

Integrated Pest Management Plan 2012

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Introduction

Structural, landscape pests can pose significant problems in schools. The term pests as used in this document should also be understood to mean unwanted vegetation, such as weeds where herbicides are used for eradication. Pests such as mice and cockroaches can trigger asthma. Mice and rats are carriers of disease. Many people and most importantly 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 cause special health risks to children simply due to their still developing organ system. Mapleton School District (MSD) considers the health and safety of our students, staff and patrons our number one priority, and a prerequisite to learning, therefore it is the policy of MSD to approach pest management with the least possible risk to all people that visit our campuses. Oregon Revised Statute 634.700 through 634.750, passed in Senate Bill (SB) 637 (2009), requires that all school districts adopt an integrated pest management plan by July 1, 2012. Due to this legislative passage a need for a more formal written plan consistent with ORS 634.700 through 634.750 is required and will replace procedures and practices that Mapleton School District now has in place.

What is Integrated Pest Management?

Integrated Pest Management, also known as IPM, means a proactive strategy that focuses on long-term practices that will protect the health and safety of our students, staff, campus visitors and patrons while creating a positive learning environment, protecting structures and grounds in an environmentally sound way through a wide variety of tactics. The focus of which is to prevent pests from becoming a problem by working to address or eliminate conditions that foster their establishing a presence, feeding, breeding and proliferation of any invasive, unwanted species.

Since IPM focuses on remediation of the fundamental reasons why pests are here, the goal is to use pesticides only when necessary and after other deterrents have failed to produce the desired effect.

I. IPM Basics

A. Education and Communication

An essential part of any IPM plan is effective communication and education. We must identify and understand the conditions and environment that contribute to the problems associated with pests. Identification of pests, monitoring of pests, conditions that support their existence including their biology must be understood before we can begin to manage pests effectively. There must be a protocol for reporting pests, pest conducive conditions and a record of the pest's behavior with the specified action taken reduced to writing.

B. Cultural and Sanitation

Understanding and identifying how human behavior supports pest in our buildings and grounds is essential to the success we achieve in this area. Changes in the habits of persons working in and visiting our buildings can have a significant impact on our susceptibility to pests. Cleaning under kitchen counters, food preparation and serving line counters every day is essential. Identifying unnecessary clutter in areas of the classroom, staff room, custodial closet and storage areas are crucial. Creating a place for the dumpster as far away from the back door of the kitchen as practical. Managing the amount and type of discarded waste in and around athletic stadiums, in addition to establishing comprehensive irrigation, overseeding, fertilizing, mulching, aerating and other best practice turf maintenance.

C. Physical and Mechanical

Traps for rodents, sticky traps to monitor crawling and flying insects to determine density, door sweeps on external doors, sealing cracks in all structures, caulking holes under sinks, provide proper mulching and drainage for shrubs and where possible keep landscape plants twenty-four to thirty-six inches away from all buildings.

D. Pesticides

IPM focuses on practices to prevent an infestation to be present in a building or an invasion of invasive plants in a landscape. If these practices are successful then the need for pesticides should be the exception rather than the rule and they should only be used after other measures have been considered.

II. What is a Integrated Pest Management Plan?

A. ORS 634.700 defines an IPM plan as a proactive strategy that:

1. Focuses on long-term prevention or suppression of pest problems through economically sound practices.
2. Protects the health and safety of student, staff and faculty.

3. Protects the integrity of campus buildings and grounds.
4. Maintains a productive learning environment.
5. Protects the local ecosystems health.

B. Focus on the Prevention

1. 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 of pests.
2. Incorporate the use of sanitation, structural remediation or habitat manipulation of mechanical, biological and chemical pest control measures that present a reduced risk or have low impact, and, for the purpose of mitigating a declared pest emergency, the application of pesticides that are not low-impact pesticides.
3. Includes regular monitoring and inspections to detect pests, pest damage and unsanctioned pesticide usage.
4. Evaluates the need for pest control by identifying acceptable pest population density levels.
5. Monitors and evaluates the effectiveness of pest control measures.
6. Excludes the application of pesticides for purely aesthetic reasons.
7. Includes school staff education about sanitation, monitoring, inspection and about pest control measures.
8. Gives preference to the use of nonchemical pest control measures.
9. Allows the use of low-impact pesticides if nonchemical pest control measures are ineffective.
10. Allows the application of a pesticide that is not a low-impact pesticide only to mitigate a declared pest emergency or if the application is by, or at the direction or order of, a public health official.

NOTE: The above definition is the basis for Mapleton School District's IPM plan. The following process and procedures form the skeletal structure for meeting the goals and implementing the strategies adopted in ORS 634.700 through ORS 634.750.

III. ORS 634.700 Allows Some Pesticide Application

- A. For the routine application of pesticides designed to be consumed by pests. To avoid proliferation of pests and/or unnecessary applications of pesticides several things must be put into place as MSD process and procedure before any applications are performed.
1. Staff must receive training on sanitation, monitoring and exclusion as the primary means to control pests.
 2. An acceptable level for a pest population to exist must be established before application of a pesticide is considered.
 3. Sanitations practices, structural remediation, habitat manipulation, mechanical or biological control methods must be incorporated into the management strategy for the pest.

4. Establish documentation protocols to record the steps that were taken and the results of those practices.
5. The label and Material Safety Data Sheet (MSDS) must be in the possession of the applicator and are considered to be the law for applying the selected chemical with all requirements and cautions strictly followed.

IV. IPM Plan Coordinator (IPMC)

- A. Mapleton School District designates the maintenance supervisor under the direction of the superintendent, the IPM Plan Coordinator. Coordination is key to success for the IPM plan. The IPMC will have full authority to implement all phases of the IPM plan. He/She will develop procedures to accomplish the following:
 1. The IPMC will be responsible for attending six hours of IPM training each year. The training shall include at least a general review of IPM principles and the requirements of ORS 634.700 through 634.750.
 2. The IPMC shall provide outreach to the school district community including all aspects of support services, teachers, administrators and staff.
 3. The IPMC will conduct training as defined in this document.
 4. The IPMC will oversee prevention efforts, such as sealing cracks, by support staff and teachers. All teacher communications will be conducted through the administrator at each site and the correction of any violation by teachers or teaching assistants will be implemented at his direction of the principal.
 5. The IPMC shall establish a decision making process for implementing IPM in the district. The IPMC will continually assess and improve the pest monitoring, reporting, action protocol and compliance.
 6. The IPMC is responsible for the notification; posting and that record keeping requirements are established and time lines met.
 7. The IPMC will create an approved list of low impact pesticides that can be applied when other methods have failed.
 8. The IPMC will confiscate any unapproved pesticide brought into school buildings, onto school grounds or onto and around athletic fields.
- B. The IPMC is responsible for conducting one “Routine Inspection” and one “Annual Inspection” each year.
 1. The routine inspection is a Level 2 inspection and the annual inspection is a Level 3.
 2. The IPMC is responsible for responding to complaints about noncompliance with the plan. Responses to inquiries and complaints will be in writing and kept on record with the original written complaint submitted to the coordinator and the action that was taken.

V. IPM Decision Making Process

A. IPM Coordinator

1. The IPMC will have full authority to implement all phases of the IPM plan. He/She will develop procedures to accomplish the goals and strategies set forth in this document.

B. Custodial Services

1. Custodians shall attend at least one annual training provided by the IPMC or his/her designee.
2. Custodians as part of the quarterly safety inspection fill out an addition to that form that deal specifically with IPM and submit it along with their quarterly report.
3. Place and check sticky traps for the monitoring of crawling and flying pests.
4. Report via email to the IPMC the results from the sticky traps.
5. Report via email clutter and other problem areas in the classroom and other areas of the building.
6. Report by district work order to the IPMC any cracks, holes or voids that need to be filled to elevate any pest conducive conditions in the building.
7. Respond to any requests by building staff to observe pest problems or pest concerns and report them in a work order or to the IPMC via email.
8. The custodian will notify the IPMC of any unapproved pesticide (such as aerosol cans) discovered during inspections or regular duties. The IPMC will confiscate the unapproved pesticide and notify the principal, teacher or other staff member of the violation.

C. Food Services

1. The employee shall attend at least one annual training provided by the IPMC or his/her designee.
2. Assure that all food, food components (i.e., sugar, flour and etc.) are thoroughly cleaned up every day from all surfaces.
3. Assure that the floor under the serving counter and the preparation tables are thoroughly cleaned each day and are free of food and drink spills.
4. Promptly empty corrugated cardboard materials and remove from building.
5. Keep exterior doors closed.
6. Report by way of work order to the food service supervisor pest conducive conditions that require maintenance.
7. Locate the main dumpster as far away from the entrance door to the kitchen as far as practical.
8. The kitchen manager will forward a work order to the food service supervisor with any concerns regarding pests or pest access to the kitchen.
9. The food service supervisor will evaluate work orders for pest management in the kitchen. The supervisor will forward the request to the IPMC for action or to complete the record.

D. Maintenance/Grounds Services

1. Employees shall attend at least one annual training on IPM practices and procedures conducted by the IPMC or his/her designee.
2. Under the direction of the IPMC the maintenance/grounds department will address all structural concerns at all buildings and any grounds infestations or other adverse landscape conditions.

3. The members of the maintenance/grounds team will constantly be observant of any conditions that would cause concern and report that concern to the IPMC where it will be reduced to writing and kept on file in the IPMC's office.
4. Under the direction of the IPMC the maintenance/grounds team will develop protocols and provisions for pest avoidance and prevention during construction or renovation projects.
5. The grounds department will continue to take Department of Agriculture required classes and retain their certification as licensed applicators if required by IPMS.
6. Where feasible the vegetation surrounding buildings will be kept from between 24 inches to 36 inches away from all buildings.
7. Under the direction of the IPMC the grounds lead will schedule all applications of pesticides on school district grounds.
8. Following notification by the IPMC the grounds lead will post, record and schedule application.

E. School Faculty: Principals, Teachers, Specialist and Educational Assistants

1. All employees will attend at least one annual training provided by the IPMC or his/her designee.
2. Teachers and faculty will keep their classrooms and work areas free from clutter.
3. Teachers and faculty will make sure students clean up after themselves whenever food is served in the classroom.
4. Teachers and faculty will report pests and pest conducive conditions to the IPMC via email with a specific room number or location, type of pest, time space is available for inspection and suggested remedy.
5. Follow first steps protocol for reporting ant management before notifying IPMC.
 - a. First Response Protocol is performed by the staff person reporting any classroom, kitchen or sink area infestation. Custodial areas excluded. The employee will clean up any food the ants are eating, kill visible ants, wipe down area where ants or other with soapy water, notify IPMC via email if ants continue to be found after following protocol.
6. Principals will assure that teachers and faculty keep their classrooms free from clutter and that they do not foster a pest conducive environment due to consumption of food or other practices in the classroom.

VI. Monitoring

- A. Monitoring is the most important component of a successful IPM program as defined in ORS 634.700 through 634.750. It could be described as the regular and ongoing inspection of areas where pest problems do or might occur.
 1. All information is always written down and filed in the IPMC office.
 2. Staff will be instructed in what to look for in the annual required training for IPM.
 3. The monitoring process can take place as the employee goes about their normal duties.

B. The Three Levels of Monitoring

1. Level One

Is the casual observing/looking with no record keeping which is generally not helpful.

2. Level Two: All Staff

- a. Is the casual observing/looking with written observations and can be very useful.
- b. Observe, identify and report a conducive environment for pests.
- c. Notify custodian of your concerns.
- d. Email the IPMC your concerns and actions taken from the “first steps protocol”.
- e. The IPMC will conduct one Level2 inspection per year.

3. Level Three: IPMC, Custodian, Maintenance/Grounds

a. Integrated Pest Management Coordinator

- (1) The IPMC shall conduct one Level 3 inspection while accompanied by the building custodian at least once per year while school is in session.

b. Custodian

- (1) Will randomly conduct at least four inspections per year as part of the building inspection and report those findings to the IPMC and the Safety Committee.
- (2) Observe and report pest conducive conditions throughout their building including structural deterioration, holes that allow pests to enter and conditions that provides harborage.
- (3) Will evaluate and report the level of sanitation in the building as a result of food and food waste sold on site or brought in.
- (4) Will evaluate and report the level of cleanliness as a result of use by community events, athletic events (MSD and other), students and patrons.
- (5) Will observe and report the amount of pest damage and the number of locations of pest signs (i.e., rodent droppings, termite tubes, termite dust, rotted wood) that appear as they conduct their daily routines.
- (6) Will observe and report human behaviors that affect or facilitate a pest environment such as working conditions that make it impossible to close doors and screens, food preparations and school activities.
- (7) Will conduct and report their own management activities in specific areas of remediation like caulking/sealing, setting sticky traps, treating pests and the result of those actions.

c. Grounds Lead

- (1) Will monitor turf and landscape area.
- (2) Will monitor the condition and health of all landscape plants and trees.
- (3) Monitor the kind and abundance of pests including weeds, insects, mites, moles, gophers, ladybugs, spiders, lacewing larvae, syrphid fly larvae, box elder, pigeons, pigeon droppings and etc.
- (4) Record any unusually dry hot, wet, or cold weather in the past few weeks or months that may affect growing conditions and the health of the landscape.
- (5) Observe and report the need for proper drainage in areas that are flooding the landscape.
- (6) Human behaviors that affect the landscape plants or promotes pests such as; foot traffic that compacts soils, physical damage to plants by people, insistence on having plants grow in inappropriate locations and etc.
- (7) Record and report management techniques and activities performed by the grounds team such as; pruning, mulching, fertilizing, aeration, treating for pest and weed infestation and etc.

VII. Reporting

A. Pests of Concern

1. A “pest of concern” is a pest determined to be a public health risk or a significant nuisance pest. They include but are not limited to:
 - a. Cockroaches which are disease vectors and asthma triggers.
 - b. Mice, rats and pigeons that are disease vectors and asthma triggers.
 - c. Yellow jackets and wasps that can sting and cause anaphylactic shock.
 - d. Cornered nutria, raccoons, cats, dogs, opossums and skunks that can bite and foul playgrounds and athletic fields with their feces.
2. All district staff are reporters for the monitoring of pests in their building have the ability to report their observations to the custodian verbally; the principal in writing; or by emailing the Integrated Pest Management Coordinator (IPMC).

B. Action

1. All reports of pest related problems by staff will be e-mailed to the IPMC as soon as possible. The best report is the one that comes directly from the observer. A form for reporting an incident can be found in your buildings administrative office.
2. Request can also be submitted on the district work order forms.
3. When requests are received the IPMC will date the time received and assign a priority for the repair or intervention based on what measures have already been taken, if any, and the severity of the infestation or repair. Anything in kitchen areas are high priority. Small ants on the outside of the building would be a low priority.

Unless, observed entering the building via a crack or hole. In that case they would be assigned a priority based on the report and the crack filled.

4. The corrective work will be assigned to a member of the maintenance/grounds team or the school custodian based on the severity of the intervention.
5. A work order will be filled out and upon completion submitted to the IPMC to be recorded as public record of the corrective work completed. All such records will include receipts for monies spent to manage the pest and will be kept for a minimum of four years.

VIII. Acceptable Population Density

A. Acceptable Thresholds

1. How many ants are too many? The IPMC has discretionary authority in this area to set threshold numbers for pests.
 - a. Ants, spiders, flies and etc., will depend on the location and the severity of the infestation.
 - b. Cockroaches, mice, rats, raccoons, opossums, skunk and nutria the tolerance level is zero.
 - c. Dogs and cats that defecate on school grounds and in landscape areas will be dealt with depending on the severity of the infestation and the impact on the healthy environment of the playground or athletic field. (Service animals will be considered exempt)

IX. Pest Emergencies

- A. If a pest emergencies is declared by the IPMC the area must be evacuated and cordoned off before taking steps to correct the situation.
 1. After consultation with the building administrator the IPMC may declare an emergency which would require that he/she determined that the presence of a pest or pests immediately threaten the health and safety of students, staff or patrons using the campus, or the structural integrity of campus facilities, he/she have the authority to declare a “Pest emergency”.

An example of what may constitute a pest emergency is yellow jackets swarming in areas frequented by children, or a raccoon in an area frequented by children, or a half dozen rats or mice running through occupied areas of the school.

X. Annual IPM Report

- A. The IPMC will in the month of July of every school year write and submit a yearly report to the superintendent for her/his review.
 1. The report will include but not be limited to a summary of the previous year’s pest responses, monies spent for correction and data gathered.

2. The report will be a comprehensive review of the year's action and responses with all dates and times for chemical applications as well as specific products used, where they were applied, and MSDS for each product.

XI. Required Training

- A. ORS 634.700 (3) (i) Require staff education; "about sanitation, monitoring and inspection and about pest control measures. All staff shall have at least a general review of IPM principles and the requirements of ORS 634.700 through 634.750" each year.
- B. IPM Plan Coordinator Training
 1. ORS 634.720 (2) requires that the IPM Plan Coordinator; "shall complete not less than six hours of training each year. The training shall include at least a general review of the IPM principles and requirements of ORS 634.700-634.750".
 2. Training should include but not be limited to the health and economic issues associated with pests in schools, exclusion practices, pest identification and biology of common pests. Common challenges with monitoring/reporting/action protocols, proper use of sticky monitoring traps for insects, and hands-on training and proper inspection techniques shall also be presented.
- C. IPM Training for Building Staff
 1. At the beginning of the 2012-2013 school years the IPMC or his designee will meet with each staff by building or combined buildings to outline the overall plan, specific goals and procedures of the MSD adopted IPM plan.
 2. In subsequent years the IPMC in conjunction with the building administrator will provide written information to every staff member and will make himself/herself available as a requested presenter for at least one staff meeting per year.
 3. The IPMC will respond to all staff questions and concerns and will be the primary contact for any clarification of requested information about the MSD IPM plan.
- D. IPM Training for Food Service, Custodial and Maintenance
 1. The IPMC will conduct yearly trainings for each group in an effort to maintain a high level of awareness with these three groups.
 2. After the initial all staff training of September 2012 the IPMC may assign a designee to perform the yearly trainings as schedules allow for each group.
 3. The Grounds Lead and staff will meet with the IPMC more than one time per year to review practices and procedures. Those meetings will include but not be limited to the review of practices, the approved product application list, application schedules, staff interaction, any written complaints submitted in writing and etc.

E. Other Training

1. Basic training on the principles of IPM and the main points of this IPM plan should also be provided to school administrative staff, superintendents, coaches and any other group deemed essential by the district.
2. Coaches who use athletic fields should be given an overview of the IPM plan and how use of the natural surface can be affected by the way the field is used. They should also be made aware that these new practices will change the look of the surface they are used to playing on.

XII. Pesticide Applications

A. Required Notification

1. Any pesticide application (this includes weed control products, ant baits and all other professional or over the counter products) on school property must be made by a public pesticide applicator.
2. In the month of July of every year a list of potential pesticide products that may be used in the event that other pest control measures have failed will be posted on the MSD website. In addition to the approved list will be the MSD IPM Plan for public review by all administrators, faculty, students, parents, citizens at large, and the process for contacting the IPMC with inquiries about the program.
3. The IPMC will send a notice via email to each school administrator and office manager before any application of a pesticide at their site. It is incumbent upon the school to forward the email to all faculty, parent club, site council, students, parents and other interested parties the administration deems part of the school community.

B. Notification and Posting for Nonemergencies

1. When prevention or management of pests through other measures proves to be ineffective, the use of a low-risk pesticide is permissible. Documentation of these measures is a prerequisite to the approval of a low-risk pesticide. This documentation will remain on file with the IPMC.
2. Nonemergency pesticide applications will occur only on nonstudent days where possible. If an application can not wait it will take place after 4:00pm and preferably on a Friday. The IPMC will make the call and document the factors leading up to the decision.
3. The label is the law in all cases when it comes to re-entry times. A pesticide cannot, be applied when school is in session and students may be exposed to the application before the approved re-entry time.
4. The IPMC or his/her designee will give written notice of a proposed pesticide application posting on the district website and the school website as well as signage at the application site with all pertinent information no less than 24 hours before the application takes place.
5. The notice shall include but not be limited to the name of the product being applied, trademark or type of pesticide, the EPA registration number, the expected area of the application, the expected date (all applications may be postponed and rescheduled due to weather) and the reason for the application.

6. The IPMC or his/her designee shall place warning signs around pesticide application areas beginning no later than 24 hours before the application and remaining for no less than 72 hours after application occurs.
7. A warning sign must bear the words “Warning: pesticide treated area”, display the proposed date of application, the expected or actual reentry time, and provide the telephone number of a contact person.
8. If a pest emergency occurs and it is impracticable to place warning signs at least 24 hours before the pesticide is applied, the IPMC or designee shall place the signs on the location as soon as possible but before the application occurs.

Note: Failure to give notice or post warnings as required by this section does not create a cause of action for damages and may not be asserted as the basis for a per se negligence claim (ORS 634.740, (5), [2009 c.501 §7]).

C. Notification and Posting for Emergencies

1. The IPMC may declare a pest emergency after consultation with school faculty and administration
2. If necessary a pesticide other than a low impact pesticide may be used to mitigate a declared pest emergency.
3. If a pest emergency is declared the IPMC will review the IPM plan and see if there are modifications that can be made to the plan that might prevent the future declaration of a pest emergency.
4. After declaration of a pest emergency the area affected must be evacuated and cordoned off before taking any other steps.
5. By definition an emergency can not be planned for so the 24 hour notice before application can not occur but signs must be placed outside for the cordoned off area before application begins.
6. ORS 634.700 also allows the application of a non-low pesticide “by, or at the direction or order of, a public health official”.

D. Record Keeping of Pesticide Applications

1. The IPMC or his/her designee shall keep a copy of the following pesticide product information on file and a copy in each building where pesticide applications may occur:
 - a. A copy of the label;
 - b. A copy of the MSDS;
 - c. The brand name or trademark of the pesticide product;
 - d. The United States Environmental Protection Agency registration number assigned to the pesticide product;
 - e. The pest condition that prompted the application;
 - f. Description of the area on campus where the application occurred;
 - g. The approximate amount and concentrations of the pesticide product applied;
 - h. The type of application and whether the application proved effective;
 - i. The pesticide applicator or public applicator license numbers and the pesticide trainee or public trainee certificate numbers of the persons applying pesticide;

- j. The names of the persons applying the pesticide;
- k. The dates on which the plan coordinator gave any notices required by ORS 634.740;
- l. The dates and times of the placement and removal of warning signs under ORS 634.740;
- m. Pesticide application records must include copies of all notices given under ORS 634.740;
- n. The district IPMC shall retain pesticide application records required by this section for at least four years following the application date. [2009 c.501 §8]

E. Annual Report on Pesticide Applications

- 1. The IPMC will be responsible for an annual report on pesticide applications to be completed no later than the last day of August of each year. A copy will be kept in the IPMC office with other documentation relevant to the IPM Plan and one copy will be presented to the superintendent for her/his review.
- 2. The report will contain the following for each application:
 - a. The brand name and USEPA registration number of the product applied;
 - b. The approximate amount and concentration of product applied;
 - c. The location of the application;
 - d. The prevention or management steps taken that proved to be ineffective and led to the decision to make a pesticide application;
 - e. The type of application and whether the application proved effective.

F. Approved List of Low-Impact Pesticides

- 1. With all pesticide application the label is considered law and shall be followed exactly and consistently without exception.
- 2. ORS 634.705 (5) mandates that a governing body shall adopt a list of low-impact pesticides for use with the integrated pest management plan. The governing body may include any product on the list except products that:
 - a. Contain a pesticide product or active ingredient that has the signal words “Warning” or “Danger” on the label.
 - b. Contain a pesticide product classified as a human carcinogen or probable human carcinogen under the United States Environmental Protection Agency 1986 Guidelines for Carcinogen Risk Assessment.
 - c. Contain a pesticide product classified as a carcinogen to humans or likely be to humans under the United States Environmental Protection Agency 2003 Draft Final Guidelines for Carcinogen Risk Assessment. [2009 c.501 §3]
- 3. Mapleton School Dist. #32 shall adopt the list of low-impact pesticides compiled and periodically updated by Oregon State University and posted at www.ipmnet.org/tim.