Integrated Pest Management Plan for Butte Falls School District 91

Contents

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 Butte Falls 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 Butte Falls School District Board of Directors (hereinafter referred to as "Board") 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

(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 Butte Falls School District's IPM plan. This plan fleshes out the required strategy from ORS 634.700 – 634.750 for Butte Falls 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, 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.

Note: See appendix 1a for more information on small ant management.

IV. SCHOOL DISTRICT IPM PLAN COORDINATOR

The Board designates the maintenance/groundskeeper as the IPM Plan Coordinator. The Coordinator is key to successful IPM implementation in Butte Falls 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

review of IPM principles and strategy as outlined in Sections II and III.

A. *IPM Plan Coordinator*

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

B. *Custodial / Maintenance Staff*

1. Training/Education

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

Maintenance - 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 below.

2. Responsibilities

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

2) Continually monitoring for pest-conducive conditions during daily work, and sealing small holes and cracks when noticed (if this can be done in a short amount of time)

3) Reporting pest problems and pest-conducive conditions that he/she cannot resolve in a short amount of time to the IPM Coordinator.

4) Reporting teachers to IPM Coordinator who repeatedly refuse to or need assistance to reduce clutter and other pest-conducive conditions in their classrooms.

5) Confiscating any unapproved pesticides (such as aerosol spray cans) discovered in their regular duties or during an inspection and delivering them to the IPM Coordinator.

6) Assisting IPM Coordinator with resolving issues found in annual inspection report.

7) Working with the IPM Coordinator to develop a protocol and priority list with deadlines for sealing holes, installing external door sweeps, and other pest exclusion needs which cannot be done in a short period of time.

C. *Grounds Department*

1. Training/Education

The head of grounds staff (or designee) will train grounds staff at least once per year.

6) Keeping all food items in sealed containers.

7) Immediately reporting any sightings of rodents or rodent droppings to the IPM Coordinator, and following up with an e-mail to the Coordinator (for records).

8) Reporting to the Coordinator any pest-conducive conditions that require maintenance (e.g., leaky faucets, dumpster too near building, drains need scrubbing, build-up of floor grease requiring spray-washing, etc.)

E. *Faculty*

1. Training/Education

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

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

2) Keeping their classrooms and work areas free of clutter.

3) Making sure students clean up after themselves when food or drink is consumed in the classroom.

4) Reporting pests and pest-conducive conditions to the IPM Coordinator, by e-mail and in emergency situations, by phone.

F. *School Principal*

1. Training/Education

(Same training/education as Faculty)

1. Monitoring & Reporting – All Staff

After a brief (15 – 20 minute) training by the IPM 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 e-mail or by phone in an emergency.

2. Monitoring & Reporting – Coordinator and Custodial/Maintenance Staff

During the normal course of their daily work, the IPM Coordinator and custodial/maintenance staff will monitor structures and building perimeters for:

1) Pest-conducive conditions inside and outside the building (structural deterioration, holes that allow pests to enter, conditions that provide pest harborage).

2) The level of sanitation inside and out (waste disposal procedures, level of cleanliness inside and out, conditions that supply food and water to pests)

3) The amount of pest damage and the number and location of pest signs (rodent droppings, termite shelter tubes, cockroaches caught in sticky traps, etc.)

4) Human behaviors that affect the pests (food preparation procedures, concessions procedures, classroom food, etc.)

5) Their own management activities (caulking/sealing, cleaning, setting out traps, treating pests, etc.) and their effects on the pest population.

6) Any pests or pest-conducive conditions will be reported to the IPM Coordinator either by e-mail or by phone.

3. Monitoring & Reporting – Grounds Staff

During normal daily activities, grounds staff will monitor for invasive weeds, gophers, moles, yellow jackets, and other outdoor pests. These will be reported to the IPM Coordinator using Pest Logs.

4. 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 and checking them once per month, and replacing them once every four months.

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

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) Human behaviors that affect the pests (working conditions that encourage or support pests, food preparation procedures that provide food for pests, etc.)

2) Management activities (caulking/sealing, cleaning, setting out traps, treating pests, etc.) and their effects on the pest population.

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

D. Annual IPM Report (completed by IPM Plan Coordinator)
In January of each year, the IPM Plan Coordinator will provide the Board an annual IPM report. The report will include a summary of data gathered from Pest Logs or e-mails, 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

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 of such to the Board.*
3) *The Board 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.

<u>If a pest emergency is declared, the area must be evacuated and cordoned off before taking any other steps.</u>

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

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

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

C. Record Keeping of Pesticide Applications

The IPM Plan Coordinator or designee shall keep a copy of the following pesticide product information on file at the 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 Board an annual

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

Appendix 13 Low Impact Pesticide List

Appendix 1a

Small Ants

Most small ants in Oregon are harmless. They do not transmit human disease and are thus called nuisance ants. Pavement Ants and Odorous House Ants are the two most common types of ants found in Oregon schools.

Nuisance ants may nest outdoors under objects, in soil, or within wall voids of structures. Pavement ants nest in soil under concrete walkways or foundations. Ants sometimes enter buildings in search of food or water, or during periods of heavy rain. Some sugar-feeding ants may move indoors in winter when their preferred food source (honeydew from aphids) is gone. Ants may also be more noticeable in spring or summer as colonies are dividing and establishing new nests.

Pavement Ant
The pavement ant gets its name from commonly locating its nest in or under cracks in pavement. It also nests under stones and at the edges of pavement. In winter it will nest in buildings in crevices adjacent to a heat source. Pavement ants tend aphids for their honeydew, and feed on seeds and insect remains. Indoors they may feed on sweets and greasy food.

Odorous House Ant
The odorous house ant gets its name from the pungent, rotten-coconut-like odor given off when it is crushed. It nests in a wide variety of places both outdoors and indoors. Odorous house ants tend aphids (as well as scale insects and mealybugs) for their honeydew, which they prefer, but they also feed on other insects. Indoors they may feed on sweets, protein foods, and greasy food. When odorous house ants are disturbed or threatened, they can break off from the main colony and form satellite colonies. This is called "budding". When odorous house ants disperse and form new colonies and nests in ths way, one colony of ants can actually have multiple satellite colonies and multiple queens. Disturbances, such as spraying a pesticide on a group of odorous house ants, actually increases the number of ants because of budding.

When Nuisance Ants Come Inside
Total eradication of nuisance ants indoors is extremely difficult. The district's first response to any trail of ants is to clean surfaces with soapy water or a disinfectant. Fortunately, most ants will leave on their own if denied access to food and water. Additional control measures are warranted if ants are entering a school in large enough numbers to cause a disruption in the learning environment. The district will use mechanical methods (such as crack sealing) first, and may use low-impact pesticide baits only as a last resort.

If nuisance ants become a disruption at a school, staff should take the following steps:

- Ask the custodian to vacuum any food crumbs, clean up any garbage or spills, and to

3) 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).
4) Following A, B, and C above.

If the use of a low-impact pesticide baits are deemed necessary, they will be placed in childproof containers, and used only in areas that are out of sight and reach of children/students. Small amounts of low-impact pesticide gels or pastes may also be placed in cracks and crevices or low-impact pesticide dusts may be sprayed into wall voids.

Staff must be informed that sanitation is important to ensure the effectiveness of any baits that are used. Ants are less likely to take a bait if there are more attractive food and water sources nearby.

ADDITIONAL EXCLUSION MEASURES

In addition to sealing up cracks and holes where the ants are coming from, custodial and/or maintenance/construction staff should routinely seal up as many cracks and holes as time allows, especially those around:

- Baseboards
- Cupboards
- Electrical outlets
- Pipes
- Sinks
- Toilets

Outdoors, pipe and electrical chases should be sealed off.

Grounds staff should prune away any tree limbs or bushes (leaving about 24" of space) that are touching the building.

Appendix 2

Annual IPM Inspection Form

(Pests and Pest Conducive Conditions Checklist)

School District_____

School or Site	
Date	
Inspected by	

Entryways	Yes	No	Not Sure	N/A
Doors closed when not in use				
Doors shut tight and close on their own				
Door sweeps installed so no ¼" gaps				
Cracks & crevices around door are sealed				

If pests are present in the area, write what kind here _____

Notes:

Outside Areas	Yes	No	Not Sure	N/A
Area free from trash, old vehicles, other pest attractants				
All trash cans have secure lids				
Trash cans cleaned regularly				
Site has good drainage and is free from standing water				
Bushes, shrubs, trees at least 18" from building				
Tree branches not overhanging roof				
All dumpsters located away from building				
All dumpsters clean				
No gaps between windows or screens and frame				
Eves and roofs free from birds, wasps, etc.				
Play structures free from wasp harborage areas				

If pests are present in the area, write what kind here _____

Notes:

Custodial and Custodial Closets	Yes	No	Not Sure	N/A
Area is free of unauthorized pesticides				
Mops are clean and hanging up when not in use				
Closets are free of trash and food				
Custodial closets are in good order and organized				
Trash cans and maid carts are emptied daily and clean				
Break area is clean and free of food, crumbs and trash				
Storage areas free of items stored in cardboard boxes				
Break area free of cloth covered couches and chairs				
Custodians are trained in the IPM process				
IPM records (including pest logs, monitoring trap data, pest management actions, etc.) are on file				

If pests are present in the area, write what kind here _____

Notes:

Boiler Rooms and Fan Rooms	Yes	No	Not Sure	N/A
Free of unauthorized pesticides				
Room is free of standing water				
Room is cleaned regularly				
Room is free of trash and food				
Room is free of storage, especially in cardboard boxes				
Floor drains are clean				
Plumbing is free of leaks and condensation				
Cracks or holes in floors and walls are sealed properly				
Outside air intakes are properly screened & free of trash				

If pests are present in the area, write what kind here _____

Notes:

Classrooms or Offices Room #	Yes	No	Not Sure	N/A
Free of unauthorized pesticides				
Free of clutter				
Indoor plants healthy and free of pests				
Desks, closets, and cubbies clean and free of food, clutter				
All food items are stored in sealed plastic containers				
Animal or bird cages are clean in and around the area				
Any pet food is stored in sealed plastic containers				
Sinks are free of dripping or standing water				
Gaps or holes under sinks or counters have been sealed				
Holes or gaps to the outside are sealed				
Outside windows and doors close tight and have no gaps				
Window screens (if any) are in good repair				
Nothing (except short-term) is stored in cardboard boxes				

If pests are present in the area, write what kind here _____

Notes:

Classrooms or Offices Room #	Yes	No	Not Sure	N/A
Free of unauthorized pesticides				
Free of clutter				
Indoor plants healthy and free of pests				
Desks, closets, and cubbies clean and free of food, clutter				
All food items are stored in sealed plastic containers				
Animal or bird cages are clean in and around the area				
Any pet food is stored in sealed plastic containers				
Sinks are free of dripping or standing water				
Gaps or holes under sinks or counters have been sealed				
Holes or gaps to the outside are sealed				
Outside windows and doors close tight and have no gaps				
Window screens (if any) are in good repair				
Nothing (except short-term) is stored in cardboard boxes				

If pests are present in the area, write what kind here _____

Notes:

Appendix 4

Training Outlines

CUSTODIAL STAFF TRAINING

1. Concerns about Pests and Pesticides
    a. Pests which are Public Health Risks
    b. Pesticide Risks
2. Introduction to Integrated Pest Management (IPM)
    a. IPM is…
    b. IPM involves…
3. Benefits of IPM to custodial staff
    a. Recognition of your important role within the school district
    b. More effective, efficient, and long-lasting solution to specific pest issues
    c. Reduced pesticide use
    d. Improved children's health
    e. Long-term cost savings for school and school district
    f. Better organized working environment
4. Pest basics
    a. Food
    b. Water
    c. Shelter
5. Role of custodial staff in a school IPM program
    a. Custodial staff are critical to the success of a district's IPM program
    b. Awareness of pest conducive conditions
    c. Reduction of pest conducive conditions
    d. Use of insect monitoring traps
    e. Communication
        i. Report pests in pest log
        ii. Report maintenance needs
        iii. Regular communication and follow up with facilities staff/IPM Coordinator
    f. Sanitation
    g. Cultural changes
    h. Attend annual IPM training provided by the IPM Plan Coordinator
    i. When to take action against a pest: appropriate pest-response action for custodial staff
6. Requirements of ORS 634.700 – 634.750 (IPM plan, Coordinator, no pesticides applied without license, etc.)

GROUNDS STAFF TRAINING

1. Concerns about Pests and Pesticides
    a. Pests which are Public Health Risks
    b. Pesticide Risks
2. Introduction to Integrated Pest Management (IPM)
    a. IPM is…
    b. IPM involves…
3. Benefits of IPM to schools
    a. More effective, efficient, and long-lasting solution to specific pest issues
    b. Reduced pesticide use
    c. Improved children's health
    d. Long-term cost savings for school and school district
4. Grounds Pest Basics
    a. Food
    b. Water
    c. Shelter
5. Grounds Pest Specifics
    a. Review of OSU turf management publications
    b. Review of model plan appendix 1-g
    c. Mulching landscaped areas
    d. Aeration of turf
    e. Irrigation scheduling
    f. Gophers, Moles, Voles
    g. Other pests
6. Role of Grounds Staff
    a. Keeping all vegetation at least three feet from buildings
    b. Proper aeration, mulching, irrigation scheduling, etc.
    c. Attend annual IPM training provided by the IPM Plan Coordinator
    d. Pesticide application notification, posting, record keeping, and reporting
7. Requirements of ORS 634.700 – 634.750 (IPM plan, Coordinator, no pesticides applied without license, etc.)

FACULTY TRAINING

1. Concerns about Pests and Pesticides
    a. Pests which are Public Health Risks
    b. Pesticide Risks
2. Introduction to Integrated Pest Management (IPM)
    a. IPM is…
    b. IPM involves…
3. Benefits of IPM to Faculty
    a. More effective, efficient, and long-lasting solution to specific pest issues
    b. Reduced pesticide use
    c. Improved children's health
    d. Long-term cost savings for school and school district
    e. Better organized working environment
4. Pest Basics
    a. Food
    b. Water
    c. Shelter
5. Role of Faculty in a School IPM Program
    a. Awareness of pest conducive conditions in your classroom and teacher's lounge
    b. Reduction of pest conducive conditions in your classroom and teacher's lounge
    c. Monitoring & communication
        i. Report pests in pest log
        ii. Report maintenance needs
    d. Sanitation
    e. Cultural changes
    f. Education
        i. Involve students in classroom pest management (monitoring, sanitation, cultural changes)
        ii. Attend annual IPM training provided by IPM Plan Coordinator
    g. When to take action against a pest: appropriate pest-response action for faculty
6. Requirements of ORS 634.700 – 634.750 (IPM plan, Coordinator, teachers cannot use pesticides)

Appendix 6

Pesticide Application Notification Form

A pesticide application is scheduled for / was performed on:

DATE_____ TIME _____

Pesticide Common Name	Pesticide Trade Name / Type of Pesticide Product	EPA Registration Number

Expected Area of the pesticide application: _____

Expected date of application: _____

Reason for the application:

Date of Application _____ / _____ / _____
Month Day Year

chool _____

PESTICIDE APPLICATION RECORD

This form meets all pesticide record-keeping requirements for schools in Oregon. **Note additional attachments required.**

Name	Phone	
License No.	Certificate No.	
Address		
City	State	Zip Code

Pesticide Product Used

Product (Brand) Name	EPA Registration No
Product type (granular, liquid, etc.)	

Attach following documents

Pesticide Label ☐ MSDS ☐ Copies of all required notices, including dates the notices were given ☐

Date and time for placement and removal of warning signs	Placement:	Removal:

Application Information

Time began		Time ended	
Temp		Wind Speed & Direction	
Amount of Product Applied			
Total Product Volume or Weight		Total Area of Application(s)(acres, feet, etc.)	
Product Concentration (amount per area; note units)			
Location(s) of application			
Type of Application			
Backpack ☐	Bait ☐	Boom Sprayer ☐	Crack/Crevice ☐
Other (describe)			
Did the application prove effective? Explain:			

Appendix 13

Low-Impact Pesticide List

List of products that meet the requirements of a Low-Impact Pesticide as required in ORS 634.700 – 634.750.

After receiving requests from several members of the Oregon School Facilities Management Association (OSFMA), the OSU School IPM Program e-mailed all members to offer assistance (via an OSU toxicologist with expertise in pesticide toxicology) with creating their "low-impact" pesticides lists. Members were asked to provide the active ingredient, EPA registration number, and product name of any "caution" labeled products they were using (or considering using) for the toxicologist to review.

Below is a list of the reviewed products that meet the requirements of the law, as well as abridged comments from the reviewer (for complete comments and the list with complete background information, see Jeff Gorman).

We will periodically review future requests (that include the active ingredient, EPA registration number, and product name of "caution" labeled products) from school IPM coordinators who have completed the OSU School IPM Program's IPM coordinator training, and post updates to this list on our website.

Abridged Reviewer Comments:
Using the NPIC Pesticides and Active Ingredient Retrieval System, I checked the EPA registration numbers for each product. I then used EPA's publication "Chemicals Evaluated for Carcinogenic Potential" to assign carcinogen classifications. For those active ingredients not classified in this 2006 publication I used other EPA sources, such as the Reregistration Eligibility Determinations or Federal Register Notices on the establishment of tolerances.

Signal words and carcinogen classification for the active ingredients on the review list were compared to language in ORS 634.705 Adoption of integrated pest management plan and related provisions; exceptions; low-impact pesticide list, Section (5), which states:

A governing body shall adopt a list of low-impact pesticides for use with the 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. [2009 c.501 §3]

Labels for all products on the review list have the signal word "Caution". No products on the list have a carcinogen classification under the 1986 Guidelines of "human carcinogen" or "probable human carcinogen". No products on the list have a carcinogenic classification of "carcinogenic to humans" under the 2003 draft guidelines.

List of "low-impact pesticides" that meet the requirements of ORS 634.700 – 634.750

Product Name	Formulation	EPA Registration #	Active Ingredient
Advion Ant Gel	Bait Gel	352-746	Indoxacarb
Advion Cockroach Gel Bait	Bait Gel	352-652	Indoxacarb
Aquamaster	Liquid	524-343 (-ZF)	Glyphosate, isopropylamine salt
Bee Bopper II, ARI Wasp and Hornet Killer	Pressurized liquid	7754-44	Tetremethrin d-Phenothrin
Casoron 4G	Granular	400-168	Dichlobenil
Crossbow	Emulsifiable Concentrate	62719-260-5905	2,4-D, butoxyethyl ester Triclopyr, butoxyethyl ester
K-Orthine Dust	Dust	432-772	Deltamethrin
Delta Dust	Dust	28293-322	Deltamethrin
Demand G Insecticide	Granular	100-1240	Lambda-cyhalothrin
The Andersons 0.25% Granular Dithiopyr Herbicide	Granular	9198-213	Dithiopyr
EcoEXEMPT G Granular Insecticide	Granular	Exempt	Eugenol (clove oil) Thyme oil
EcoEXEMPT IC-2 Insecticide Concentrate	Concentrate	Exempt	Rosemary Oil
EcoPCO WP-X Wettable Powder Insecticide	Wettable Powder	67425-25-655	Pyrethrins 2-Phenylethyl propionate Oil of thyme

Envoy Plus	Emulsifiable Concentrate	59639-132	Clethodim
Generation mini blocks	Pellets/tablets	7173-218	Difethialone
Gourmet Liquid Ant Bait	Impregnated Materials	73766-2	Disodium Octaborate Tetrahydrate
Grant's Ant Control A bait stations	Impregnated Materials	1663-33	Hydramethylnon
Hi-Yield Super Concentrate Kill-Zall II	Soluble Concentrate	42750-61-7401	Glyphosate, isopropylamine salt
InTice Thiquid ant bait	Soluble Concentrate	73079-7	Sodium Tetraborate Decahydrate
Landmaster BW	Soluble Concentrate	42750-62	2,4-D, isopropylamine salt Glyphosate, isopropylamine salt
Maxforce FC Professional Insect Control Roach Killer Bait Gel	Bait gel	432-1259	Fipronil
Maxforce Professional Insect Control Roach Killer Bait Gel	Bait Gel	432-1254	Hydramethylnon
Milestone VM Plus	Emulsifiable Concentrate	62719-572	Aminopyralid, triisopropanolamine salt Triclopyr, triethylamine salt
MotherEarth D Pest Control Dust	Dust	499-509	Diatomaceous Earth (amorphous silica)
MotherEarth Granular Scatter Bait	Granular	499-515	Boric Acid
MotherEarth Wasp & Hornet	Pressurized Liquid	499-519	d-Limonene
Optigard Ant Gel Bait	Ready-to-Use Solution	100-1260	Thiamethaxom
Orange Guard	Ready-to-Use Solution	61887-1-AA	d-Limonene
Patrol Insecticide	Emulsifiable Concentrate	100-1066	Lambda-cyhalothrin
Phantom Termiticide-Insecticide	Emulsifiable Concentrate	241-392	Chlorfenapyr
QuickSilver Herbicide	Emulsifiable Concentrate	279-3301	Carfentrazone-ethyl

Raid wasp and hornet spray	Pressurized Liquid	4822-553	Cypermethrin Prallethrin
Rescue W H Y spray for wasp, hornet, & yellowjacket nests	Pressurized Liquid	Exempt	Lemongrass oil Clove oil (eugenol) Rosemary oil Geranium oil
Rodeo	Soluble Concentrate	62719-324	Glyphosate, isopropylamine salt
Round Up Pro Max	Soluble Concentrate	524-579	Glyphosate, potassium salt
Safari 20 SG Insecticide	Emulsifiable Concentrate	33657-16-59639	Dinotefuran
Safer Brand Wasp and Hornet Killer	Liquid Aerosol	36488-47	d-Limonene Pyrethrins Potassium Salts of Fatty Acids Indian Palmarosa Oil
Snapshot 2.5 TG	Granular	62719-175	Trifluralin Isoxaben
Talstar P Professional Insecticide	Emulsifiable Concentrate	279-3206	Bifenthrin
Temprid SC Insecticide	Soluble Concentrate	432-1483	Imidacloprid beta-Cyfluthrin
Termidor SC	Soluble Concentrate	7969-210	Fipronil
Terro Liquid Ant Baits	Ready-to-Use Solution	149-8	Sodium Tetraborate Decahydrate
TZone	Emulsifiable Concentrate	2217-920	Dicamba 2,4-D, 2-ethylhexyl ester Triclopyr, butoxyethyl ester Sulfentrazone
Whitmire PT 515 Wasp Freeze	Pressurized Liquid	499-362	d-trans Allethrin d-Phenothrin

[2] International Agency for Research on Cancer (IARC) found that there is inadequate evidence to link amorphous silica with cancer effects in humans or test animals. (http://www.epa.gov/oppsrrd1/REDs/factsheets/4081fact.pdf).