

**St. Helens School District**  
**Integrated Pest Management Plan**



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## 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 its first priority and a prerequisite to learning, it is the priority of St. Helens School District (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 District's School Board has adopted this integrated pest management plan for use on District campuses.

## WHAT IS INTEGRATED PEST MANAGEMENT?

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

### IPM Basics

Education and Communication: The foundation for an effective IPM program is education and communication. We need to know what conditions can cause pest problems, why and how to monitor for pests, proper identification, pest behavior and biology before we can begin to manage pests effectively. Communication about pest issues is essential. A protocol for reporting pests or pest-conducive conditions and a record of what action was taken is the most important part of an effective IPM program.

Cultural & Sanitation: Knowing how human behavior encourages pests helps you prevent them from becoming a problem. Small changes in cultural or sanitation practices can have significant effects on reducing pest populations. Cleaning under kitchen serving counters, reducing clutter in classrooms, putting dumpsters further from kitchen door/loading dock, proper irrigation scheduling, and over-seeding of turf areas are all examples of cultural and sanitation practices that can be employed to reduce pests.

Physical & Mechanical: Rodent traps, sticky monitoring traps for insects, door sweeps on external doors, sealing holes under sinks, proper drainage and mulching of landscapes, and keeping vegetation at least 24 inches from buildings are all examples of physical and mechanical control.

Pesticides: IPM focuses on remediation of the fundamental reasons why pests are here, pesticides should be rarely used and only when necessary, as shown by this diagram.



## WHAT IS AN INTEGRATED PEST MANAGEMENT PLAN?

ORS 634.700 defines an IPM plan as a proactive strategy that has the following criteria.

- 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
  - d. Protect local ecosystem health
- B. Focuses on the prevention of pest problems by working to reduce or eliminate conditions of property construction, operation and maintenance that promote or allow for the establishment, feeding, breeding and proliferation of pest populations or other conditions that are conducive to pests or that create harborage for pests.
- C. Incorporates the use of sanitation, structural remediation or habitat manipulation or of mechanical, biological and chemical pest control measures that present a reduced risk or have a low impact and, for the purpose of mitigating a declared pest emergency, the application of pesticides that are not low-impact pesticides.
- D. Includes regular monitoring and inspections to detect pests, pest damage and unsanctioned pesticide usage.
- E. Evaluates the need for pest control by identifying acceptable pest population density levels.
- F. Monitors and evaluates the effectiveness of pest control measures.
- G. Excludes the application of pesticides on a routine schedule for purely preventive purposes, other than applications of pesticides designed to attract or be consumed by pests.
- H. Excludes the application of pesticides for purely aesthetic purposes.
- I. Includes school staff education about sanitation, monitoring and inspection and about pest control

measures.

- J. Gives preference to the use of nonchemical pest control measures.
- K. Allows the use of low-impact pesticides if nonchemical pest control measures are ineffective.
- 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 District's IPM plan. This plan fleshes out the required strategy from ORS 634.700 – 634.750 for the District.

## **SCHOOL DISTRICT IPM PLAN COORDINATOR**

The District designates Jared Plahn, Director of Facilities, as the IPM Plan Coordinator. The Coordinator is essential to successful IPM implementation in the District, and is given the authority for overall implementation and evaluation of this plan. The Coordinator is responsible for:

- A. Attending not less than six hours of IPM training each year. The training will include a general review of IPM principles and the requirements of ORS 634.700-634.750. It will also include hands-on training on updated exclusion practices, monitoring & inspection techniques, and management strategies for common pests.
- B. Conducting outreach to the school community (custodians, maintenance, construction, grounds, faculty, and kitchen staff) about the school's IPM plan. The IPM Coordinator (or designee) will provide training as outlined in the IPM plan.
- C. Overseeing pest prevention efforts. The Coordinator will work with administration, custodian/maintenance, teachers and staff to reduce clutter and food in the classrooms and seal up pest entry points.
- D. Assuring that the decision-making process for implementing IPM in the district is followed. The Coordinator will continually assess and improve the pest monitoring/reporting/action protocol.
- E. Assuring that all notification, posting, and record-keeping requirements are met when the decision to make a pesticide application is made.
- F. Maintaining the approved pesticides list.
- G. Responding to inquiries and complaints about noncompliance with the plan. Responses to inquiries and complaints will be in writing and kept on record with the Coordinator.
- H. Placing and checking sticky insect monitoring traps around facilities as needed.
- I. Keeping records of pest complaints using pest logs located in the facilities shop office.
- J. Developing protocols and provisions for pest avoidance and prevention during construction and renovation projects. The Coordinator will be involved in drafting any bids, and will have the authority to halt construction projects if protocols and provisions for pest avoidance and prevention are not being met.

## **RESPONSIBILITIES AND TRAINING/EDUCATION OF SCHOOL EMPLOYEES**

All staff should have at least a general review of IPM principles and strategy. Staff education will include monitoring, inspection, sanitation and about pest control measures.

A. IPM Plan Coordinator

- a. Training and Responsibilities outlined in the IPM plan.

B. Building Custodians

a. Training/Education

- i. The IPM Plan Coordinator (or designee) will train building custodial staff annually on sanitation, monitoring, inspection, and reporting, and their responsibilities as outlined below.

b. Responsibilities

- i. Attending annual IPM training provided by the IPM Coordinator (or designee).
- ii. Continually monitoring for pest-conducive conditions during daily work, and sealing small holes and cracks when noticed.
- iii. Reporting pest problems and pest-conducive conditions that they cannot resolve in a short amount of time to the IPM Coordinator.
- iv. Reporting teachers to IPM Coordinator who need assistance to reduce clutter and other pest-conducive conditions in their classrooms.
- v. Report any unapproved pesticides (such as aerosol spray cans) discovered in their regular duties or during an inspection and reporting them to the IPM Coordinator.
- vi. Assisting IPM Coordinator with resolving issues found in annual inspection report.
- vii. 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/Maintenance Department

a. Training/Education

- i. The IPM Coordinator (or designee) will train grounds/maintenance staff once per year. The annual training will include review of this IPM Plan It will also include the identification of pest-conducive conditions and mechanical control methods (such as door sweeps on external doors and sealing holes under sinks), and crew responsibilities as outlined below. Grounds crew will also be trained in basic monitoring for common pests on grounds.

b. Responsibilities

- i. Attending annual IPM training provided by the IPM Coordinator (or designee).
- ii. Working with the IPM Coordinator to reduce conditions conducive to weeds, gophers, moles, yellow jackets, and other outdoor pests
- iii. Keeping vegetation at least 24 inches from building surfaces.
- iv. Follow best practices for field maintenance for each individual field.
- v. Reporting any unapproved pesticides discovered in their regular duties or during an inspection to the IPM Coordinator.
- vi. Assisting IPM Coordinator with resolving issues found in annual inspection report.
- vii. 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.
- viii. Continually monitoring for pest-conducive conditions during daily work, and sealing

small holes and cracks when noticed.

- ix. When the decision is made to apply a pesticide, following notification, posting, record-keeping and reporting protocols.

D. Kitchen Staff

a. Training/Education.

- i. The IPM Coordinator (or designee) will train kitchen staff once per year on the basic principles of IPM and their responsibilities as outlined below.

b. Responsibilities

- i. Attending annual IPM training provided by the IPM Coordinator (or designee).
- ii. Assuring floor under serving counters and movable equipment is kept free of food and drink debris.
- iii. Avoiding long-term storage or use of cardboard boxes.
- iv. Removing recycle products daily.
- v. Keeping outside doors closed at all times (except during deliveries and emptying trash).
- vi. Keeping all food items in sealed containers.
- vii. Immediately reporting any sightings of rodents or rodent droppings to the custodian, and following up with an email to the IPM Coordinator.
- viii. 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 & School Administration

a. Training/Education.

- i. Staff will complete an online training video on IPM covering, what pest-conducive conditions are (clutter, food debris, moisture, cracks, holes, etc.), and the importance of reporting these in a timely manner. It will also include the importance of keeping their classrooms and work areas free of clutter and having students clean up after themselves when food or drink is consumed in the classroom.

b. Responsibilities

- i. Attending annual basic IPM training provided by the IPM Coordinator (or designee).
- ii. Keeping their classrooms and work areas free of clutter.
- iii. Making sure students clean up after themselves when food or drink is consumed in the classroom.
- iv. Reporting pests and pest-conducive conditions to the custodian, in-person or by email. In emergency situations, by phone.

## IPM PROCESS

### A. **Monitoring – Reporting – Action Protocol.**

Monitoring is the most important part of our 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.

- a. As much as possible, monitoring should be incorporated into the daily activities of school staff. Staff training on monitoring should include what to look for and how to record and report the information.
- b. Monitoring & Reporting – All Staff. After a brief 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 verbally or by e-mail to the custodian.
- c. Monitoring & Reporting – Coordinator and Custodial Staff. During the normal course of their daily work, the IPM Coordinator and custodial staff will monitor structures and building perimeters for:
  - i. Pest-conducive conditions inside and outside the building (structural deterioration, holes that allow pests to enter, conditions that provide pest harborage).
  - ii. The level of sanitation inside and out (waste disposal procedures, level of cleanliness inside and out, conditions that supply food and water to pests).
  - iii. The amount of pest damage and the number and location of pest signs (rodent droppings, termite shelter tubes, cockroaches caught in sticky traps, etc.)
  - iv. Human behaviors that affect the pests (food preparation procedures, concessions procedures, classroom food, etc.)
  - v. Their own management activities (caulking/sealing, cleaning, setting out traps, treating pests, etc.) and their effects on the pest population.
  - vi. Any pests or pest-conducive conditions will be reported to the IPM Coordinator by e-mail, or by using Pest Logs to the Coordinator.
- d. Monitoring & Reporting – Grounds/Maintenance 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 by e-mail.
  - i. Pest-conducive conditions inside and outside the building (structural deterioration, holes that allow pests to enter, conditions that provide pest harborage).
  - ii. The level of sanitation inside and out (waste disposal procedures, level of cleanliness inside and out, conditions that supply food and water to pests)
  - iii. The amount of pest damage and the number and location of pest signs (rodent droppings, termite shelter tubes, cockroaches caught in sticky traps, etc.)
  - iv. Human behaviors that affect the pests (food preparation procedures, concessions procedures, classroom food, etc.)
  - v. Their own management activities (caulking/sealing, cleaning, setting out traps, treating pests, etc.) and their effects on the pest population.



- e. 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.
  - i. All staff in the affected area will be made aware of the traps and their purpose so they don't disturb them. The IPM Coordinator and maintenance staff (after proper training by Coordinator) will be responsible for setting them out, checking them regularly, and replacing as needed.
  - ii. Sticky monitoring traps will be placed in the kitchen and any other "pest- vulnerable areas" the Coordinator deems necessary.
  - iii. Kitchen sticky insect traps will be checked regularly (primarily for drain flies, ants, and cockroaches).
- f. Monitoring for Mice. In addition to monitoring for signs of mice (droppings, gnawing, hair, etc.), snap traps will be placed in the kitchen (and any other area the IPM Coordinator deems necessary), and checked by the Coordinator or designated.
- g. Reporting (pests, signs of pests, and conducive conditions). When staff observe pests or pest-conducive conditions they should e-mail the custodian. The custodian will submit a work order to the facilities department, which will be reviewed by the IPM Coordinator.
- h. 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).
  - i. When pests of concern (or their droppings, nests, etc.) are observed, staff should contact the IPM Plan Coordinator immediately.
- i. Action
  - i. Structural: Any items (such as sealing up holes) that custodial/maintenance staff observe that they can resolve should be taken care of and reported to IPM Coordinator. The Coordinator will keep records of these actions using Pest Logs.
  - ii. If the actions needed are not something that can be accomplished alone with minimal time, the Coordinator will meet with them to develop a plan of action with a proposed deadline for completion based on the severity of the risk or nuisance.
  - iii. The Coordinator will monitor actions being taken/work performed, and monitor the completion of all work. The Coordinator will keep records of actions taken/work performed using pest logs.
  - iv. Grounds: When pests on grounds reach a threshold established by the IPM Coordinator, action will be taken as per the matrices in Appendix 1. The Grounds Crew will keep records of actions taken to manage pests on grounds.
- j. Acceptable Thresholds
  - i. A threshold is the number of pests that can be tolerated before acting. The acceptable threshold for cockroaches, mice, rats, raccoons, cats, dogs, opossums, skunks, and nutria is zero.

- ii. 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.

During the inspection he or she will also inspect or review:

- a. Human behaviors that affect the pests (working conditions that encourage or support pests, food preparation procedures that provide food for pests, etc.)
- b. Management activities (caulking/sealing, cleaning, setting out traps, treating pests, etc.) and their effects on the pest population.

**C. Pest Emergencies.**

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.

## **PESTICIDE APPLICATIONS: REQUIRED NOTIFICATION, POSTING, RECORD KEEPING, AND REPORTING**

Any pesticide application on school property must be made by a licensed commercial or public pesticide applicator. At the beginning of each school year, all faculty, administrators, staff, adult students and parents will be given a list of potential pesticide products that could be used in the event that other pest management measures are ineffective. They will also be informed of the procedures for notification and posting of individual applications, including those for pest emergencies. This information will be provided to all the above via e-mail as well as on the district 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 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 a school at, during, before, or while school is in session, as authorized by the IPM Plan Coordinator. If the labeling of a pesticide product specifies a reentry time, a pesticide may not be applied to an area of campus where the school expects students to be present before expiration of that reentry time. If the labeling does not specify a reentry time, a pesticide may not be applied to an area of a campus where the school expects students to be present before expiration of a reentry time that the IPM Plan Coordinator determines to be appropriate based on the times at which students would normally be expected to be in the area, area ventilation and whether the area will be cleaned before students are present.

The IPM Plan Coordinator (or designee) will give written notice of a proposed pesticide application via email to staff and on the district website at least 24 hours before the application occurs.

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

The IPM Plan Coordinator (or a designee of the Coordinator) shall place warning signs around pesticide application areas beginning no later than 24 hours before the application occurs and ending no earlier than 72 hours after the application occurs.

A warning sign must bear the words “Warning: pesticide-treated area”, and give the expected or actual date and time for the application, 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**

The declaration of the existence of a pest emergency is the only time a non low-impact pesticide may be applied.

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

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

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

**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. A copy of the label
- b. A copy of the MSDS
- c. The brand name and USEPA registration number of the product
- d. The approximate amount and concentration of product applied
- e. The location of the application
- f. The pest condition that prompted the application
- g. The type of application and whether the application proved effective
- h. The pesticide applicator’s license numbers and pesticide trainee or certificate numbers of the person applying the pesticide

- of the person applying the pesticide
- i. The name(s) of the person(s) applying the pesticide
- j. The dates on which notices of the application were given
- k. The dates and times for the placement and removal of warning signs
- l. Copies of all required notices given, including the dates the IPM Plan Coordinator gave the notices
- m. 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.

## **APPROVED LIST OF LOW-IMPACT PESTICIDES**

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.
- C. Contain a pesticide product classified as carcinogenic to humans or likely to be carcinogenic to humans under the United States Environmental Protection Agency 2003 Draft Final Guidelines for Carcinogen Risk Assessment.

As a part of pesticide registration under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) and re-registration required by the Food Quality Protection Act (FQPA), EPA Office of Pesticide Programs (OPP) classifies pesticide active ingredients (a.i.) with regards to their potential to cause cancer in humans. Depending on when a pesticide active ingredient was last evaluated the classification system used may differ as described above.

The National Pesticide Information Center (<http://npic.orst.edu/>) can be contacted at 1.800.858.7378 or [npic@ace.orst.edu](mailto:npic@ace.orst.edu) for assistance in determining a pesticide a.i. cancer classification.

The most current list of approved low-impact pesticides is included as Appendix 9 to this IPM plan.

## **LIST OF APPENDIXES**

Appendix 1	Pest Management for Specific Pests
	A. Ants (Small Ants)
	B. Yellow Jackets & Paper Wasps
	C. Gophers & Moles
	D. Poison Oak
	E. Field Weeds – Non-irrigated
	F. Field Weeds – Irrigated
	G. Mice and Rats
	H. Weeds – Non-Fields
Appendix 2	Annual Inspection Form
Appendix 3	Pest Logs
Appendix 4	Outlines of Training for Custodians, Grounds/Maintenance, Kitchen Staff, and Faculty
Appendix 5	Pesticide Application Posting Sign
Appendix 6	Pesticide Application Recordkeeping Form
Appendix 7	Hiring an Outside Contractor
	A. In-House vs. Contractor
	B. Bid Specifications – Important Things to Remember
	C. Sample Bid
Appendix 8	References and Source Materials
Appendix 9	Low Impact Pesticide List

## Appendix 1-A

### Grounds-Building Pests - Ants

**Matrix of Hierarchal Steps to Managing Pest - Level 1 is the preferred first action, Level 2 is the preferred second action, Level 3 is the preferred last action.**

This matrix is to be used in conjunction with the Saint Helens School District IPM Plan.

This is a matrix that identifies a pest problem or issue and defines approved practices for proper control.

The IPM Plan Coordinator (or designee) must approve any additional strategies before they are used.

**Site personnel must always consult the Facilities Grounds/Maintenance Manager prior to taking action against pests on District property.**

Most small ants in Oregon are harmless. They do not transmit human disease and are thus called nuisance ants. If nuisance ants become a disruption at a school, staff should take the following steps:

#### LEVEL 1: Action approved for school supervised volunteer or district staff

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Ants	Less Than 10	Site Inspection/Tolerance	
Ants	More Than 10	Make sure that any other food or water sources are removed. Vacuum any food crumbs, clean up any garbage or spills, and use soap and water to clean areas where ant trails are seen. If staff finds a place where an ant trail enters the room or building, they should mark it for later sealing.	

#### LEVEL 2: Action approved for licensed applicator, (district staff or contractor)

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Ants	Nuisance Level	Pesticide Application	Follow notification-posting-reporting requirements in IPM Plan.

#### LEVEL 3: District and Site approved action for licensed applicator (district staff or contractor) required

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
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## Appendix 1-B

### Grounds-Building Pests - Yellow Jackets & Paper Wasps

**Matrix of Hierarchal Steps to Managing Pest - Level 1 is the preferred first action, Level 2 is the preferred second action, Level 3 is the preferred last action.**

This matrix is to be used in conjunction with the Saint Helens School District IPM Plan.

This is a matrix that identifies a pest problem or issue and defines approved practices for proper control.

The IPM Plan Coordinator (or designee) must approve any additional strategies before they are used.

**Site personnel must always consult the Facilities Grounds/Maintenance Manager prior to taking action against pests on District property.**

Most Paper Wasps are docile and do not bother people. Yellow Jackets are very aggressive for people within 150 feet of the nest. If nuisance bees become a disruption at a school, staff should take the following steps:

#### LEVEL 1: Action approved for school supervised volunteer or district staff

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Yellow Jacket	Less Than 10	Site Inspection/Tolerance.	Submit a work order if a nest is found.
Paper Wasp	Less Than 10	Site Inspection/Tolerance.	Submit a work order if a nest is found.

#### LEVEL 2: Action approved for licensed applicator, (district staff or contractor)

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Yellow Jacket	Nuisance Level	Pesticide Application	Follow notification-posting-reporting requirements in IPM Plan.
Paper Wasp	Nuisance Level	Pesticide Application	Follow notification-posting-reporting requirements in IPM Plan.

#### LEVEL 3: District and Site approved action for licensed applicator (district staff or contractor) required

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
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## Appendix 1-C

### Grounds-Building Pests - Gophers & Moles

**Matrix of Hierarchal Steps to Managing Pest - Level 1 is the preferred first action, Level 2 is the preferred second action, Level 3 is the preferred last action.**

This matrix is to be used in conjunction with the Saint Helens School District IPM Plan.

This is a matrix that identifies a pest problem or issue and defines approved practices for proper control.

The IPM Plan Coordinator (or designee) must approve any additional strategies before they are used.

**Site personnel must always consult the Facilities Grounds/Maintenance Manager prior to taking action against pests on District property.**

Uneven athletic turf is often caused by the burrowing of moles and gophers. This can result in injuries to users of these fields, and a general deterioration of the quality of the turf surfaces. Dogs, often allowed by their owners to run loose on district fields, increase the hazards by digging into the burrows.

#### **LEVEL 1: Action approved for school supervised volunteer or district staff**

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Holes or mounds on grounds	One or two	Trap	Follow notification-posting-reporting requirements in IPM Plan.

#### **LEVEL 2: Action approved for licensed applicator, (district staff or contractor)**

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Holes or mounds on grounds	< 2 > 7 mounds in 200 ft <sup>2</sup>	Trap	Follow notification-posting-reporting requirements in IPM Plan.

#### **LEVEL 3: District and Site approved action for licensed applicator (district staff or contractor) required**

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Holes or mounds on grounds	> 7 mounds in 200 ft <sup>2</sup>	Trap and pesticide application	Follow notification-posting-reporting requirements in IPM Plan.



## Appendix 1-D

### Grounds-Building Pests - Poison Oak

**Matrix of Hierarchal Steps to Managing Pest - Level 1 is the preferred first action, Level 2 is the preferred second action,**  
This matrix is to be used in conjunction with the Saint Helens School District IPM Plan.

This is a matrix that identifies a pest problem or issue and defines approved practices for proper control.

The IPM Plan Coordinator (or designee) must approve any additional strategies before they are used.

**Site personnel must always consult the Facilities Grounds/Maintenance Manager prior to taking action against pests on District property.**

Poison Oak can spread rapidly without proper detection. This native plant is problematic in that, when contacted by skin, the leaves release a substance called urushiol, in oil form, which causes severe contact dermatitis in most people. It may also have dangerous (to the point of life-threatening) systemic impact on a limited number of people. There is the obvious danger of severe allergic reaction to poison oak. A secondary problem can be just as dangerous: children (and adults) can scratch skin infected by the poison oak with finger nails that contain bacteria. There is a very real danger of life-threatening staph, strep, and other bacterial infections.

#### LEVEL 1: Action approved for school supervised volunteer or district staff

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>
Poison Oak Plants - in non-use	Localized patch 1' x 1'	Inform site staff
Poison Oak Plants - in use area	Localized patch 1' x 1'	Hand/Machine Removal

#### LEVEL 2: Action approved for licensed applicator, (district staff or contractor)

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Poison Oak Plants	<10% for 100 ft <sup>2</sup>	Pesticide Application	Follow notification-posting-reporting requirements in IPM Plan.

#### LEVEL 3: District and Site approved action for licensed applicator (district staff or contractor) required

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
No currently approved treatment			

## Appendix 1-E

### Grounds-Building Pests - Field Weeds - Non-Irrigated

**Matrix of Hierarchal Steps to Managing Pest - Level 1 is the preferred first action, Level 2 is the preferred second action, Level 3 is the preferred last action.**

This matrix is to be used in conjunction with the Saint Helens School District IPM Plan.

This is a matrix that identifies a pest problem or issue and defines approved practices for proper control.

The IPM Plan Coordinator (or designee) must approve any additional strategies before they are used.

**Site personnel must always consult the Facilities Grounds/Maintenance Manager prior to taking action against pests on District property.**

Although irrigation, top dressing, over seeding, fertilization, and aeration are the dominant variables in maintaining quality turf, there are instances in which fields are so infested with broadleaf plants that they are no longer usable for athletic events. The uneven playing surfaces caused by the mix of grass and broadleaf weeds, such as plantains, create significant variations in footing. As a result, the fields become difficult and eventually unsafe for play. Besides the uneven playing surfaces the presence of a large number of weeds also improves the habitat for gophers, which prefer this vegetation for food, resulting in a very uneven surface for running with large mounds and deep holes. These render the field unplayable, and have resulted in a number of injuries to people who try to play on them. Facilities has embarked on a more aggressive gopher and mole control program. Eliminating their preferred food source (the roots of broadleaf vegetation) improves the effectiveness of this program. (See: Gophers & Moles matrix)

Athletic fields which are not irrigated have the same issues as irrigated fields, plus the added issue that the lack of irrigation makes it more difficult for the grass to compete with the weeds. The control actions are slightly different than for irrigated fields.

#### **LEVEL 1: Action approved for school supervised volunteer or district staff**

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Small number of localized weeds	Less than 10% for 100 ft <sup>2</sup>	Site Inspection/Tolerance Inspect/Adjust sprinkler system Hand cultivating Increased mowing Overseeding	Promote growth Baseball diamonds Reduce pest seeds Promote grass

#### **LEVEL 2: Action approved for licensed applicator, (district staff or contractor)**

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Large number of weeds	<10%, >50% for 100 ft <sup>2</sup>	Herbicide application, overseed, fertilize, aeration	Follow notification-posting-reporting requirements in IPM Plan.

#### **LEVEL 3: District and Site approved action for licensed applicator (district staff or contractor) required**

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Field consumed by weeds	<50% for 100 ft <sup>2</sup>	Recondition Field	Follow notification-posting-reporting requirements in IPM Plan.

## Appendix 1-F

### Grounds-Building Pests - Field Weeds - Irrigated

**Matrix of Hierarchal Steps to Managing Pest - Level 1 is the preferred first action, Level 2 is the preferred second action, Level 3 is the preferred last action.**

This matrix is to be used in conjunction with the Saint Helens School District IPM Plan.

This is a matrix that identifies a pest problem or issue and defines approved practices for proper control.

The IPM Plan Coordinator (or designee) must approve any additional strategies before they are used.

**Site personnel must always consult the Facilities Grounds/Maintenance Manager prior to taking action against pests on District property.**

Although irrigation, top dressing, over seeding, fertilization, and aeration are the dominant variables in maintaining quality turf, there are instances in which fields are so infested with broadleaf plants that they are no longer usable for athletic events. The uneven playing surfaces caused by the mix of grass and broadleaf weeds, such as plantains, create significant variations in footing. As a result, the fields become difficult and eventually unsafe for play. Besides the uneven playing surfaces the presence of a large number of weeds also improves the habitat for gophers, which prefer this vegetation for food, resulting in a very uneven surface for running with large mounds and deep holes. These render the field unplayable, and have resulted in a number of injuries to people who try to play on them. Facilities has embarked on a more aggressive gopher and mole control program. Eliminating their preferred food source (the roots of broadleaf vegetation) improves the effectiveness of this program. (See: Gophers & Moles matrix)

#### LEVEL 1: Action approved for school supervised volunteer or district staff

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Small number of localized weeds	Less than 10% for 100 ft <sup>2</sup>	Site Inspection/Tolerance Inspect/Adjust sprinkler system Hand cultivating Increased mowing Overseeding	Promote growth Baseball diamonds Reduce pest seeds Promote grass

#### LEVEL 2: Action approved for licensed applicator, (district staff or contractor)

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Large number of weeds	<10%, >50% for 100 ft <sup>2</sup>	Herbicide application, overseed, fertilize, aeration	Follow notification-posting-reporting requirements in IPM Plan.

#### LEVEL 3: District and Site approved action for licensed applicator (district staff or contractor) required

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Field consumed by weeds	<50% for 100 ft <sup>2</sup>	Recondition Field	Follow notification-posting-reporting requirements in IPM Plan.

## Appendix 1-G

### Grounds-Building Pests - Mice and Rats

**Matrix of Hierarchal Steps to Managing Pest - Level 1 is the preferred first action, Level 2 is the preferred second action, Level 3 is the preferred last action.**

This matrix is to be used in conjunction with the Saint Helens School District IPM Plan.

This is a matrix that identifies a pest problem or issue and defines approved practices for proper control.

The IPM Plan Coordinator (or designee) must approve any additional strategies before they are used.

**Site personnel must always consult the Facilities Grounds/Maintenance Manager prior to taking action against pests on District property.**

Mice or rats are zero threshold pests. The first step is prevention. The following steps are required by the district to help eliminate an environment that is appealing or accessible to mice. Any gaps of 1/4 inch or more should be properly sealed using the appropriate sealant (steel wool, foam and other temporary materials are not recommended). Seal around water, gas, electric, and other pipes and conduits going through walls. All external doors should be mouse proofed using the high quality brush-type door sweeps that seal the gap between the threshold and the door base. No trash should be allowed to accumulate along the exterior walls. Keep dumpsters clean, with lids closed. De-clutter storage areas and classrooms

#### LEVEL 1: Action approved for school supervised volunteer or district staff

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Evidence of Mouse or Rat	0	Trap	

#### LEVEL 2: Action approved for licensed applicator, (district staff or contractor)

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>

#### LEVEL 3: District and Site approved action for licensed applicator (district staff or contractor) required

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>

## Appendix 1-H

### Grounds-Building Pests - Weeds - Non-Field

**Matrix of Hierarchal Steps to Managing Pest - Level 1 is the preferred first action, Level 2 is the preferred second action, Level 3 is the preferred last action.**

This matrix is to be used in conjunction with the Saint Helens School District IPM Plan.

This is a matrix that identifies a pest problem or issue and defines approved practices for proper control.

The IPM Plan Coordinator (or designee) must approve any additional strategies before they are used.

**Site personnel must always consult the Facilities Grounds/Maintenance Manager prior to taking action against pests on District property.**

Weeds that grow in various places on the district's property will be allowed in some areas and their eradication will be determined on a case by case basis by the IPM coordinator. Vegetation growth is not tolerated in/under fences. The weeds push up the bottom of the fence and leave an edge that could trip or cut a child when they are playing or walking near a fence. Vegetation growth is not tolerated in/on the asphalt, concrete paths, or curbs. The roots crack and break the structural integrity of the surface causing increased maintenance. Vegetation growth is not tolerated within 18" inches of any structure so that it does not provide a sheltered area for insects and rodents to reside. Flora also attracts various insects and will draw more insects closer and eventually into our buildings. Weeds in flower beds will not be tolerated because they are allergy triggers for some students. They also attract bees and gophers (see appendices 1-b and 1-c).

#### **LEVEL 1: Action approved for school supervised volunteer or district staff**

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Weeds	Less than 1% for 100 ft <sup>2</sup>	Site Inspection/Tolerance	

#### **LEVEL 2: Action approved for licensed applicator, (district staff or contractor)**

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Weeds	<1%, >10% for 100 ft <sup>2</sup>	Hand Pull Weeds	

#### **LEVEL 3: District and Site approved action for licensed applicator (district staff or contractor) required**

<u>Pest Description</u>	<u>Threshold</u>	<u>Action</u>	<u>Comments</u>
Weeds	<10% for 100 ft <sup>2</sup>	Herbicide application	Follow notification-posting-reporting requirements in IPM Plan.

## Appendix 2

### Annual IPM Inspection Form

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				
Eaves 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:

<b>Kitchen and Food Preparation Area</b>	<b>Yes</b>	<b>No</b>	<b>Not Sure</b>	<b>N/A</b>
Free of unauthorized pesticides				
Trash emptied daily				
Door sweeps installed so no ¼" gaps				
Floor at every corner is clean and without signs of pests				
Area is free of standing water				
Floor drains and floor sinks are clean				
All faucets close properly and have no leaks or drips				
Under stoves, sinks, and dishwasher kept clean				
No open holes or other access to outside				
Any cracks in walls or floors are sealed properly				
Windows have screens on them				
Vents are free of grease and dirt				
Storage is kept off the floor on wire rack shelving				
Food is put away and stored properly in sealed containers				
Cardboard boxes present				
No long term storage of anything in cardboard boxes				
Pest monitors (sticky traps) are present and dated				
Pest log is posted				
Breaker boxes free of evidence of pests				

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

Notes:

<b>Custodial and Custodial Closets</b>	<b>Yes</b>	<b>No</b>	<b>Not Sure</b>	<b>N/A</b>
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:

<b>Boiler Rooms and Fan Rooms</b>	<b>Yes</b>	<b>No</b>	<b>Not Sure</b>	<b>N/A</b>
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:

<b>Teachers Lounge</b>	<b>Yes</b>	<b>No</b>	<b>Not Sure</b>	<b>N/A</b>
Room is free of cloth couches and chairs				
It's clean behind and under microwave				
It's clean under and behind vending machines				
It's clean inside, under, and behind the refrigerator				
All counters clean and free of food bits and such				
Floor at every corner is clean and without signs of pests				
Under sink is kept clean				
Cupboards clean and any food is in sealed containers				
Free of unauthorized pesticides				
Pest monitors (sticky traps) are present and dated				
Pest log is posted				

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

Notes:

<b>Classrooms or Offices</b>	<b>Room #</b>	<b>Yes</b>	<b>No</b>	<b>Not Sure</b>	<b>N/A</b>
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:

<b>Classrooms or Offices</b>	<b>Room #</b>	<b>Yes</b>	<b>No</b>	<b>Not Sure</b>	<b>N/A</b>
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:

<b>Classrooms or Offices</b>	<b>Room #</b>	<b>Yes</b>	<b>No</b>	<b>Not Sure</b>	<b>N/A</b>
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:

<b>Other Room:</b>	<b>Yes</b>	<b>No</b>	<b>Not Sure</b>	<b>N/A</b>
Free of unauthorized pesticides				
Room is free of standing water				
Room is free of trash and food				
Room is free of storage, especially in cardboard boxes				
Any food items are stored in sealed plastic containers				
Free of clutter				
Cracks or holes in floors and walls are sealed properly				
Outside windows and doors close tight and have no gaps				
Window screens (if any) are in good repair				

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

Notes:

## Appendix 3

## Saint Helens School District Pest Log

[illegible]

## Appendix 4

### Training Outlines

#### CUSTODIAL STAFF TRAINING

Training on IPM is done through Public School Works training videos and covers bullet points 1-4.

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
  - j. Responsibilities
    - i. Attending annual IPM training provided by the IPM Coordinator (or designee).
    - ii. Continually monitoring for pest-conducive conditions during daily work, and sealing small holes and cracks when noticed.

- iii. Reporting pest problems and pest-conducive conditions that they cannot resolve in a short amount of time to the IPM Coordinator.
  - iv. Reporting teachers to IPM Coordinator who need assistance to reduce clutter and other pest-conducive conditions in their classrooms.
  - v. Report any unapproved pesticides (such as aerosol spray cans) discovered in their regular duties or during an inspection and reporting them to the IPM Coordinator.
  - vi. Assisting IPM Coordinator with resolving issues found in annual inspection report.
  - vii. 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.
6. Requirements of ORS 634.700 – 634.750 (IPM plan, Coordinator, no pesticides applied without license, etc.)

## **GROUND/MAINTENANCE STAFF TRAINING**

Training on IPM is done through Public School Works training videos and covers bullet points 1-4.

- 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
  - e. Better organized working environment
- 4. Pest basics
  - a. Food
  - b. Water
  - c. Shelter
- 5. Role of maintenance/construction staff
  - a. Monitoring for pest conducive conditions
  - b. Working with Coordinator to develop priority list, deadlines for pest exclusion needs
  - c. Working with Coordinator to develop protocols and provisions for pest avoidance and prevention during construction and renovation projects
  - d. Attend annual IPM training provided by the IPM Plan Coordinator
- 6. 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
7. 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
  - e. Responsibilities
    - i. Attending annual IPM training provided by the IPM Coordinator (or designee).
    - ii. Working with the IPM Coordinator to reduce conditions conducive to weeds, gophers, moles, yellow jackets, and other outdoor pests
    - iii. Keeping vegetation at least 24 inches from building surfaces.
    - iv. Follow best practices for field maintenance for each individual field.
    - v. Reporting any unapproved pesticides discovered in their regular duties or during an inspection to the IPM Coordinator.
    - vi. Assisting IPM Coordinator with resolving issues found in annual inspection report.
    - vii. 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.
    - viii. Continually monitoring for pest-conducive conditions during daily work, and sealing small holes and cracks when noticed.
    - ix. When the decision is made to apply a pesticide, following notification, posting, record-keeping and reporting protocols.
8. Requirements of ORS 634.700 – 634.750 (IPM plan, Coordinator, no pesticides applied without license, etc.)

## **KITCHEN STAFF TRAINING**

Training on IPM is done through Public School Works training videos and covers bullet point 1-4.

- 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 Kitchen Staff
  - a. Reduced potential for pest-vectoring diseases
  - 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
4. Pest Basics
  - a. Food
  - b. Water
  - c. Shelter
  - d. Kitchen and pantry are often the most pest-prone area of a school
5. Role of Kitchen Staff in a School IPM Program
  - a. Awareness of pest conducive conditions in kitchen, pantry, dumpster area
  - b. Reduction of pest conducive conditions in kitchen, pantry, and dumpster area
  - c. Communication
    - i. Report pests in pest log
    - ii. Report maintenance needs
  - d. Sanitation
  - e. Cultural Changes
  - f. Education
    - i. Maintain IPM awareness among all kitchen staff
    - ii. Participation in IPM inspections of kitchen
    - iii. Attend annual IPM training provided by IPM Plan Coordinator
  - g. When to take action against a pest: appropriate pest-response action for kitchen staff
  - h. Responsibilities
    - i. Attending annual IPM training provided by the IPM Coordinator (or designee).
    - ii. Assuring floor under serving counters and movable equipment is kept free of food and drink debris.
    - iii. Avoiding long-term storage or use of cardboard boxes.
    - iv. Removing recycle products daily.
    - v. Keeping outside doors closed at all times (except during deliveries and emptying trash).
    - vi. Keeping all food items in sealed containers.
    - vii. Immediately reporting any sightings of rodents or rodent droppings to the custodian, and following up with an email to the IPM Coordinator.
    - viii. 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.)
6. Requirements of ORS 634.700 – 634.750 (IPM plan, Coordinator, staff cannot use pesticides)

## **FACULTY TRAINING**

Training on IPM is done annually through Public School Works training videos and covers the following.

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)
  - 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 5

# **WARNING**

## **PESTICIDE-TREATED AREA**

**A pesticide application is scheduled for/was performed on:**

**DATE**\_\_\_\_\_ **TIME**\_\_\_\_\_

**For further information regarding this notice please contact:**

\_\_\_\_\_  
**Name**

\_\_\_\_\_  
**Telephone Number**

# School IPM Recordkeeping Form

Oregon Department of Agriculture  
Pesticide Program  
(503) 986-4635

Form date 4/19



**Oregon**  
Department  
of Agriculture

Date: \_\_\_\_\_ Time of application: Start \_\_\_\_\_ End \_\_\_\_\_

School: \_\_\_\_\_ Specific area(s) treated: \_\_\_\_\_

Address: \_\_\_\_\_ Size of area treated: \_\_\_\_\_

Applicator name: \_\_\_\_\_ Applicator license number: \_\_\_\_\_

Supervising applicator and license number (if applicator is a Trainee or Apprentice): \_\_\_\_\_

Condition that prompted application:

Date written notice was sent: \_\_\_\_\_

**\*\* Be sure to attach/save a copy of the written notice that was sent\*\***

Date and time of warning sign placement Date: \_\_\_\_\_ Time: \_\_\_\_\_

Date and time of warning sign removal Date: \_\_\_\_\_ Time: \_\_\_\_\_

Product name	EPA #	Type of application	Dilution	Total amount	Equipment used

Notes:

Did the application prove effective? Yes ☐ No ☐ Note: \_\_\_\_\_

- Be sure to retain an up-to-date copy of the label on file at a school on the campus
- Be sure to retain a copy of the SDS on file at a school on the campus
- Be sure to keep a file of pesticide supplier information

## **Appendix 7**

### **Hiring an Outside Contractor**

(The following guidance is excerpted and modified from NC State University's IPM North Carolina Schools Manual)

#### **A. In-House vs. Contractor: Advantages & Disadvantages**

Schools in Oregon receive pest control services from pest control companies or trained school maintenance employees. Both pest control companies and school employees with the proper training can successfully perform Integrated Pest Management (IPM). Some school districts contract pest control companies to provide pest control services. Others combine in-house and contracted services and some use in-house services exclusively. Each approach has advantages and disadvantages therefore school officials should decide which one best suits the school district's resources and needs.

#### **Pest Control by In-House Personnel**

##### *Advantages*

1. Compared to contracted pest control services, school pest management personnel may find it easier to communicate and develop a rapport with students, teachers, staff and other school employees. Cooperation with all individuals in the school is needed for the program to succeed.
2. When a school employee performs pest control services, schools may find it efficient to incorporate some pest control activities with other maintenance activities performed by certified in-house employees, as long as the employee is a certified pest control operator.
3. Because in-house personnel are always around the schools, they are more likely to identify pest problems before they become too serious.
4. When in-house personnel perform pest control, there is no need to develop a bid invitation and therefore the potential difficulty of choosing a pest control firm based on reliability rather than simply on lowest bid.
5. Maintenance or buildings and grounds supervisors have greater control over personnel selection and performance, and subsequently the quality of pest control services.

##### *Disadvantages*

1. There is need to find safe storage sites for pesticides and pest control equipment.
2. The potential liability of the district in regard to pesticide use is probably higher in an in-house program.
3. If a re-entry time interval is needed which is greater than that listed on the label, overtime expenses could be incurred.
4. Certifying an employee to apply pesticides in a school will require time and a charge for the certification exam. In addition, all pesticide applicators will need to maintain ongoing certification by attending continuing education events.

#### **Contracted Pest Control Services**

##### *Advantages*

1. Professional pest control personnel usually have a broader range of experience, on-going training, and greater familiarity with the full range of treatment techniques and potentially expensive

equipment available to safely and effectively control pests. By contracting with an outside pest control company, the School district eliminates or reduces the need to train and maintain pesticide applicator certification for employees, although schools are encouraged to have certified applicators who can better evaluate the quality of the work performed by the contractor.

2. Using contracted services can reduce potential liability of the school system with regard to the use and storage of pesticides. The need for locating a special storage site for pesticides is eliminated.
3. There are times when pest control activities must be performed after-hours or on weekends to meet reentry interval requirements. By hiring a contractor the school district avoids the need for overtime expenses.
4. Contracted pest control services can provide school administrators with the flexibility of using specialized and professional labor on an "as-needed" basis, as opposed to investing in the development of in-house capabilities that may not be used on a continuous basis.

#### *Disadvantages*

1. Communication between contracted individuals and school employees may not be as easily developed as in an in-house program.
2. School districts must develop a bid invitation for contracted services and choose a pest control firm based on IPM expertise and reliability rather than simply on lowest bid.

### **B. Bid Specifications – Important Things to Remember**

#### **What to Look for When Choosing and Evaluating an IPM Contractor**

- Is the contractor prevention-oriented or reactive-oriented?
- Is the contractor knowledgeable about the damage caused by each type of pest?
- Does the contractor inspect for pest-conducive conditions and monitor population levels at least monthly?
- Does the contractor use a flashlight during inspections?
- Does the contractor use monitoring traps for insects?
- Are the traps checked and changed according to IPM Plan schedule?
- Does the contractor explain ways to prevent further pest outbreaks?

#### **Essential Items in IPM Bid Specifications**

Some elements for IPM bid specifications are listed below:

- On-site inspections: Prospective bidders should conduct a thorough on-site inspection before submitting a bid. This allows potential bidders to view firsthand the facilities and pest problems, so bidders can make a realistic estimate of service needed and the time required for these services.
- IPM Plan: The bid should spell out exactly which sections of the district's IPM Plan will be carried out by the contractor, and how these will be coordinated and communicated with school staff.
- Minimum service times: The minimum amount of time that a pest control technician should take per scheduled visit can be defined by the school district in the bid. Bidders should understand that minimum service times are an expectation of the contract, and any failure of the contractor to meet these minimum service times should be grounds for cancellation of the contract by the school district.
- Monitoring tools: The contractor should use appropriate monitoring tools (flashlight, sticky insect monitoring traps, etc.) and procedures mentioned in the IPM Plan on a regular basis to find pest infestations and assess the need for corrective action.
- Approved Pesticides: Only products from the district's list of approved pesticides shall be used. Districts should receive from the bidder copies of labels and Material Safety Data Sheets (MSDS)

for all pesticides to be used on the school district property.

- Reduced-risk formulations and methods: The use of baits, bait stations, and crack- and-crevice or void treatments are the only approved treatments indoors. Aerosol, broadcast, spot, and baseboard treatments are prohibited except when a pest emergency as defined in the district's IPM Plan is declared. All applications must follow the requirements and protocols outlined in the Plan.

The above provisions and others are specified in the following set of model bid specifications. These specifications are strongly recommended as a model for school districts attempting to implement an indoor IPM program. School districts may want to incorporate some elements of the model contract into existing bid specifications; others may adopt the requirements in total, with additions as suggested by their IPM coordinator, purchasing officer or other business personnel. Many standard clauses are omitted from the following contract to save space. If there is a conflict between the model bid specifications and the school district's usual bid process, the district should defer to its regular bidding process.

(The following bid is excerpted and modified from the Texas Agricultural Extension Service Publication B-6015)

### **C. Sample Bid: Integrated Pest Management Plan Contract Guide Specification**

#### **1. GENERAL**

*Description of Program:* This specification is part of a comprehensive Integrated Pest Management (IPM) Plan for the premises listed herein. IPM is a process for achieving long-term, environmentally sound pest suppression and prevention through the use of a wide variety of technological and management practices (see the district's IPM plan at, <https://www.sthelens.k12.or.us/Page/5058>).

- Facility inspections to identify pest harborage and presence of conditions favorable to pests.
- Proper identification of pests and an understanding of pest biology and behavior.
- Structural and procedural changes to reduce food, water, harborage, and access used by pests.
- A preference for non-pesticide technologies such as trapping and monitoring devices.
- Use of low-risk pesticide compounds, formulations, and selection of application methods that present a reduced potential hazard to humans and the environment.
- Coordination among all facilities management programs that have a bearing on the pest control effort.

*Contractor Service Requirements:* The Contractor shall furnish all supervision, labor, materials, and equipment (excluding insect light traps, air curtains, and other major expense items unless requested by the contract administrator) necessary to accomplish the inspection, monitoring, trapping, pest management (including pesticide application if needed, but excluding sanitation and building maintenance), and pest removal components of the IPM Plan. The Contractor shall also provide detailed, site-specific recommendations for structural and procedural modifications to aid in pest prevention.

#### **2. PESTS INCLUDED AND EXCLUDED**

**PESTS INCLUDED:** The Contractor shall adequately suppress the following pests:

- A. Indoor populations of commensal rodents, insects, arachnids, and other arthropods. For the purposes of this contract, commensal rodents include Norway rat, roof rat and house mouse. There may be an additional charge for the control of certain species because of increased material and/or labor expenses such as bed bugs and other pests not specified in the contract.

- B. Outdoor populations of potentially indoor-infesting species that are within the property boundaries within \_\_\_\_\_ yards of the specified buildings.
- C. Nests of stinging insects within the property boundaries of the specified buildings. D. Individuals of all excluded pest populations that are incidental invaders inside the specified buildings.
- D. Populations (or individual animals) of vertebrates (other than commensal rodents), including birds and bats. For vertebrate pests, contractor should have a qualified person on staff to control them or recommend a qualified wildlife damage control agent.

PESTS EXCLUDED: The following pests are excluded from this contract:

- A. Termites and other wood-destroying organisms.
- B. Mosquitoes.
- C. Pests that feed on outdoor vegetation

### 3. INITIAL BUILDING INSPECTIONS

The Contractor shall complete a thorough, initial inspection of each building or site at least \_\_ working days prior to the starting date of the contract. The purpose of the initial inspections is for the Contractor to evaluate the pest control needs of all locations and to identify problem areas and any equipment, structural features, and other conditions or management practices that are conducive or contributing to pest infestations. Access to building space shall be coordinated with the Facilities Manager.

*\*Contact information for each facility (with address and phone number) is attached.*

### 4. THE INTEGRATED PEST MANAGEMENT CONTRACT

The Contractor shall submit to \_\_\_\_\_ an Integrated Pest Management (IPM) Contract at least \_\_\_\_\_ working days prior to the starting date of the contract. Upon receipt of the IPM Contract, the \_\_\_\_\_ will render a decision regarding its acceptability within \_\_\_\_\_ working days. If aspects of the IPM Contract are incomplete or disapproved, the Contractor shall have \_\_\_\_\_ working days to submit revisions. The Contractor shall be on-site to perform the initial service visit for each building within the first \_\_\_\_\_ working days of the contract.

The IPM Contract shall consist of five (5) parts as follows:

- A. *Proposed Methods for Pest Identification, Monitoring and Detection:* The Contractor shall provide information on procedures to be used to identify pests, as well as describe methods and procedures to be used for identifying sites of pest harborage and access, for making objective assessments of pest population levels, and for determining the need to implement specific control measures throughout the term of the contract.
- B. *Description of any Structural or Operational Changes That Would Facilitate the Pest Control Effort:* The Contractor shall describe site-specific solutions for observed sources of pest food, water, harborage, access or other conditions conducive to pest problems.
- C. *Proposed Materials and Equipment for Service:* The Contractor shall provide the following information:
  - a. A list of all pesticide products to be used. These must be on the school district's approved list of low-impact pesticides. They shall include each product's brand name, common name of the active ingredient.
  - b. A list of the brand names of pesticide application equipment, rodent bait boxes, insect and rodent trapping devices, pest monitoring devices, pest detection equipment, and any other pest control devices or equipment that may be used to provide service.
  - c. The current label (and labeling) and Material Safety Data Sheet (MSDS) for each pesticide product on the list referenced in C1.

- D. *Commercial Pesticide Applicator Documentation:* The Contractor shall provide the following documents
- a. The phone number for the currently designated state poison control center.
  - b. The names and phone numbers of at least two individuals who are designated as the primary and secondary 24-hour contacts for information concerning any aspects of the pest control service being provided.
  - c. A photocopy of the valid Oregon Pesticide Applicator License(s) under which all pest control is to be performed.
  - d. A photocopy of the Contractor's valid Certificate of Insurance.
  - e. A list of all Contractor employees who will be performing on-site service under this contract; this list shall include the employee's name and a statement of whether the employee is a licensed pesticide applicator or trainee.
- E. *Commercial Pesticide Applicator Documentation:* The Contractor shall be responsible for carrying out work according to the approved Pest Control Plan. The Contractor shall receive the concurrence of the \_\_\_\_\_ prior to implementing any subsequent changes to the approved Pest Control Plan, including changes in on- site service personnel and any additional or replacement pesticides.

## 5. RECORD KEEPING

The Contractor shall be responsible for maintaining a pest management logbook for each building or site specified in this contract. These logbooks shall be kept on-site and accessible to all site staff and the community. The Contractor shall maintain or update the contents of these logbooks on each visit. Each logbook shall contain at least the following items:

- A. *Integrated Pest Management Contract:* A complete copy of the Contractor's approved IPM Contract.
- B. *Pest Log:* A school-district-approved form that permits school personnel to record the location any pest sightings and Contractors any action taken. The \_\_\_\_\_ will review and approve the design of this form prior to its distribution and use at the facilities. The \_\_\_\_\_ will be responsible for informing and educating all site staff about methods for reporting pest observations in the log.
- C. *Contractor's Service Report:* The Contractor shall document site-specific pest findings and subsequent control measures performed during the service visit. A separate form is not required if the Pest Log is designed to incorporate this information.

## 6. THE MANNER AND TIME TO CONDUCT PEST MANAGEMENT ACTIVITIES

- A. *Time Frame of Service Visits:* The Contractor will negotiate with \_\_\_\_\_ regarding time frame of service visits. It is imperative that the Contractor interacts with school staff during regular school hours to get a better understanding of the local situation and educate staff when necessary. It is also important that the Contractor conduct those pest management activities that may cause class disruption after school hours. All contractor employees shall adhere to all policies for notifying local personnel that the employee is onsite and working in the building. When it is necessary to perform work outside of the regularly scheduled service time set forth in the IPM Plan, the Contractor shall notify the \_\_\_\_\_ at least \_\_\_\_\_ day in advance except when the \_\_\_\_\_ requests emergency service as described in Section 7 of this contract. The \_\_\_\_\_ shall approve such changes before any work is done.
- B. *Safety and Health:* The Contractor shall observe all applicable safety precautions throughout the

performance of this contract. All work shall be in strict accordance with all applicable Federal, state, and local safety and health requirements, as well as specific pest control product label instructions. Where there is a conflict between applicable regulations, the most stringent will apply.

- C. *Compliance*: The Contractor shall assume full responsibility and liability for compliance with all applicable regulations pertaining to the health and safety of personnel during the execution of work. The contractor's liability insurance must be enforced throughout the term of this contract.
- D. *Special Entrance*: Certain areas within some buildings may require special instructions for persons entering them. Any restrictions associated with these special areas will be explained by the\_. The Contractor shall adhere to these restrictions and incorporate them into the IPM Contract.
- E. *Uniforms and Protective Clothing*: All Contractor personnel working in or around buildings specified in this contract shall wear distinctive uniform clothing and a photo ID badge. The Contractor shall determine the need for and provide any personal protective items required for the safe performance of work. Protective clothing, equipment, and devices shall, as a minimum, conform to U.S. Occupational Safety and Health Administration (OSHA) standards and to any specific label requirements for the products being used.
- F. *Vehicles*: Vehicles used by the Contractor shall be identified in accordance with state and local regulations. While on-site, all service vehicles shall be secured to prevent unauthorized access to chemicals and equipment. Service vehicles shall be equipped with appropriate pesticide spill control equipment in accordance with state and federal regulations. All pesticides on contractor vehicles shall remain locked or remain inaccessible while vehicles are unattended.

## **7. SPECIAL REQUESTS AND EMERGENCY SERVICE**

On occasion, the Facility Manger may request that the Contractor perform corrective, special, or emergency services that are beyond routine service requests. The Contractor if possible shall respond to these exceptional circumstances and complete the necessary work within a timeframe approved by the Facility Manger, which will minimize disruption of the daily activities of the building.

## **8. CONTRACTOR PERSONNEL**

Throughout the term of this contract, all Contractor personnel providing on-site applications must have a commercial applicators license in accordance with SB 637. They must also have specific IPM training. In addition, the contractor shall run criminal background checks and not allow any individual with a felony within the last 5 years to service the property.

## **9. INSECT CONTROL**

The priority for insect control will be the use of non-pesticide methods. The Contractor shall use non-pesticide methods of control wherever possible. For example:

- Portable vacuums rather than pesticide sprays shall be the standard method for initial cleanouts of cockroach infestations and the control of spiders and other miscellaneous pests.
- Trapping devices, such as light traps, shall be the standard method for indoor fly control. The Contractor will make recommendations to the Facility Manager regarding the purchase and installation of such traps.

Pesticides can only be used after following the protocols of the district's IPM Plan. When pesticides are used, the Contractor shall use pesticides on the district's approved list of low-impact pesticides and employ reduced-risk methods of application.

- A. *Monitoring*: Monitoring devices (Sticky traps, light traps, etc) shall be used to guide decisions on appropriate pest control measures and subsequently to evaluate the effectiveness of these



measures.

- B. *Insecticide Bait Formulations*: Non-volatile bait formulations shall be the first choice for cockroach and ant control. If possible, baits shall be applied or placed in areas that cannot be accessed by children or building occupants.
- C. *Application of Insecticides to Cracks and Crevices*: As a general rule, the Contractor shall apply liquid/dry insecticide formulations as “crack and crevice” treatments only, defined in this contract as treatments in which the formulated insecticide is applied to hidden or protected areas that are used as harborage sites by pests.
- D. *Application of Insecticides to Exposed Surfaces*: Application of insecticides to exposed surfaces shall be restricted to a pest emergency as defined in the district’s IPM Plan where no alternative effective measures are practical. The Contractor shall obtain approval of Facility Manager prior to any application of insecticide to an exposed surface or any space spray treatment. No surface application or space spray shall be made while the treatment site is occupied. The Contractor shall take all necessary precautions to ensure occupant and employee safety, and all necessary steps to ensure the containment of the pesticide to the site of application.
- E. *Space sprays*: Application of pesticides as space sprays (“fogging”) are strictly prohibited, except when a pest emergency as defined in the district’s IPM Plan is declared. The application must follow the same restrictions outlined for surface sprays. Space sprays must be timed to allow the specific treatment site to remain unoccupied for a minimum of 24 hours. The Contractor shall be responsible for ventilating the treatment site in accordance with instructions on the product label before school personnel reenter the site. The Facility Manager will assist the Contractor to secure the treatment site to prevent any unauthorized reentry to the area prior to ventilation or before any re-entry period specified on the product label, and to arrange for appropriate cleaning of exposed surfaces by \_\_\_\_\_ employees before the site is free for general use.

## 10. RODENT CONTROL

- A. *Indoors trapping*: As a general rule, rodent control inside buildings shall be accomplished with trapping devices only. All such devices shall be placed so as to conceal them from general view, make them inaccessible to building occupants, and to protect them from any adverse effects of routine cleaning and other operations.
- B. *Trapping devices* shall be checked on a schedule approved by the Facility Manager. The Contractor shall be responsible for disposing of all trapped rodents and all rodent carcasses in an appropriate manner.
- C. *Use of Rodenticides*: In exceptional circumstances, when rodenticides are deemed essential for adequate rodent control inside buildings, the Contractor shall obtain approval of the Facility Manager prior to making any interior rodenticide treatment. ONLY block (paraffin-based or other types) rodenticides shall be used. Pellet/pack bait formulations and packaging shall not be used in/around school buildings. All bait shall be placed in EPA-approved tamper-resistant bait boxes that can be secured to a surface.
- D. *Use of Bait stations*: All bait stations shall be maintained in accordance with EPA and regulations, with an emphasis on the safety of non-target organisms. The Contractor shall adhere to the following five (5) points:
  - 1. All bait stations shall be placed out of the general view, in locations where they will not be disturbed by routine operations.
  - 2. The lids of all bait stations shall be securely locked or fastened shut.
  - 3. All bait boxes shall be securely attached or anchored to floor, ground, wall, or other immovable surface, so that the station cannot be picked up or moved by unauthorized personnel.
  - 4. Bait shall always be secured in the feeding chamber of the station and never placed in the runway or entryways of the stations where it could be removed or dislodged.

5. All bait stations shall be labeled with the Contractor's business name and address, and dated by the Contractor's technician at the time of installation and each servicing.
- E. *The locations of all trapping devices and baiting stations* will be recorded in the site's Pest Log. The Contractor shall record all changes/additions to this information before leaving the site during that service visit. The Contractor will provide the Facility Manager with a key and instructions for opening bait stations in the event of an emergency.

## **11. USE OF PESTICIDES**

The contractor shall be responsible for application of pesticides according to the label and all additional labeling. All pesticides used by the Contractor must be registered with the U.S. Environmental Protection Agency (EPA) and the Oregon Department of Agriculture. Transport, handling, and use of all pesticides shall be in strict accordance with the manufacturer's label instructions and all applicable Federal, state, and local laws and regulations. The Contractor shall adhere to the following rules for pesticide use:

- A. *Minimization of Risk*: Where pesticide use is necessary, the Contractor shall emphasize "reduced risk measures", i.e., the Contractor shall employ materials, quantities and application methods that minimize the risk or hazard of exposure to the applicator, building occupants, and the environment in general. The Contractor shall not give any pesticides to any site personnel for application to the site.
- B. *Selection of pesticide products*: Only products from the district's approved list of low-impact pesticides shall be used.
- C. *Approved Products*: The Contractor shall not apply any pesticide product that has not been included in the IPM Contract or has not been approved in writing by the maintenance/ facilities director or other designated personnel. Any additions to the list of approved pesticides must be submitted to the maintenance/ facilities director five (5) working days prior to the proposed date of use. The maintenance/ facilities director shall render a decision on the proposed addition within three (3) working days. Prior to the use of any new approved pesticide products, the Contractor shall provide product labels, labeling and MSDS in the logbooks of each site where the products are to be used.
- D. *Pesticide Storage*: The Contractor shall not store any pesticide product in the buildings specified in this contract.
- E. *Application by Need*: Routine pesticide applications will not be employed.  
Application of pesticides to any interior or exterior area shall be based on visual inspection or monitoring devices indicating the presence of pests in that specific area and the need to apply a pesticide, as specified in the district's IPM Plan.
- F. *Approved Applicators*: Only Contractor employees shall apply pesticides under the terms of this contract. The Contractor shall not provide pesticide products to non-certified school employees for their use in/around the building and property.

## **12. VERTEBRATE PEST CONTROL (OTHER THAN COMMENSAL RODENTS)**

The following terms of the contract apply only if the Contractor has agreed to be responsible for vertebrate pest control.

- A. *General Vertebrate Pests*: The Contractor shall be responsible for the control of miscellaneous vertebrates, including snakes, raccoons, skunks. Where state, county or local regulations require the issuance of a wildlife depredation permit for the taking of such vertebrates, the contractor shall arrange for such permits. Subsequent to the issuance of the depredation permit, the Contractor shall take or arrange with a state-licensed Wildlife Damage Control Agent (WDCA) to take such vertebrates in accordance with all state and local wildlife regulations. If the WDCA

is not an employee of the contractor, then the Contractor shall inform the Facility Manager in advance the name of any WDCA to be used for such work. The cost for these services will be negotiated with the contractor separately from this contract.

- B. *Bat and Bird Populations*: Situations that require more extensive exclusion methods, such as the repairs to exclude bats from established roosting sites within buildings, or the installation of mesh, pointed wire or other devices to exclude birds from roosting will be negotiated with the Contractor separate from this contract.

The proper removal/cleanup of animal feces ("guano") may be included as part of the terms of a separate specific contract.

### **13. STRUCTURAL MODIFICATIONS AND RECOMMENDATIONS**

Throughout the term of this contract, the Contractor shall be responsible for advising the Facility Manager about any structural, sanitary, or procedural modifications that would reduce pest food, water, harborage, or access. The Contractor will not be held responsible for carrying out structural modifications as part of the pest control effort, unless both parties agree upon such modifications. Minor applications of silicone sealant and other sealing materials by the Contractor to eliminate pest harborage or access may be approved by the Facility Manager on a case-by-case basis. The Contractor shall obtain the approval of the Facility Manager prior to any application of sealing material or other structural modification.

### **14. PROGRAM EVALUATION**

The Facility Manager will continually evaluate the progress of this contract in terms of effectiveness and safety, and will require such changes as are necessary. The Contractor shall take prompt action to correct all identified deficiencies.

### **15. QUALITY CONTROL PROGRAM**

The Contractor shall establish a complete quality control program to assure the requirements of the contract are provided as specified. Within \_\_\_\_\_ working days prior to the starting date of the contract, the Contractor shall submit a copy of his program to the Contracting Officer.

The program shall include at least the following items:

- A. *Inspection System*: The Contractor's quality control inspection system shall cover all the services stated in this contract. The purpose of the system is to detect and correct deficiencies in the quality of services before the level of performance becomes unacceptable and/or the \_\_\_\_\_ identifies the deficiencies. For the duration of this contract, the contractor shall carry out such inspections on a quarterly basis.
- B. *Checklist*: A quality control checklist shall be used in evaluating contract performance during regularly scheduled and unscheduled inspections. Every task shall be included on the checklist for every building or site serviced by the Contractor.
- C. *File*: A quality control file shall contain a record of all inspections conducted by the Contractor and any corrective actions taken. The file shall be maintained throughout the term of the contract and a copy provided to the Facility Manager.
- D. *Inspector(s)*: The Contractor shall state the name(s) of the individual(s) responsible for performing the quality control inspections.

## Appendix 8

### References and Source Materials

Used in the Preparation of Model IPM Plan for Oregon Schools (accessed 5/1/2012)

#### **School IPM 2015**

(Exhaustive list of resources and weblinks)

[http://www.ipminstitute.org/school\\_ipm\\_2015/resources.htm](http://www.ipminstitute.org/school_ipm_2015/resources.htm)

#### **Outdoor IPM for Maine Schools**

(Good basic, general manual on IPM for outdoors)

<http://www.maine.gov/agriculture/pesticides/schoolipm/pdf/outdooripm.pdf>

#### **Portland Public Schools IPM Program Manual**

(Click on “District’s IPM program manual” link in second-to-last paragraph)

<http://www.pps.k12.or.us/departments/facilities/3416.htm>

#### **Eugene School District 4J Landscape Management**

(Matrices of hierarchical steps to manage various outdoor pests)

<http://www.4j.lane.edu/facilities/pesticide>

#### **Portland Parks & Recreation IPM Program**

(A detailed “Pesticide Spill Response” section begins on page 29)

<http://www.portlandonline.com/shared/cfm/image.cfm?id=116237>

**Salt Lake City School District IPM Plan** (click on “SLCSD IPM Plan 2010” link)

<https://aal.slcschools.org/pls/apex/f?p=118:40:1695263352950185>

#### **California School IPM Guidebook, California Department of Pesticide Regulation**

(Has sample chart on injury/action levels. Various sample forms and examples in appendices)

[http://apps.cdpr.ca.gov/schoolipm/managing\\_pests/guidebook.cfm](http://apps.cdpr.ca.gov/schoolipm/managing_pests/guidebook.cfm)

#### **North Carolina State University IPM for Schools & Child Care Facilities**

(“IPM for North Carolina Schools Manual” link goes to well-written basic manual. Part Four has good information on how to develop bid invitations for IPM services)

<http://schoolipm.ncsu.edu/resources.htm>

## Appendix 9

### Low-Impact Pesticide List

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

Herbicides		
Product Name	EPA Reg. No.	Active Ingredient(s)
Aquamaster Herbicide	524-343	glyphosate, isopropylamine salt
Avenger AG Burndown Herbicide	82052-4	d-Limonene
Barrage HF Low Volatile Herbicide	5905-529	2,4-D ester
Bayer Advanced Natria Grass & Week Killer RTU/Organic Gardening	67702-7-72155	ammonium salts of fatty acids
Broadstar Herbicide	59639-128	flumioxazin
Casoron 4G	400-168	dichlobenil
Cornerstone Plus - Agrisolutions	1381-192	glyphosate isopropylamine salt
Crossbow	62719-260-5905	2,4-D, butoxyethyl ester
Defendor	62719-560	florasulam
Dimension 270-G Turf & Landscape Ornamental	7001-375	dithiopyr
Dimension Ultra 40 WP	62719-445	dithiopyr
Drexel De-ester LV6	19713-655	2,4-D, ethylhexyl ester
Drexel Simazine 4L	19713-60	simazine
Envoy Plus Herbicide	59639-132	clethodim
Esplanade EZ	432-1528	Indaziflam
Esplande 200 SC	432-1516	Indaziflam
EZ-Ject Diamondback Herbicide Shells	83220-1	glyphosate
Fiesta Turf Weed Killer	67702-26-87865	iron HEDTA

Gallery 75 Dry Flowable Herbicide	62719-145	isoxaben
Gallery SC Specialty Herbicide	62719-658	isoxaben
Gly Star Plus, Gly Star Pro	42750-61	glyphosate, isopropylamine salt
Glyphogan Plus Herbicide	66222-176	glyphosate, isopropylamine salt
Gly-Star Original	42750-60	glyphosate, isopropylamine salt
Gordon's Agricultural Products Brushmaster Herbicide	2217-774	2,4-D ethylhexyl ester, 2,4-DP, dicamba
Gordon's ProForm Professional Formulations Q4 Plus Turf Herbicide for Grassy & Broadleaf Weeds	2217-930	quinclorac, 2,4-D, dicamba, sulfentrazone
Gordon's Proform Professional Formulations Speed Zone	2217-835	2,4-D ethylhexyl ester, mecoprop-p, dicamba, carfentrazone ethyl
Gordon's Proform Professional Formulations Speed Zone Broadleaf Herbicide for Turf	2217-833	2,4-D ethylhexyl ester, mecoprop-p, dicamba, carfentrazone ethyl
Gordon's Proform Professional Formulations Speed Zone EW Broadleaf Herbicide for Turf	2217-1053	2,4-D ethylhexyl ester, mecoprop-p, dicamba, carfentrazone ethyl
Gordon's Farm Pronto Big N' Tuf, Gordon's Farm Pronto BigN'Tuf2 Nonselective Herbicide	42750-61-2217	glyphosate, isopropylamine salt
Gordon's ProForm Professional Formulations T Zone Broadleaf Herbicide	2217-920	dicamba, 2,4-D (2- ethylhexyl ester), sulfentrazone, and triclopyr, butoxyethyl ester
Hi-Yield Super Concentrate Kill-Zall II	42750-61-7401	glyphosate, isopropylamine salt
Landmaster BW	42750-62	2,4-D, isopropylamine salt, and glyphosate, isopropylamine salt
Lesco Momentum Q Herbicide	228-531	2,4-D (diethylamine salt), quinclorac, dicamba
Lesco Pre-M Aqua Cap Herbicide	241-416-10404	pendimethalin
Lilly Miller Ultra Green Phosphorus Free Weed & Feed	2217-559-33116	2,4-D, mecoprop, dicamba
Lilly-Miller Moss Out! plus Fertilizer	802-543	ferrous (iron) sulfate monohydrate

Makaze	34704-890	glyphosate, isopropylamine salt
Marengo	432-1518-59807	Indaziflam
Marengo G	432-1523-59807	Indaziflam
Milestone	62719-519	aminopyralid, triisopropylamine salt
Moss Melt Concentrate	82052-1-91094	d-Limonene
Nufarm Prosedge	228-711	halosulfuron-methyl
Payload Herbicide	59639-120	flumioxazin
Pendulum AquaCap Herbicide	241-416	pendimethalin
Plateau Herbicide	241-365	imazapic, ammonium salt
Poa Constrictor	70506-107	ethofumesate
Quicksilver T+O Herbicide	279-3265	carfentrazone-ethyl
Quikpro Herbicide	524-535	glyphosate, diquat dibromide
Ranger PRO Herbicide	524-517	glyphosate, isopropylamine salt
Razor Pro Herbicide	228-366	glyphosate
Refuge	100-1362	glyphosate
Rodeo	62719-324	glyphosate, isopropylamine salt
RoundUp Pro Concentrate	524-529	glyphosate, isopropylamine salt
Roundup Promax Herbicide	524-579	glyphosate, potassium salt
Sedgehammer Turf Herbicide	81880-1-10163	halosulfuron-methyl
Sedgehammer Turf Herbicide	81880-24-10163	halosulfuron-methyl
Simazine	19713-252	simazine
Snapshot 2.5 TG, Snapshot DG	62719-175	trifluralin, isoxaben
Specticle 20 WSP Herbicide	432-1499	indaziflam
Specticle Flo	432-1518	Indaziflam
Specticle Flo	432-1608	Indaziflam
Specticle G	432-1523	Indaziflam
SureGuard SC Herbicide	71368-114	flumioxazin
T Zone SE	2217-976	triclopyr butoxyethyl ester, sulfentrazone, 2,4- D
Tenacity	100-1267	mesotrione

The Andersons Professional Turf Products Dimension 0.25g With Agpro	9198-213	dithiopyr
The Andersons Professional Turf Products Fertilizer with Surge 16-0-9	2217-882-9198	2,4-D ethylhexyl ester
SpeedZone EW Broadleaf Herbicide for Turf	2217-1053	2,4-D ethylhexyl ester, mecoprop-p, dicamba, carfentrazone ethyl

Insecticide		
Product Name	EPA Reg. No.	Active Ingredient(s)
EcoEXEMPT G Granular Insecticide from Envincio/Prentiss LLC	None - 25(b)	eugenol (clove oil), thyme oil (other: wintergreen oil, corn cob)
22-0-7 Fertilizer with Acelepryn Insecticide	9198-247	chlorantraniliprole
Acelepryn	100-1489	chlorantraniliprole
Acelepryn G	100-1500	chlorantraniliprole
Advion Ant Gel	352-746	indoxacarb
Advion Cockroach Gel Bait	352-652	indoxacarb
Amdro Kills Ants Ant Killing Bait	1663-33-73342	hydramethylnon
Andersons Professional Turf Products 8% Granular Insecticide With Carbaryl	9198-146	carbaryl
Anvil 10+10 ULV	1021-1688-8329	phenothrin, piperonyl butoxide
ARI Wasp and Hornet Killer	7754-44	tetramethrin, dphenothrin
Arilon Insecticide	352-776	indoxacarb
AzaSol	81899-4-74578	azadirachtin
Azatrol EC Insecticide	2217-836	azadirachtin
Bee Bopper II	7754-44	tetramethrin, dphenothrin
Boractin Insecticide Powder	73079-4	boric acid
Combat Liquid Ant Bait	73766-2-64240	disodium octaborate tetrahydrate (basically boric acid)
Conserve SC Turf & Ornamental	62719-291	spinosad
Cyzmic CS	53883-261	lambdacyhalothrin



Delta Dust Insecticide	432-772	deltamethrin
Demand CS Patrol	100-1066	lambda-cyhalothrin
Demand G Insecticide	100-1240	lambda-cyhalothrin
Down and Out	1769-370	tetramethrin, permethrin, piperonyl butoxide
EcoExempt D	None - 25(b)	2-phenethyl propionate, eugenol (clove oil) (other: calcium silicate, sodium bicarbonate, calcium carbonate, soybean oil, wintergreen oil)
Essentria IC-3 Insecticide Concentrate from Envincio/Prentiss LLC	None - 25(b)	rosemary oil, geraniol, peppermint oil (Other: oil of wintergreen, white mineral oil, vanillin, polyglyceryl oleate)
Garden Safe Brand Ant & Roach Killer	64405-2-39609	boric acid
Gourmet Liquid Ant Bait	73766-2	disodium octaborate tetrahydrate (basically boric acid)
Grant's Kills Ants Ant Control	1663-33	hydramethylnon
Grenade ER Insecticide	100-1066-773	lambda-cyhalothrin
InTice Gelamino Ant Bait	73079-8	sodium tetraborate decahydrate
InTice Liquid Ant Bait	73079-7	sodium tetraborate decahydrate
Lesco CrossCheck Plus Multi-Insecticide	279-3206-10404	bifenthrin
Maxforce FC Ant Killer Bait Gel	432-1264	fipronil
Maxforce FC Professional Insect Control Roach Killer Bait Gel	432-1259	fipronil
Maxforce FC Select Professional Insect Control Roach Killer Bait Gel	432-1259	fipronil
Maxforce Professional Insect Control Roach Killer Bait Gel	432-1254	hydramethylnon
Monterey Horticultural Oil	48813-1-54705	Mineral Oil
Mosquito Dunks Biological Mosquito Control	6218-47	Bacillus thuringiensis subspecies israelensis
MotherEarth D Pest Control Dust	499-509	diatomaceous earth (amorphous silica)
MotherEarth Granular Scatter Bait	499-515	boric acid
NatureLine NGB Professional Grade Insecticidal Concentrate	None - 25(b)	sodium chloride (salt)

NatureLine Plus Professional Grade Botanical Insecticide	None - 25(b)	clove oil, lemongrass oil, rosemary oil, cinnamon oil
NatureLine PRO Power Residual Oil	None - 25(b)	clove oil, lemongrass oil, rosemary oil, cinnamon oil
Onslaught FastCap Spider & Scorpion Insecticide	1021-2574	esfenvalerate, prallethrin, piperonyl butoxide
Orange Guard	61887-1	d-limonene
Ortho Max Pro	279-3207	bifenthrin
Phantom TermiticideInsecticide	241-392	chlorfenapyr
Prescription Treatment Wasp Freeze Wasp & Hornet Killer	499-362	d-trans allethrin, d- phenothrin
PT Wasp-Freeze II	499-550	prallethrin
Raid Wasp & Hornet Killer 33	4822-553	cypermethrin, prallethrin
Rescue Yellowjacket Attractant Cartridge	84565-5-49407	heptyl butyrate
Rescue! WHY Attractant	84565-3-49407	heptyl butyrate, acetic acid, 2- methyl-1-butanol
Revenge Granular Ant Bait NiBan Granular Bait	64405-2	boric acid
Revenge Pre-Filled Liquid Ant Baits	73766-2-4	disodium octaborate tetrahydrate (basically boric acid)
Share Corp Wasp & Hornet Killer	10088-91-11547	tetramethrin, permethrin, piperonyl butoxide
Speckoz Border Insecticide	100-1066-72113	lambda-cyhalothrin
Spectracide Wasp & Hornet Killer 4	9688-141-8845	permethrin, tetramethrin, piperonyl butoxide
Spectracide Wasp and Hornet Killer 3	9688-190-8845	prallethrin,lambdacyhalothrin
Sting-X	1769-370-66114	tetramethrin, permethrin, piperonyl butoxide
Talstar Professional Insecticide	279-3206	bifenthrin
Taurus SC	53883-279	fipronil
Tempo 1% Dust Insecticide Ready to use	432-1373	cyfluthrin
Tempo SC Ultra Insecticide	432-1363	beta-cyfluthrin
Termidor SC	7969-210	fipronil
Terro Ant Killer II Liquid Ant Baits/Killer	149-8	sodium tetraborate decahydrate
Terro Multi-Purpose Insect Bait	64405-2-149	boric acid
Terro-PCO Liquid Ant Bait	149-8-64405	sodium tetraborate decahydrate

WHY Spray for Wasp, Hornet, & Yellow jacket Nests from Rescue	None - 25(b)	lemmongrass oil, clove oil (eugenol), rosemary oil, geranium oil
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Molluscicides		
Product Name	EPA Reg. No.	Active Ingredient(s)
Sluggo	67702-3-54705	iron phosphate

Fungicides		
Product Name	EPA Reg. No.	Active Ingredient(s)
Headway	100-1216	azoxystrobin, propiconazole
Monterey Horticultural Oil	48813-1-54705	mineral oil