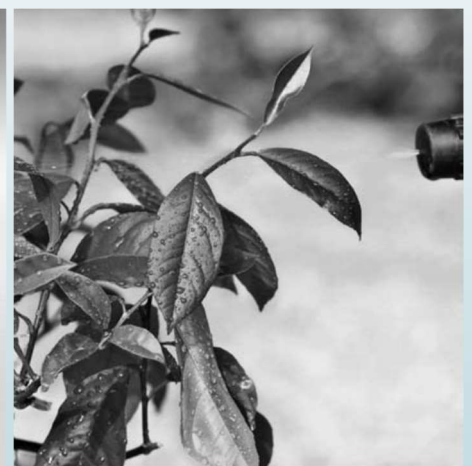




Government of **Western Australia**
Department of **Health**

A guide to the management of pesticides in local government pest control programs in Western Australia



Acknowledgements

The significant contribution of many people within the Environmental Health Directorate in the review of the Guide is gratefully acknowledged.

Compliance

Compliance with the Guide is voluntary and may be adopted in whole or in part. Recommendations made in the Guide are not mandated by legislation in Western Australia; however, the Department of Health (DOH) and the Pesticides Advisory Committee supports their adoption by Local Government Authorities as part of their policy framework for the control of pests within their jurisdictions.

Disclaimer

This document is intended as a guide to assist local government authorities develop their pesticide-use policy. It is not intended to be comprehensive and local government remains responsible for any liability for loss or damage that may arise as a result of the local government authority relying on the information in this guide.

The local government authority should ensure that any policy developed, and any pesticide used is in accordance with applicable legislation.

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Introduction

Local Government Authorities (LGAs) in metropolitan and regional Western Australia are responsible for controlling pests within their jurisdiction. Many consider pesticides to be the most efficient and cost-effective option. Those LGAs that use pesticides face several challenges including the:

- Potential for pesticides to harm people's health
- Potential for pesticides to contaminate the environment
- Public acceptance of pest control with pesticides
- Communication of risks to the public
- High cost of implementing alternative efficient pest control methods.

This guide is written for local government officers that are responsible for managing pests in their jurisdiction. The document aims to guide the development of a pest control program that incorporates a:

- Pesticide management policy (using integrated pest management principles) and
- Pesticide use notification plan.

A pest control program that adopts the framework above can promote:

- Better management of the use of pesticides by LGA's
- More effective use of contracted Pest Management Technicians in LGA's pest control programs
- An increased level of community awareness in, and involvement with, the program and
- The adoption of a more consistent and considered approach to the management of pest control programs.

Defining a Pesticide-use policy

The purpose of a pesticide-use policy is to translate the LGA vision and values into actions.

A policy identifies the issues being addressed and has statements on the desired outcomes in the form of objectives and scope. Effective policies are underpinned by a set of principles and clearly set out what is expected from LGA officers and LGA contractors. A policy should be a succinct one to two pages in length and adopt the following principles:

- Minimise unnecessary pesticide use, consistent with achieving acceptable pest control outcomes
- Use pesticides based on risk management, good contract management and auditing of results
- Consult the community and provide timely notification of pesticide application events
- Consult other government agencies and local stakeholders when pest control activities have the potential to impact on environmentally significant land, water catchment areas, farming property or other sensitive area or activity
- Comply with all applicable legislation, codes and policies with respect to pesticide application by the LGA or its contractors.

Pesticide-use notification plan

A pesticide-use notification plan is an important addition to a pesticide-use policy. It provides information about how, when and where a LGA intends to apply a pesticide in a public place. Pesticide-use notification plans typically contain the following elements:

- Reasons or justification for using pesticides in the jurisdiction
- Information on the types of pesticides used
- Details about where pesticides will be applied
- Information on the methods used to apply pesticides
- Agreed arrangements for notification
- Information about the LGA's pesticide notification registers, including how to register
- Evaluation and review provisions for the pesticide-use plan
- Any supporting documents
- Contact information

Integrated pest management program (IPMP)

Integrated pest management (IPM) is a risk-based decision-making tool using a combination of common-sense practices to reduce invasive species in the environment and protect public health. An IPM program aims to improve the efficacy, cost effectiveness and sustainability of a pesticide program while considering environmental factors and community concerns. IPM practices include:

- Forward planning
- Regular monitoring
- Timely decision making

It both supports and informs the pesticide-use policy. An integrated pest management program (IPMP) is supported by risk assessment and risk management and includes a process for audit and review.

Features of integrated pest management

1. Selection of methods of control based on knowledge of local pest biology, disease transmission and morbidity

Not all weeds, insects or small vertebrates need to be managed. IPM identifies the type of pest that needs to be controlled, its seasonal characteristics, lifecycle, diseases carried and method of transmission and ecological sensitivity so that appropriate control decisions can be made. This prevents pesticide treatments when not needed and the wrong type of pesticide from being used.

2. Utilization of a range of pest control strategies

Not all pests require pesticide treatment nor do all pests require treatments all year round. The choice of treatments should be informed by characteristics identified in (1). An action level at which to treat pests is important to guide pest control decisions and these should be consistent with achieving acceptable and sustainable pest control outcomes while considering community sensibilities. The Department of Health (DOH) encourages non-chemical treatments wherever possible to minimise the community's pesticide exposure however recognizes that treatments such as slashing, burning and steaming may not be appropriate, feasible or financially sustainable.

3. Rational use of chemical pesticides

Pesticides present a public health risk when not used appropriately. Low toxicity options should always be chosen when non-chemical treatment is not an option. Only pesticides registered and labelled by the Australian Pesticides and Veterinary Medicines Authority (APVMA) are to be used. The DOH expects that LGA employees and contractors will strictly adhere to label instructions to prevent harm to the person applying the pesticide, the public and the environment.

4. Application context

Understanding and following the pesticide label is important to manage risk however it does not mean that all risks will be eliminated. It is important to consider the context or circumstance in which a pesticide is being applied; for instance, a pesticide application should be avoided during the times that people are most likely to use public open space. Risk is determined, through an assessment of the context or circumstance in which a pesticide is being applied.

5. Collaboration and consultation

An aim of IPM is to prevent pest infestations. Prevention methods extend beyond pesticide treatment and include good waste management, plant selection and pest barriers such as weed mats or mulch which stop pests from thriving. Maintaining regular contact within the DOH, industry, researchers and with other relevant public and private stakeholders allows for the exchange of ideas, advice and methods that do not involve the use of pesticides.

Consultation with the DOH and other government agencies is particularly important when pesticide treatments have the potential to impact environmentally significant land, water catchment areas, farming property or other sensitive area or activity.

6. Engagement with local communities and other stakeholders

The IPM should provide a process that allows adequate opportunity for communities and other identified stakeholders to comment on pesticide-use policy and programs. An IPM includes a notification hierarchy that formalises when and how the public will be notified of pesticide treatments. Provides information on how a 'no spray register' will be designed and maintained and what communication formats will be in place to advise residents who are on the register. Ensures the notification of pesticide application events occurs in a timely manner.

7. Reference to the public health regulatory and legislative framework

Ensures compliance with applicable legislation. The primary legislation in Western Australian to consider includes the:

- a. *Health (Pesticide) Regulations 2011*
- b. *Medicines and Poisons Regulations 2016* and their related codes of practice
- c. And any other legislation pertaining to the environment, worker safety and biosecurity.

8. Application of good management practices

The IPM provides a method for managing contemporaneous records of pesticide application treatments, contractor details and jobs undertaken.

Risk assessment and management

Risk assessment and management is the process where hazards are identified, assessed and where necessary, eliminated or controlled. This process should be carried out for each specific

location where characteristics vary. In instances where locations have similar characteristics a generic risk assessment may be undertaken.

Factors that influence risk and risk management are listed below:

1. Organisational

- Size of the program and the financial, physical and human resources available
- Extent to which IPM methods are used
- Effectiveness of training received by LGA employees, including training in the risk assessment process
- Level of skill and experience in pest control held by LGA employees
- Extent to which advice on pest control is sought from external sources (e.g. government agencies, consultants)
- Adequacy of information held by the LGA on pesticides to be used in the program
- Experience of the LGA officer responsible for preparing and monitoring pest control contracts
- Storage facilities and transport arrangements for pesticides within the LGA.

2. Location

- Site specific location (e.g. each golf course or public park); and/or
- Generic, similar locations (e.g. urban verges within the LGA).

3. Chemical factors

- Active constituents and trade names
- Rate of application of the pesticide
- Quantities of pesticide required and frequency of use
- Method of application to be used
- Relative toxicity to human and the environment
- All restrictions and prohibitions in relation to the use of the pesticide
- Residual effects of the pesticide in the environment
- Season, time of day and weather conditions
- The type of surface (e.g. sandy soil, clay, hardstand, bitumen) or vegetation covering the area
- Pesticides used by adjoining LGA (if appropriate)

4. Human exposure factors

- Extent, nature and frequency of use of the area to be treated by the public and specific users
- Observance of human re-entry periods according to the label
- Proximity of “chemically sensitive” person(s)

5. Environmental factors

- Target pests to be controlled, their reproductive cycle, and extent of incursion
- Proximity of sensitive areas/locations (e.g. public drinking water source areas, organic farms, public places)
- Requirements for protecting marine, riparian and terrestrial areas
- Requirements for protecting commercial/agricultural areas
- Requirements for protecting recreational areas
- Requirements for no-spray separation areas and exclusion zones
- Other factors specific to the LGA
- Accessibility to the treatment area
- Characteristics of surfaces to be treated (e.g. porosity, wettability, texture, vegetation).

Control options for reducing risk

Where the risk assessment determines that the risk of using a pesticide cannot be managed, then an alternative pesticide or non-chemical treatment must be used.

Examples of risk reducing options include (but not limited to) the following:

- Using a non-chemical method of control
- Substituting a less harmful pesticide
- Lowering the rate of pesticide application
- Applying pesticide at a different time of day
- Using different application equipment
- Imposing a no-spray zone
- Only applying the pesticide when the wind conditions and direction prevent spray drift onto non-target areas
- Removing, redirecting people/animals/objects from the sensitive area
- Setting up appropriate signage and advertising.

Community consultation and notification

Consulting with the community on pesticide-use is considered best practice. It is important that the community has an opportunity to comment on the pesticide-use policy and pesticide-use notification plans and that the documents are publically available.

Consulting the community serves three main purposes:

- 1) It provides the opportunity for community and other stakeholders to inform LGAs of their needs, wants and expectations
- 2) Provides the opportunity for community and other stakeholders to comment on the draft policy and plans
- 3) Demonstrates that LGAs are taking account of the communities and other stakeholders concerns when developing policies and plans.

Strategies that can be applied during the consultation process for pest control programs include providing stakeholders with:

- reasonable opportunity to provide comments on a draft pesticide use policy prior to adoption
- access to an employee who is trained in the safe and effective use of pesticides, and who can:
 - discuss the pesticide use policy and notification plan; and provide opportunities for accepting reports of:
 - pesticide misuse; and/or
 - unacceptable performance by contracted Pest Management Technicians, or LGA officers responsible for the application of pesticides.
- access to a complaint register and investigation process for recording alleged misuse of pesticides and alleged breaches of the *Health (Pesticides) Regulations 2011*.

Pest Management Technicians employed by LGA

Ensure that any persons employed by a LGA to apply and handle pesticides:

- Have received appropriate training in the type of pest control work required by the LGA to ensure the safe and effective use of pesticides
- Are adequately supervised by a person who also holds appropriate qualifications in this area
- Are provided with:
 - Well maintained application equipment; and
 - Personal protective equipment that is appropriate to the pesticide being used
- Understand their obligations and rights under Occupational Safety and Health legislation
- Adopt safe practices at the work site, including the use of appropriate occupational safety and health checklists and procedures
- Comply with all applicable legislation, policies, codes and the LGA pesticide policy and notification plan
- Understands the difference between protecting public health and protecting their health when applying pesticides.

Pest Management Technicians contracted by LGA

- A contractor must be licensed by the DOH and be endorsed in the respective pest treatment required.
- An owner-operator contractor must, in addition to holding an appropriately endorsed license, hold a current DOH business registration (this is in addition to an ASIC business registration).

Review and Evaluation

An appropriate review period should be specified in the policy and planning documentation. The review period will vary depending on individual LGA's and the scale of their programs and can range from anywhere between one to five years.

The review may consist of a simple desktop review or it may involve a more detailed evaluation on the effectiveness of the LGA pest control program. Some considerations that may be included in an assessment:

- Scale of the program in relation to the resources used/available
- How effective the pest control measures being utilised are in controlling the weed or pest
- The effectiveness of the use of contract Pest Management Technicians in comparison with the use of LGA employees
- The identification, and impact assessment, of off target damage
- The effectiveness of the contract between the LGA and the business firm/Pest Management Technicians
- The effectiveness of the notification processes
- The number and nature of any complaints about the program
- The effectiveness of the pest control programs of adjoining LGA (where appropriate); and
- Recommendations for improvement where appropriate.

Appendix 1: Examples of local government pesticide policies and notification plans

- City of Stirling

<https://www.stirling.wa.gov.au/waste-and-environment/natural-environment-and-conservation/pests-and-weeds>

- City of Joondalup

<https://www.joondalup.wa.gov.au/wp-content/uploads/2017/12/COJ-Pesticide-Use-Notification-Plan.pdf>

- City of Wanneroo

http://www.wanneroo.wa.gov.au/downloads/file/3322/pesticide_management_policy

- Shire of Capel

<https://capel.wa.gov.au/wp-content/uploads/sites/167/2020/01/5.6-Integrated-Pest-Management.pdf>

Appendix 2: Legislation, Standards and Resources

- Department of Health
www.health.wa.gov.au
- Department of Agriculture and Food
www.agric.wa.gov.au
- Department of Water and Environmental Regulation
www.dwer.wa.gov.au
- Department of Commerce (WorkSafe Division)
www.safetyline.wa.gov.au
<http://www.commerce.wa.gov.au/worksafe/>
- Australian Pesticides and Veterinary Medicines Authority (APVMA)
www.apvma.gov.au
- ChemCert WA
www.chemcert.com.au/
- WALGA (Guidelines for Bushland Management)
<https://walga.asn.au/Policy-Advice-and-Advocacy/Environment/Biodiversity/Guidelines-for-Bushland-Management>
- Drum Muster
www.drummuster.com.au
- Chemclear
www.chemclear.com.au

Appendix 3: Glossary and abbreviations

APVMA	Australian Pesticides and Veterinary Medicines Authority
Business registration	A Department of Health Certificate that authorises the person registered to carry on a pest management business at the premises specified in the registration.
Endorsement	The act of approving the use of a particular pesticide against a set of criteria.
Public health	The Public Health Act defines public health as: a) the wider health and wellbeing of the community and b) the combination of safeguards, policies and programs designed to protect, maintain, promote and improve the health of individuals and their communities and to prevent and reduce the incidence of illness and disability.
Integrated Pest Management (IPM)	Integrated pest management is an environmentally sensitive way of managing pests. IPM uses a range of control methods and practices that aim to reduce the need for pesticide intensive activities.
LGA	Local Government Authority
LGA Officer	An employee of a local government
Licence	A Pest Management Technician's licence or Provisional licence. The licence is restricted by endorsements depending on training and qualifications.
Pest	Organisms deemed to be harmful or damaging to health, environment or property. Includes but not limited to insects, weeds, fungi, nematodes, plant pathogens, certain vertebrate animals.
Pest management technician	The holder of a technician's current licence.
Pesticide	A chemical formulated as a solid, liquid or gas used for managing pests. Used for directly or indirectly destroying, stupefying, repelling, inhibiting, or preventing infestation by or attacks of, any pest in relation to a plant, a place or thing; or modifying the physiology of a plant or pest so as to alter its natural development productivity, quality or productive capacity. Includes herbicides, insecticides, fungicides and algaecides.
Risk	The likelihood of a person experiencing an adverse health effect if exposed to a hazard
Spray drift	Pesticide droplets suspended in air that are carried by wind away from the target area

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