of sanitation inside and out (e.g., waste disposal procedures, level of cleanliness inside and out, conditions that supply food and water to pests, etc.);
 - The amount of pest damage and the number and location of pest signs (e.g., rodent droppings, termite shelter tubes, cockroaches caught in sticky traps, etc.);
 - Human behavior that affects the pests (e.g., working conditions that make it impossible to close doors or screens, food preparation procedures that provide food for pests, etc.); and
 - Maintenance activities (e.g., caulking and sealing, cleaning, setting out traps, treating pests, etc.) and these effects on the pest population.

- b. Grounds staff who will routinely monitor turf and landscape areas for:
- The condition of the plants (vigor and appearance);
 - The amount of plant damage;
 - pH, phosphorus, and potassium levels of turf (soil testing every 3-4 years in various locations);
 - Kind and abundance of pests (e.g., weeds, insects, mites, moles, etc.) as well as natural enemies (e.g., ladybugs, spiders, lacewing larvae, syrphid fly larvae, etc.);
 - Weather conditions (records of any unusually dry, hot, wet, or cold weather in the past few weeks);
 - Proper drainage;
 - Human behaviors that affect the plants or pests (e.g., foot traffic that compacts the soil, physical damage to plants caused by people, insistence on having certain plants grown in inappropriate situations, etc.); and
 - Maintenance activities (e.g., pruning, fertilizing, mulching, aeration, treating pests, etc.) and their effects on the plants and the pest population.

2. Monitoring with Sticky Traps

Sticky traps are neither a substitute for pesticides nor an alternative for reducing pest populations, but they are a diagnostic tool to aid in identifying a pest's presence, the reproductive stage, the likely direction pests are coming from, and the number of pests. The College hires an outside contractor for sticky traps.

3. Reporting Pests

When staff observes pests, signs of pests, or pest conducive conditions they should notify FMS using the FMS SRC.

4. Reporting a “Pest 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 and 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 (a significant nuisance pest).

When pests of concern or their droppings, nests, etc. are observed, staff should immediately contact FMS using the FMS SRC. The SRC must contact the IPM Plan Coordinator (or designee) immediately.

5. Action!

- a. Structural – an action, such as sealing up a hole, that maintenance, construction or custodial staff observes that they can resolve quickly should be taken care of. The action should then be reported using the FMS SRC.

If the action needed is not something that the IPM Plan Coordinator can accomplish alone or with minimal assistance, the Coordinator will meet with maintenance, custodial, grounds, or other professional staff to develop a protocol and priority list with deadlines for sealing the holes, installing external door sweeps, and other pest exclusion or pest management needs.

- b. Grounds – When ground pests reach an acceptable threshold* established by the Grounds staff and the IPM Plan Coordinator, action will be taken as per the matrices in Appendix 1-g.

6. Acceptable Threshold*

An acceptable threshold is the number of pests (pest population density level) that can be tolerated before acting. 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 in conjunction with Safety & Risk Services.

(C) INSPECTIONS

The IPM Plan Coordinator will conduct routine inspections of campuses and centers throughout the year (schedule for the campus/center to be determined by the Coordinator). Site custodial managers are required to accompany the Coordinator during these inspections. The inspections will focus on compliance with the College’s IPM Plan, with an inspection of the kitchen, staff rooms, childcare facility, and any other area of concern. After each routine inspection the Coordinator will record the findings and recommendations which will be kept on file. (See Appendix 2 – Inspections).

(D) PEST EMERGENCIES (also see Section VII. (B) below)

IMPORTANT – When a pest emergency is declared, the area must be evacuated and cordoned off before taking any other action!

When the IPM Plan Coordinator, after consultation with campus leadership, determines that the presence of a pest or pests immediately threatens the health or safety of students, staff, 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 staff or students, or a half a dozen mice or rats running through an occupied area of a building.)

VI. REQUIRED TRAINING

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 the College’s IPM Plan principles and strategy as outlined in Sections II and III.

(A) IPM Plan Coordinator

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 at campuses, 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.

(B) Custodial Staff

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

(C) Maintenance/Construction Staff

The IPM Plan Coordinator (or designee) 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) Grounds Staff

Grounds staff will be trained in basic monitoring for common pests on grounds in quarterly meetings through best practices.

The IPM Plan Coordinator (or designee) will train grounds staff at least once per year. Each year before training, the grounds manager will meet with the grounds department to review the FMS SRC work orders. The annual training will review this IPM Plan (especially grounds department responsibilities outlined in Section V. (A). It will also review the matrices in Appendix 1 and 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/>).

(E) Kitchen Staff

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

(F) Faculty and Other Staff

The IPM Plan Coordinator (or designee) will communicate with faculty at least once per year on the basic principles of the College’s IPM Plan and their responsibilities as outlined in Section V. (A).

VII. PESTICIDE APPLICATIONS - REQUIRED NOTIFICATION, POSTING, RECORDS, AND REPORTING

Any pesticide application (this includes weed control products, ant baits, and all professional and over-the-counter products) used on College property must be made by a licensed commercial or public pesticide applicator. College staff will 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 or the College 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 prerequisite to the approval of any application of a low-risk pesticide. This documentation will remain on file on site with the IPM Plan Coordinator (or designee) and within the FMS CMMS Aim.

If the labeling of a pesticide product specifies a re-entry time, a pesticide may not be applied to an area of the campus where the College expects students to be present before expiration of that re-entry time. If the labeling does not specify a re-entry time, a pesticide may not be applied to an area of a campus where the College expects students to be present until the IPM Plan Coordinator (or designee) determines an appropriate re-entry time based on the area, ventilation, and whether the area will be cleaned before students are present.

The IPM Plan Coordinator (or designee) will give written notice via email or the College website of a proposed pesticide application 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(s) and time(s) of the application, and the reason for the application.

The IPM Plan Coordinator (or designee) shall place notice signs around pesticide application areas beginning no later than 24 hours before the application occurs.

A notice 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 re-entry time, and provide the telephone number of the IPM Plan Coordinator (or designee).

(B) Notification and Posting for Emergencies

IMPORTANT NOTES:

- ✓ **The IPM Plan Coordinator may not declare the existence of a pest emergency until after consultation with College administration.**
- ✓ **If a pesticide is applied at a campus/center 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 College administration and the FMS Director.**

✓ **The FMS Director shall review and direct formal action on any recommendations in the report in consultation with College administration.**

1. The declaration of the existence of a pest emergency is the only time a non low impact pesticide may be applied.
2. If a pest emergency is declared, the area must be evacuated and cordoned off before taking any other steps.
3. 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 (or designee) shall send the notice no later than 24 hours after the application occurs.
4. The IPM Plan Coordinator (or designee) shall ensure that notification signs are placed 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 noted above.

(C) Records of Pesticide Applications

The IPM Plan Coordinator (or designee) shall keep a copy of the following pesticide product information using the Pesticide Application Record form; must be on file for 4 years at the site where the application occurred. The form includes:

- A copy of the label;
- A copy of the SDS – refer to the College’s Dolphin SDS system (IHS);
- The brand name and EPA 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; and
- Copies of all required notices given, including the dates.

VIII. APPROVED LIST OF LOW-IMPACT PESTICIDES

The College’s Safety Data Sheets (SDS) can be found in the College’s Dolphin (IHS) system. Additionally, the College’s most current list of approved low-impact pesticides is available on the FMS website in accordance with ORS 634.705 (5) that states that the governing body of a school district shall adopt a list of low-impact pesticides for use with

their Integrated Pest Management Plan. Included is 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 (EPA) 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 EPA 2003 Draft Final Guidelines for Carcinogen Risk Assessment.

NOTE - All pesticides must be used in strict accordance with their label instructions.

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 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 for assistance in determining a pesticide’s active ingredient cancer classification can be contacted at 1-800-858-7378 (<http://npic.orst.edu/>) or npic@ace.orst.edu.