

TILLAMOOK BAY COMMUNITY COLLEGE

Integrated Pest Management Plan

Revision 1

Contents

I. INTRODUCTION	4
II. WHAT IS INTEGRATED PEST MANAGEMENT?	4
III. WHAT IS AN INTEGRATED PEST MANAGEMENT PLAN?	5
IV. IPM PLAN COORDINATOR RESPONSIBILITIES	6
V. TRAINING and RESPONSIBILITIES of College Staff	7
A. <i>IPM Plan Coordinator</i>	7
B. <i>Custodial Staff</i>	7
C. <i>Grounds Department</i>	8
D. <i>Administrative Staff and Faculty</i>	8
E. <i>College President</i>	9
VI. IPM PROCESS	9
A. Monitoring – Reporting – Action Protocol	
1. Monitoring & Reporting All Staff	10
2. Sticky monitoring traps for insects	10
3. Monitoring for mice	10
4. Reporting (pests, signs of pests, and conducive conditions)	10
5. Reporting “Pests of Concern”	10
6. Action!	10
7. Acceptable Thresholds	11
B. Inspections	11
C. Pest Emergencies	11
D. Annual IPM Report (completed by IPM Plan Coordinator)	11
VII. PESTICIDE APPLICATIONS: REQUIRED NOTIFICATION, POSTING, RECORD KEEPING, AND REPORTING	12

A. Notification and Posting for Non-emergencies	12
B. Notification and Posting for Emergencies	13
C. Record Keeping of Pesticide Applications	13
D. Annual Report of Pesticide Applications	14
VIII. LIST OF APPROVED LOW-IMPACT PESTICIDES	14
IX. INQUIRIES & FURTHER INFORMATION	15
LIST OF APPENDICES	16

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 and adults 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, staff and community members is our first priority it is the policy of the College to approach pest management with the least possible risk to students and staff. In addition ORS 634.700-634.750 requires all schools to implement integrated pest management.

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 used only when necessary.

IPM Basics

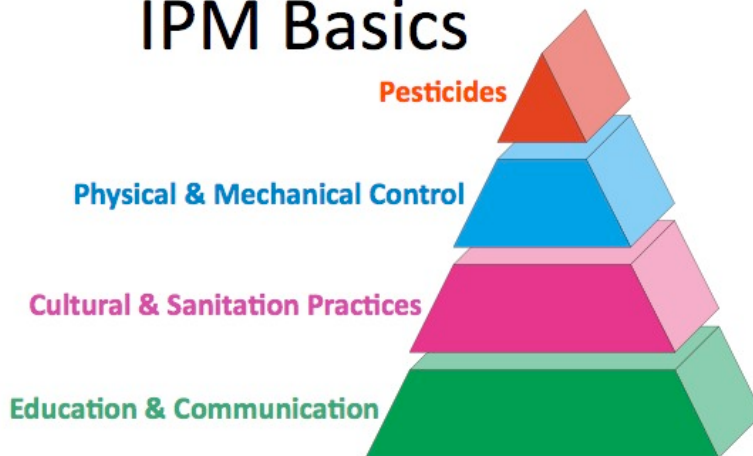
Education and Communication: The foundation for an effective IPM program is education and communication. We need to know what conditions can cause pest problems, why and how to monitor for pests, proper identification, pest behavior and biology before we can begin to manage pests effectively. Communication 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 used only when necessary.

IPM Basics



III. WHAT IS AN INTEGRATED PEST MANAGEMENT PLAN?

An IPM plan is 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 the 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 the College's IPM plan. This plan fleshes out the required strategy from ORS 634.700 – 634.750 for the College.

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) Informing staff in the area where the pests are that sanitation and exclusion are the primary means to control the pest.
- 2) Establishing an acceptable pest population density
- 3) Cleaning up any food debris in the area.
- 4) Sealing up any cracks or crevices where we know the pests are coming from.
- 5) Setting out sticky insect monitoring traps in the area using the sticky insect monitoring trap protocol.

IV. IPM PLAN COORDINATOR RESPONSIBILITIES

The College designates the Facilities Coordinator as the IPM Plan Coordinator and gives them the authority for overall implementation and evaluation of the IPM 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;

- B) Oversee pest prevention efforts and evaluate pest management results;
- C) Assuring that all required notices are given and posted warnings have been placed when pesticide applications are scheduled;
- D) Assuring proper use and application of pesticides when non-pesticide controls have been unsuccessful;
- E) Evaluate the pest situation and determine the means of managing the pest problem that will cause the least possible hazard to people, property and the environment;
- F) Maintaining the approved pesticides list and publishing it annually;
- G) Responding to inquiries and complaints about noncompliance with the IPM plan. Complaints and responses to complaints will be kept on file with the Coordinator.
- H) Keeping records of pest complaints and solutions to pest problems.

V. TRAINING and RESPONSIBILITIES of COLLEGE STAFF

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

A. *IPM Plan Coordinator*

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

B. *Custodial Staff*

1. Training

Custodial Services are contracted to a private company. The college’s custodial supervisor will ensure the custodial practices are designed to minimize pest conducive conditions. An IPM training packet will be provided to the custodial service and reviewed annually.

2. Responsibilities

3) Reporting pest problems and pest-conducive conditions to the TBCC custodial supervisor.

5) Reporting any unapproved pesticides (such as aerosol spray cans) discovered in their regular duties.

C. Grounds Department

1. Training

Grounds maintenance is contracted to a landscape maintenance company. The IPM Coordinator will work with the landscape contractor to ensure that all IPM requirements are being met and make adjustments as necessary.

2. Responsibilities

Grounds crews are responsible for:

- 1) Maintaining the grounds using practices designed to reduce conditions conducive to weeds, gophers, moles, yellow jackets, and other outdoor pests
- 2) Keeping vegetation (including tree branches and bushes) at least 24 inches from building surfaces when possible.
- 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.
- 5) Reporting of pest problems and pest conducive conditions to the IMP Plan Coordinator.

D. Administrative Staff and Faculty

1. Training

The IPM Plan Coordinator (or a designee of the Coordinator) will develop IPM training that will be made available on-line and will be the individual's responsibility to complete. This short annual training will cover the principals of IPM, responsibilities as outlined below and will review the following with Staff and Faculty.

- 1) What pest-conducive conditions are (clutter, food debris, moisture, cracks, holes, etc.), and the importance of reporting these in a timely manner.
- 2) The importance of keeping their classrooms and work areas free of clutter.
- 3) The importance of having students clean-up after themselves when food or drink is consumed in the classroom.

2. Responsibilities

Faculty and Staff are responsible for:

- 1) Completing mandatory annual IPM training that is available on-line.
- 2) Keeping their classrooms, offices and work areas free of clutter.
- 3) Making sure students clean up after themselves when food or drink is consumed in the classroom.
- 4) Timely reporting of pests and pest-conducive conditions using the Pest Log, phone, email or in person. Emergency situations must be promptly reported to the IPM Coordinator by phone or in person.

E. College President

1. Training

(Same training/education as Faculty and Staff)

2. Responsibilities

The College President is responsible for:

- 1) Ensuring that staff and faculty complete the annual IPM training.
- 2) Completing the annual IPM training.
- 3) Encouraging faculty and staff to keep their rooms clean and free of clutter in accordance with good IPM practices.
- 4) Assuring 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.

VI. IPM PROCESS

A. Monitoring – Reporting – Action Protocol

Monitoring is the most important requirement of ORS 634.700 – 634.750. It is the backbone of our college'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 college staff. Staff training on monitoring should include what to look for and how to record and report the information.

1. Monitoring & Reporting – All Staff

After the annual training staff will be expected to report pests or pest-conducive conditions they observe during the normal course of their daily work.

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. The IPM Coordinator will be responsible for setting them out, checking them regularly, and replacing them as necessary.

Sticky monitoring traps will be placed in "pest-vulnerable areas" which the Coordinator deems necessary.

3. Monitoring for Mice

In addition to monitoring for signs of mice (droppings, gnawing, hair, etc.), snap traps will be placed in areas where signs are found or other vulnerable areas.

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

When pests or pest-conducive conditions are observed by staff, they should record them on a pest log or report them directly to the IPM Plan Coordinator, in person or by email.

5. 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.

6. Action!

The IPM Plan Coordinator will determine the appropriate corrective action and implement the solution following the plan's guidelines. A record will be made of these actions taken and will be kept on file at the office of the IPM Plan Coordinator.

The IPM Coordinator will inform the Facilities/Safety/HR Director of pest issues, actions

taken and the results of the efforts. Should outside contractors be necessary the coordinator will monitor the completion of all work being done as well as costs incurred.

7. 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.

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

B. Inspections

The IPM Plan Coordinator will conduct an annual inspection using the annual IPM inspection form (Appendix 2). During the inspection he or she will also inspect or review:

- 1) The structural condition of the building.
- 2) The level of sanitation inside and out.
- 3) Human behaviors that affect the pests (working conditions that encourage or support pests, food preparation procedures that provide food for pests, etc.)
- 4) 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 Facilities/Safety/ HR Director an annual IPM report. The report will include a summary of data gathered from pest logs and work orders, 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)

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.

The application of a germicide, disinfectant, sanitizer, deodorizer, antimicrobial agent or insecticidal soap are not subject to the requirements for a pesticide application under the integrated pest management plan if the application is consistent with the goals of the IPM plan.

At the beginning of January each year an updated list of pesticide products that could be used in the event other pest management measures are ineffective will be posted on our website under Environmental News and will be available to all faculty, administrators, staff, students or anyone interested. Procedures for notification and posting of individual pesticide applications, including those for pest emergencies will be part of the pesticide list.

A. Notification and Posting for Non-emergencies

When prevention or management of pests through other measures proves to be ineffective, the use of a low-risk pesticide is permissible. *Documentation of these measures is a pre-requisite to the approval of any application of a low-risk pesticide. This documentation will remain on file with the IPM Plan Coordinator.*

Non-emergency pesticide applications may occur in or around the college during school hours if the manufacturer and the IPM Plan Coordinator does not specify a reentry time. 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 unless the IPM Plan Coordinator authorizes an exception. Reentry times set by the IPM Plan Coordinator will be based on the type of pesticide, the times at which students or staff 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 post a notice of a proposed pesticide application on the college website and on bulletin boards at least 24 hours before the application occurs.

A reasonable effort will also be made to ensure that this information is forwarded to the parents of minor-aged students and any other categories of expected building occupants that may need special consideration.

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.

The 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 Coordinator shall review the IPM plan to determine whether modification of the plan might prevent future pest emergencies, and provide a written report and recommendations to the College President.*
- 3) *The College President shall review and take formal action on recommendations in the report.*

The declaration of the existence of a pest emergency is the only time non low-impact pesticides 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 warning 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 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 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 Facilities/Safety/ HR Director 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

VIII. APPROVED LIST OF LOW-IMPACT PESTICIDES

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

According to ORS 634.705 (5), the 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.

The most current list of approved low-impact pesticides is available on our website

under “Environmental News”.

IX. INQUIRIES & ADDITIONAL INFORMATION

IPM program questions and concerns are always welcome and encouraged, whether they be from students, family members, employees or the general public.

The point of contact is the IPM Plan Coordinator whose primary role at TBCC is as the Facilities Maintenance Specialist. Current contact information can be found on the TBCC website in the “TBCC Directory” tab or in the “Environmental News” section of the “Safety and Security” selection at the bottom of the web page or by simply asking.

In addition to pertinent notices and the current, approved “Low Impact Pesticide List”, other useful information and on-line links can be found on the same “Environmental News” section mentioned above.

Community Outreach: If additional dissemination of information is deemed appropriate and necessary by the TBCC President, the Facilities/Safety Director or the IPM Plan Coordinator, careful consideration will be given to increasing the scope beyond those mentioned already in the plan.

LIST OF APPENDICES

Appendix 1 Approved Low Impact Pesticide List

Appendix 2 Pesticide Application Notification Form

Appendix 3 Pesticide Application Posting Sign

Appendix 4 Pesticide Application Record Keeping Form

Appendix 5 Annual Inspection Form

Appendix 6 Annual IPM Report Form

Appendix 7 Management Plans for Specific Pests

(These blank and completed forms are available at the Facilities Maintenance Office)