# IPM Field Guide



This field guide was produced for Metro staff in July 2014. For more information, contact Dan Moeller at <u>dan.moeller@oregonmetro.gov</u>or 503.797.1819.

#### What is integrated pest management?

Integrated pest management is a coordinated decision-making process that uses the most appropriate management strategy on a site-specific basis. The process requires identifying the pest, deciding if the pest needs to be managed, and if so, how best to achieve the required reductions in pest problems.

Only **Oregon State licensed** pesticide applicators are approved to buy, advise, use or supervise use of pesticides and their application on Metro-owned properties. There are some exceptions – see Metro's IPM Policy (April 2014, pg.4).

#### Pest prevention always comes first some examples...

- Remove pest-susceptible plants or replace with pest-resistant varieties
- Reduce over/under watering by monitoring timing and amount
- Close all possible entry points to keep out rodents
- Eliminate over/under fertilization through proper timing and quantity
- Mulch for weed reduction, water retention, winter protection, and root zone improvement
- Remove pest sources by raking and reducing debris
- Keep food in sealed containers to prevent moths and ants

#### IPM basics

Step 1. Determine the **threshold** or tolerance level for the presence of a particular pest or pest problem and which action should be taken.

Step 2. If the threshold is met, use a **management method** that complies with the standards set in Metro's IPM Policy (April 2014).

Step 3. Document your pest management activities and monitor your results.

#### Threshold considerations:

- Relative importance and public expectation of a facility site or planting
- Intended use and function of the facility or landscape
- Pest impact on plant health, the environment, infrastructure, assets, and safety at the site

#### Management method considerations:

- Feasibility of the method, given the area and scope of the problem
- Site conditions, such as soil type, grade, drainage, and the presence of surface water
- Erosion susceptibility and potential for runoff
- Short and long term toxicological properties, equipment operation safety issues, worker safety, and any potential health effects
- Potential impacts to non-target plants and other organisms, including federally listed species
- Possible introduction or establishment of invasive plants
- Material, application method, and labor costs
- Length and quality of pest control

## Before applying pesticides

- Check that the pesticide is on Metro's Approved Chemicals List (IPM Policy, April 2014, pg. 29).
  - Pesticides not on the approved current use list must be approved before use. Submit request form (IPM Policy, April 2014, pg. 32) to the IPM working group.
- **Check the site calendar** for any special events, mowing, irrigation, etc.
- **Post public notification signs in visible areas.** Signage must state basic application info, including application dates, appropriate contact numbers and any re-entry specifications (IPM Policy, April 2014, pg. 33).
  - Notify adjacent facilities (community centers, schools, etc.) in writing at least 24 hours before application.
- Select the proper personal protective equipment indicated on the product label.
- Check application equipment for safety and mechanical problems, calibrate if necessary.
  - Use anti-siphoning devices when filling large spray tanks
- Verify appropriate site and weather conditions to prevent drift. If needed, adjust spray droplet size and pressure. **Do not apply** if there is unacceptable drift.

Always remember to confirm...



weather conditions and predictions



site acreage/square footage



type and size of equipment needed



exact amount of pesticide required for that day





#### Transportation and storage

- □ Transport and store all pesticides in a manner that reduces the risk of spills, exposure, theft, degradation, contamination or loss.
- □ **Do not transport pesticides in the cab of passenger vehicles** when alternatives exist, such as truck beds and boxes or vehicle trunks.
- □ Only licensed applicators may transport pesticides.
- Keep pesticides or pesticide containers in secure and safe locations that are temperature controlled and well-ventilated. Storage areas must be labeled and designated for use by work supervisors.

# During and after pesticide application

- Record the application by completing a Herbicide Application Reporting form (IPM Policy, April 2014, pg. 35)
- □ Apply and dispose of pesticide according to the label and state and federal regulations.
- □ Label equipment containing any remaining pesticide mix. Label should include mix concentrations, date, and the applicator's name.
  - When resuming applications at a future date, either use leftover mix or add dilution water and circulate thoroughly before adding new concentrate.
- If spray tank rinsate is created, store the rinsate as make-up water for the next day. The next day's pesticide should be compatible or the same. Label the rinsate mix like the above.
- Rinse or clean equipment if it's (a) necessary to use a pesticide incompatible with that previously used or (b) before long term storage.

## Spill response 🦼



- □ **Call 911** if there is an injury, pesticide exposure or fire. Assist injured people.
- If there is a **pesticide exposure**, obtain the product label and have it ready for medical responders.
- Remove contaminated clothing immediately. Use eyewash, emergency shower or other water source to decontaminate the individual.
- Assess the situation. Determine if you are able to clean up the spill with the supplies and helpers that are immediately available. Consider the volume and hazardous properties of the spilled product.
- Correct any imminent hazards that you can. For example, move a vehicle away from a waterway or heat source.
- Pull vehicles off the roadway to a secure location when possible.
- Set up reflectors or other traffic control devices if there's a spill on the roadway. Notify ODOT.
- □ Keep bystanders at a safe distance using barrier tape or other means.
- □ Notify your supervisor or manager.
- Refer to the spill response section of the IMP Policy (April 2014, pg. 22) to determine if the spill requires notification of state or federal authorities.

## Emergency service numbers

**911** Fire, Ambulance, HAZMAT

**503.494.8968** Oregon Poison Center, Portland Area (24hrs)

**1.800.222.1222** Oregon Poison Center, outside Portland Area (24hrs)

503.283.5859 ODOT

**503.655.0480** Metro South Hazardous Waste Facility, Oregon City

**503.223.8133** Metro Central Hazardous Waste Facility, NW Portland

**503.797.1937** Metro Safety Specialist

**503.229.4263** DEQ Northwest Regional Office

**1.800.452.0311** Oregon Emergency Response System

1.800.424.8802 National Response Center

**1.800.424.9300** CHEMTREK (industrial spill info service)