

Managing public health risks associated with pesticides in Western Australia

Discussion paper



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1 Executive summary

Western Australia's (WA) public health legislation has undergone a change to a more riskbased approach as part of an overall process of modernising the regulatory structure of public health. There are existing public health regulations that need to be considered in the development of new *Public Health Act 2016* subsidiary legislation. This discussion paper examines the *Health (Pesticide) Regulations 2011* and the existing regulatory environment and recommends how the current safety measures may be re-constructed using a modern approach.

The Department of Health (DOH) has conducted a risk assessment of several categories of scheduled poisons across the pesticide industry and has identified that the risk profile ranges from low to medium. The risk profile when assessed assuming no regulatory controls, ranges from low to high. Regulatory control brings a significant reduction in risk to the public and is strongly recommended in the new regulatory environment.

This discussion paper presents 3 options for regulating the application of pesticides. The primary focus of this paper has identified 25 questions that will assist stakeholders in providing input into the decision making process to modernise pesticide management.

Community input is now sought on the proposed methods for management, and comments will inform the development of a final approach. Your input on this important issue is welcomed.

The aim of the pesticide regulatory review is to examine the risks to health and safety from commercial uses of pesticides, and discuss options for their management into the future.





This document contains a series of questions related to the ideas presented. We welcome your responses to any or all the questions. We also welcome any feedback on pesticide use and control that may not be related to any of the questions.

Please explain the reasons behind your suggestions, and where possible use evidence such as statistics, cost estimates and examples of solutions.

Online survey

Complete the online survey, which may be accessed at <u>https://consultation.health.wa.gov.au/environmental-health-directorate/pesticides-regulation-review</u>

Written submissions

Submissions must be received by **5:00pm (WST), Thursday 10 October 2019.** Late submissions unfortunately cannot be considered.

Written submissions lodged by email (preferred) can be sent to publichealthact@health.wa.gov.au

Hard copies can be posted to:

Pesticide Regulatory Review Environmental Health Directorate Department of Health PO Box 8172 Perth Business Centre WA 6849

2 Consultation and implementation

The objective of this review is to ensure appropriate measures are in place to minimise public health risks associated with the use of pesticides in WA. The discussion paper seeks to determine the best option for managing the public health risks associated with pesticide safety to meet community needs in the future.

Principal stakeholders for the review will include:

- Local government including the WA Local Government Association (WALGA)
- State Government
- Individuals and organisations captured by pesticide safety regulations in WA
- Individuals and organisations exempted from licensing and registration in WA
- Registered Training Organisations
- General public

The results of this consultation will inform the development of the reforms. It is intended to give a broad overview of stakeholder opinion, which will be incorporated into an implementation strategy once proposals are finalised.



3 Introduction

The *Public Health Act 2016* is a significant public health initiative reforming and improving Western Australia's public health regulatory system. It is a major step towards modernising legislation to allow for the capture of emerging risks and to provide industry with a more flexible risk-based platform replacing the existing prescriptive approach to regulating risk.

The Health (Pesticides) Regulations 2011 (Regulations) came into effect on 1 February 2011. As part of the development of these regulations, significant work was undertaken to review pesticide safety in Western Australia to ensure the legislation provided a robust, workable and nationally consistent framework for the regulation of pesticides. The Western Australian pesticide industry has built a nationwide reputation for high standards in industry competence and accident prevention.

Whilst the pesticide industry has not raised any significant concerns with the existing regulations, an opportunity exists as part of this reform to consider emerging practices and improvements that could be made to the system to further streamline and reduce regulatory burden on both the industry and enforcement agency.

3.1 Objective

The objective of this discussion paper is to provide background information and present options for public consideration relating to the future of pesticide regulation. The basic option is a choice of whether to continue regulation or to remove regulation. The discussion paper seeks public opinion on this choice through respondent feedback and presents a series of questions to assist respondents.

Pesticide treatments in Western Australia

A range of pesticides for regulatory purposes includes the following:

Algicide Avicide Fumigant Fungicide Herbicide Insecticide Mineral Molluscicide Plant Regulator Rodenticide

The pesticide regulatory review is also an opportunity to consult with the community and enforcement agencies on this issue. As part of this process, pest management methods in other jurisdictions of Australia have been considered in order to identify a range of best-practice guidance and competency assessment initiatives.

3.2 Summary of the current scenario in Western Australia

The current Regulations provide for registration, licensing and regulatory approvals under the delegation of the Chief Health Officer (CHO), formerly the Executive Director, Public Health. The current regulations provide an exemption for individuals involved in non-commercial use of pesticides from licensing and registration. This includes individuals involved in primary production. The current Regulations generally capture all individuals involved in the use of pesticides as fumigants.

At the end of the 2017/2018 financial year, there were approximately 900 registered pest management businesses in Western Australia and 2700 licensed pest management technicians. The process of repealing the *Health (Pesticide) Regulations* 2011 (Regulations) and re-establishing an appropriate legislative structure under the *Public Health Act 2016* serves as an opportunity to streamline and fine-tune current industry compliance requirements.

The DOH as a central agency located in the metropolitan area, has had limited funding available for intrastate travel to undertake industry-wide inspections and audits. There exists a focus within the DOH to increase operational monitoring of the pesticide industry. Improvements to the industry monitoring may include an increased number of random site visits or periodic industry auditing.

3.3 Why are the regulations under review?

In the lead up to stage 5 of implementation of the Public Health Act, the DOH is reviewing all regulations adopted under the *Health (Miscellaneous Provisions) Act 1911* (Health (MP) Act). The review must determine whether the associated public health risks should continue to be regulated under the new regulatory framework, or whether they can be effectively managed through a guideline, local law or other legislation instead.

3.4 Should we continue to regulate?

This discussion paper will examine the risks and issues associated with the operation of the pesticide industry and seek comment on proposed options for management. Benefits and risks have been compared for both continued regulation and deregulation.

Based on an assessment of risk and preliminary consultation with local

government, the preferred approach of the DOH is continued regulation, scaled where possible to reflect the level of risk. A range of proposals for modernising the legislation has been outlined.

3.5 What are the Options

The DOH has identified three options for the future management of pesticides; these are discussed in detail from section six onwards.

The preferred option of the DOH is to repeal the current Regulations and replace them with new regulations under the *Public Health Act 2016*.

The DOH believes that the best method of protecting the public from inappropriate application of pesticides is to continue to regulate their use due to the significant health risks associated with the misapplication of pesticides.

The existing regulations can't be directly transitioned across in their present form as they are highly prescriptive and new Public Health Act takes a risk-based approach which uses different tools to achieve regulatory outcomes.

For those that choose to continue to regulate as a preferred option, the discussion paper provides a choice to the respondents where they can provide specific feedback about a further nine proposals that have been presented for discussion in the question framework. Proposal topics consider administration items such as: registration, licensing, licencing exemption criteria and the structure for enforcement and compliance. A total of 25 questions are presented for respondent feedback.

Options for future management of pesticides

The DOH has identified three options for the future management of pesticides. These are discussed in detail from page 24 onwards.

Option A: Take no action (repeal without replacement)

Issue guidelines and encourage industry selfregulation

Use the general public health duty to reactively address issues Option B: Retention of the existing regime by making new regulations identical to those in force under the Health (Miscellaneous Provisions) Act 1911 Option C: Provide new, updated regulations under the *Public Health Act 2016*

This option has regulatory requirements, including the proposals listed below with Proposals 3 and Proposals 7-9 introduced with proposed changes:

Improving administration and protecting public safety

Proposal 1: Continue registration under the new Public Health Act Proposal 2: Continue licensing under the new Public Health Act Proposal 3: Licensing exemption criteria for individuals Proposal 4: Pesticides in public places Proposal 5: Safe fumigations Proposal 6: Management of registered pesticides Proposal 7: Local government as the enforcement agency Proposal 8: Multi-year validity for registrations and licences Proposal 9: Introduce substance management plans

4 Risks to public health

Hazards exist all throughout our society. Hazards can cause harm and can threaten health and wellbeing. One type of hazard that is well established as a risk to public health is the hazard associated with chemical toxicity. The risk that chemical toxicity presents to the individual and the public is dependent on the level of exposure. Toxicity is the degree to which a chemical can damage tissues, organs and organ systems comprising the human body. Certain chemicals may cause immediate harm while others cause harm only from many years of exposure. Some represent a residual hazard with the ability to remain in our environment for long periods of time and which may compromise our health if left unmanaged.

Specific activities in our society often require regulatory mechanisms to define the roles and responsibilities of individuals, agencies and industry associated with the hazardous aspects of that activity. The purpose of a regulatory instrument is to protect members of the public from a range of risk activities and risk situations. Regulatory instruments can establish standard processes or mitigation strategies to help to reduce each risk.

In the discussion about risk considerations for pesticide safety, experts tend to focus on what is measurable in a scientific sense, however different people's values will also have a bearing on how risk is perceived. For instance, some people may decide all pesticides are too risky and should be banned while others believe pesticides are valuable for preventing pest borne diseases.

The *Public Health Act 2016* requires that where there is uncertainty regarding the science and health outcomes, a precautionary approach to control risk must be taken. The approach must also be proportional to the risk present to balance the overall public benefit of accepting any risk. In the application of pesticides in society, the benefit may also be economical with regard to increased food production or improved amenity or reduced spread of disease, such as mosquito reduction in certain areas, but benefits may not always be distributed evenly across society (New Zealand Ministry for the Environment, 2002).

4.1 Pesticides as a public health risk

The Australian Government publishes the Standard for the Uniform Scheduling of Drugs and Poisons (Schedule) under the Therapeutic Goods Act 1989 which lists the active constituent chemicals of pesticides that have been registered for use in Australia by the Australian Pesticide and Veterinary Medicines Authority (APVMA). The body that coordinates this schedule is the National Drugs and Poisons Schedule Committee. Drugs and poisons are classified according to how much control is needed to protect public health and safety. The three significant Schedule definitions that are relevant for controlling the use of pesticides are:

- Schedule 5. Caution products containing these substances can be purchased by the general public in most hardware stores and are considered to be low risk to humans.
- Schedule 6. Poison substances with a moderate potential for causing harm, the extent of which can be reduced through the use of distinctive packaging with strong warnings and safety directions on the label.
- Schedule 7. Dangerous poison substances with a high potential for causing harm at low exposure and which require special precautions during manufacture, handling or use.

These poisons should be available only to specialised or authorised users who have the skills necessary to handle them safely.

Poisons are not specifically scheduled on the basis of a universal scale of toxicity. Although toxicity is one of the factors considered, the safety in use, potential for abuse and the need for the substance are also taken into account. For agricultural, domestic and industrial poisons Schedule 5, 6 and 7 represent increasingly strict container and labelling requirements, with special regulatory controls over the availability of the poisons listed in Schedule 7 (National Drugs and Poisons Schedule Committee, 2007).

The life cycle of a pesticide product comprises several stages from its manufacture to its enduse, each with different levels of risk The main public health risk scenarios encountered by end-users are storage, transport and application which are considered on the label information.

Strategies for preventing harm and for managing public health risks from end-use scenarios typically target common pathways of exposure. Pesticides enter the body through three pathways namely: oral entry through swallowing, respiratory entry through breathing and dermal entry through skin contact.

Pesticides are most commonly applied as a liquid preparation or a granulised solid preparation. While much less common, gaseous preparations applied as fumigants represent the greatest risk to human health as the likelihood of inhalation is greatly increased. For all application scenarios, each pathway of exposure (oral, respiratory and dermal entry) will be possible with each pathway representing a different level of risk.

4.1.1 Liquid and granulised solid powder applications as a public health risk

The standard application of a pest management treatment is in liquid form. While accidental skin contact from splashes or spray drift may cause irritation, these can often be quickly remedied by washing and simple decontamination procedures. Contact with powdered pesticides can be managed in the same way.

More serious health effects arise following accidental ingestion or inhalation of liquid or powdered aerosols and following repeated and frequent misapplication of the product.

The label on pesticide containers provides instructions for minimising risks associated with liquid and powder applications.

4.1.2 Fumigation as a public health risk

The Regulations define 'fumigation' as a pest management treatment that involves the use of a fumigant in a gaseous form. 'Fumigant' is defined as a registered pesticide that contains one or more active constituents. Most fumigant chemicals are considered to be toxic to humans, affecting many organ systems including the respiratory (lungs), renal (kidney), hepatic (liver), and nervous systems after intense (acute) or ongoing (chronic) exposure. Exposure to uncontrolled fumigants typically results in death or life-changing disability.

Table 1 lists some of the active constituents in fumigation chemicals.

Risks to human health are increased when fumigation processes are undertaken in built environments, particularly near to work places or residential housing. The risks to public health are often substantially reduced in agricultural uses primarily due to the distance from population centres. Table 1: List of chemicals currently deemed a fumigant inWestern Australia with examples of uses and schedules.

Active constituent	Application	Schedule category
Chloropicrin (Chlorofume)	soil (injected); grain (enclosed) *not currently registered for rabbit control in WA	7
1,3 – dichloropropene (Telone)	soil (injected); grain (enclosed); can be used in conjunction with Chloropicrin.	7 Except in biocidal preparations containing 0.3% or less of 1,3- dichloroprop ene
Ethanedinitrile (EDN)	timber logs and products (enclosed)	7
Ethyl formate	grain, food, hay (enclosed) bedbugs (enclosed recommended, not in public or domestic situations)	6
Ethylene oxide	medical/vet sterilant (exempt under current regulations as not used for commercial gain or reward)	7
Methyl bromide	quarantine, vessels, structures, food, timber, plants. (enclosed), soil (strict approvals required), soil (enclosed)	7
Phosphine (includes Metallic phosphides and liquid phosphine)	grain, hay, structures, dried fruits, tobacco (enclosed) feral vertebrate control (rabbits, etc) (non-enclosed)	7
Sulfuryl fluoride	Structures, timber, vessels, silos, grain, dried fruits, hay (enclosed)	6

4.1.3 Pesticides as a public health food risk

The label of each chemical product lists its appropriate use so as not to compromise public health and food security. The APVMA considers the food chain and the unintended ingestion of pesticide residues by humans. As such, this will not be explored by this paper.

4.1.4 Misuse of pesticides as a public health risk

The current regulations clearly identify the penalties that apply to the misuse of chemicals in any application of a pest management activity. These penalties apply to licenced pest management technicians, businesses and unlicensed individuals who undertake pesticide services for remuneration.

4.1.5 A review of prosecutions of pesticide operators in Western Australia

Four following principles are considered in pursuing a prosecution in Western Australia and are listed below:

- An acknowledged public health risk
- Evident adverse health effects
- A public interest to prosecute
- Intent of malicious behaviour

A review of systems within the time period 2008-2018, identified four prosecutions in Western Australia. All four prosecutions were successful in obtaining a conviction in court. Three of these prosecutions involved licensees operating in contravention of the application of pesticides in accordance with labelling instructions causing injury or resulting in the potential for injury to health. The fourth prosecution involved a licensee using a pesticide (fumigant) not endorsed by the licence causing injury or resulting in the potential for injury to health. In the time period 2009-2018 there have been 240 hospital admissions and 11 deaths in Western Australia from pesticide poisonings. Approximately 40% of the hospitalisations, but none of the deaths, were attributed to deliberate exposure. The reasons for the 'accidental' exposures leading to hospitalisation or death are not recorded. However, the Department has no record of human fatalities or severe injuries from misuse by licensed technicians in Western Australia.

4.1.6 Pesticide incidents in Australia

A review of substance-related incidents suggests that deaths and severe injury from pesticide misapplications are rare and this provides some positive feedback that the systems currently in place across the country have been effective in protecting public health. A selection of incidents that have occurred across the country are listed below to demonstrate the likely types of injury and the potential numbers of people that have been affected from poisoning or inhalation of pesticides:

- In 2017, a NSW Central Coast man with severe autism drank a cocktail of highly toxic herbicides left in an unmarked drink bottle.
- A pesticide spill at Elders in Orange NSW in 2016 reports of a spill of cropping pesticide from the back of a truck making a delivery at a site where two workers had to be decontaminated after liquid had spilled onto their boots and gloves.
- In 2006, a young child died following swallowed Spray Seed containing paraquat that was stored in an unlabelled pop-top container on the front porch of a house in Morwell. The paraquat had been taken from an employer.

- In 2002, a NSW based transport company was fined \$35,000 for causing a pesticide spill that killed more than three tonnes of fish in a Sydney creek.
- Nine workers were taken to hospital in 2002 after being exposed to chemical fumes following a pesticide accident in Melbourne's west when a forklift driver accidentally ran over three large cans of pesticide that had been placed on the warehouse floor.
- In 1997, twenty-nine workers from a city office and a fireman were taken to hospital after they were overcome by fumes from a pesticide spill.

The nature of these injuries presents a reminder about the potential for injury when pesticides are not handled correctly, used in accordance with their labels or stored in inappropriate containers.

4.2 Risk assessment

To determine whether pesticide industry risks are of public health significance, a risk assessment was undertaken based on 'measures of consequence or impact' and 'measures of likelihood' of the impact occurring. Measures of consequence and likelihood are used to determine the risk level. High risk is considered to be unacceptable and requires action to be taken to reduce the risk level.

The risk assessment was undertaken in accordance with the risk assessment model provided by the 2011 Health Risk Assessment (Scoping) Guidelines, Department of Health WA (see <u>Appendix 1 – Risk assessment</u> <u>guide</u>). In order to summarise the risk from pesticide applications to the public, four likely scenarios to cover the span of chemicals used in WA have been listed in Table 2 (and in greater detail in <u>Appendix 2 - Risk</u> Assessment of Schedule 6 and Schedule 7 pesticides). Schedule 5 pesticides have not been considered in this assessment as products can generally be purchased and used without restriction.
 Table 2: Summary of the public health risk assessment in Western Australia for Schedule 6 and Schedule 7 pesticides.

Pesticide group	Severity of impact	Likelihood of impact	Risk level assuming current regulatory controls	Risk level without regulatory controls
Schedule 6 pesticides – liquid or granular applications	Minor - Moderate	Unlikely - Possible	Low	Low/Medium
Schedule 7 restricted pesticides – liquid or granular applications	Major	Unlikely - Possible	Low	Medium/High
Schedule 7 pesticides – fumigations – urban and peri-urban sites	Major - Massive	Unlikely - Possible	Medium	High
Schedule 7 pesticides - fumigations in remote sites	Major	Rare - Unlikely	Low	Low

5 Current management

5.1 Role of regulatory authorities

5.1.1 The Department of Health

Authorised officers in DOH administer and enforce the current *Health* (*Pesticide*) *Regulations 2011*. Authorised officers are currently responsible for:

- assessing licence and business applications and issuing licences and/or business registrations;
- inspecting new businesses and vehicles fitted out for pesticide business use (in regional areas this service is undertaken by local government on behalf of the DOH);
- inspecting chemical storage facilities and premises operated by licensees;
- assessing and approving sites for fumigation as specified under Part 5 Division 3 of the regulations;
- inspections of pesticide application sites and business premises;
- investigations and interviews following notification of accidents or incidents; and
- representation and support during legal proceedings such as prosecutions and hearings at the State Administrative Tribunal.

The DOH is also the enforcement agency for the *Medicines and Poisons Act 2014* and *Medicines and Poisons Regulations 2016* which control the sale and manufacture of restricted substances. Restricted substances are defined in the Standard for the Uniform Scheduling of Drugs and Poisons under the Commonwealth *Therapeutic Goods Act 1989*.

The Code of Practice for the Safe Use and Management of Registered Pesticides containing 1080, PAPP and STRYCHNINE provides additional guidance for pesticide applications for listed restricted substances. The code establishes a hierarchy using the *Medicines and Poisons Act 2014* as its head of power which establishes a process of authorised departments and authorised officers. The DOH as an authorised department under the code is able to use licence endorsement and conditions of licence to require adherence to the code and permit the use of the restricted substances as defined by the code. The code provides the definition of a prescribed pest for the purposes of the pesticide industry.

In addition to the controls documented for restricted substances, compliance with the Code of Practice for the Disposal of Pesticide Residues from Pesticide Spray Applications is required for all registered substances as a condition of registration for all pesticide management businesses.

Appendix 3 provides a summary of the *Public Health Act 2016* mechanisms to deal with public health risk management and offences under the Act.

5.1.2 The Pesticides Advisory Committee

The Pesticides Advisory Committee (PEAC) is a statutory body under the Health (MP) Act, which represents a range of regulatory interests across its prescribed membership of government agencies. Its purpose is to advise the CHO on any matter whatsoever concerning pesticides, consider and adopt recommendations and exercise any power conferred or imposed on it. PEAC primarily sets policy for other State government agencies use of pesticides.

PEAC currently meets several times throughout the year or as required.

5.1.3 Health (Pesticides) Regulations 2011

5.1.3.1 Activities controlled under the current Health (Pesticides) Regulations 2011

A pest management technician (PMT) is an individual that undertakes pest management treatments for remuneration (which may also include fumigations). A pest management treatment is the treatment of a place or a thing with a pesticide for the purpose of destroying or inhibiting the feeding of, the infestation of, or attacks by a pest. In addition pest management treatment can also include destroying or modifying a plant or a pest or attracting a pest for the purpose of killing it.

A pest management business is a business that supplies the services of PMTs as its principal activity. The Chief Health Officer (CHO) must be satisfied that any applicant for a pesticide management business registration must have sufficient equipment and material to operate as a pesticide business and will employ sufficient staff to safety operate as PMTs at locations suitable for the intended purpose. The CHO may impose conditions on a business registration. Registered proprietors are required to keep accurate and up-to-date records of all PMTs employed and all pest management treatments undertaken. All accidents must be notified to the CHO immediately.

The CHO must be satisfied that any applicant for a licence must be at least 17 years of age, be adequately qualified to act as a PMT and be a fit and proper person. The CHO may impose conditions on a PMT licence.

Any fit and proper person may apply for a licence. A provisional licence will be required for urban pest management. A provisional licence holder is required to work under the direction and personal supervision of a

licensed PMT with the intent to acquire sufficient knowledge and skills to enable the applicant to become a (full) licensed PMT. The typical length of time that a licensee would remain provisional is 12 months.

PMTs are approved to use any registered pesticide within their endorsed area that is not a restricted-use pesticide. Where PMTs have certain endorsements on their licence such as a fumigation; they are permitted to use restricted–use pesticides.

All fumigation sites are required to be approved by the CHO prior to application of the fumigant. The current regulations specify the requirements for a fumigation plan. Registered proprietors must adhere to any conditions imposed in the approval and ensure that a fumigation plan has been completed. PMTs must adhere to the plan as well as any conditions.

During any application of a registered pesticide, all persons (including PMTs and exempt individuals) need to comply with part 6 of the current Regulations where the safe use of pesticides chemicals is specified for storage, transportation and use as per the labelled instructions on pesticide containers. There are currently prescribed requirements for maintaining visible signage for minimum sized lettering when spraying in public places. All individuals must comply with the regulations with respect to safe use, decontamination requirements or disposal of pesticides and their containers.

Officers from the DOH inspect new business premises and vehicles that have been fitted out for pesticide business use. In the more remote locations of the state, local government officers undertake inspections of new vehicles on behalf of the DOH.

5.1.3.2 Entities captured under the current regulations

The current regulations apply to those individuals and businesses who; for remuneration, undertake pest management treatments and employ PMTs.

The current regulations exempt all individuals who are employed by a single employer and only undertake pest management treatments undertaken on places or things owned, occupied or used by that employer e.g. primary producers. This exemption extends to all individuals employed exclusively by local government authorities and State government departments.

All individuals who undertake fumigations, whether for remuneration or not, are captured by the current regulations, with the exception of those who undertake soil fumigations on land owned or occupied by the person using the fumigant. This exemption is primarily utilised by those undertaking soil fumigations.

Persons assisting the licensed technician in fumigation activities are also exempt from licensing.

Supervised persons involved in seasonal spraying in the ordinary course of broad hectare farming, pasture production and those employed on a casual basis to assist in these pesticide treatments are also exempt from licensing provided that they have undertaken a CHO approved course in the safe handling and use of registered pesticides.

The following are not considered pest management treatments for the purpose of the current Regulations:

• Spraying of a pesticide by aircraft which is regulated by the Department

of Primary Industries and Regional Development (DPIRD).

- The treatment of organic material with formaldehyde. Formaldehyde is a registered substance under the Australian Industrial Chemical Scheme administered by the Commonwealth Department of Health through the National Industrial Chemicals Notification and Assessment Scheme.
- The sterilisation of surgical, medical or veterinary materials or products which is controlled under the AGVET code administered through DPIRD.

5.1.3.3 Fee structure

The fee charged for the initial application for registration and the renewal process for a registration is approved by treasury as a calculation of the costs of the time, requirements of the various level officers involved in the application approval process and material costs such as the printing of certificates. The fee charged for licences is based on a similar calculation. This fee structure is typically reviewed and adjusted annually based on inflation pressures and any other relevant costs.

5.1.4 The Department of Primary Industries and Regional Development

The Agricultural and Veterinary Chemicals (Western Australia) Act 1995 (AGVET Act) requires that before an agricultural or veterinary chemical product can be legally supplied, sold, or used in Western Australia it must be registered by the APVMA. Pesticides fall in the category of agricultural chemicals. For each AGVET chemical product that contains an active constituent, the APVMA must approve the active constituent before it registers the product. Each registered product must have a label containing the instructions approved by the APVMA including instructions for the safe and effective use of the product and for its storage, handling and disposal.

The Department of Primary Industries and Regional Development (DPIRD) administer the AGVET Act on behalf of the APVMA and the Commonwealth and have direct regulatory responsibility for primary producers across Western Australia. Primary producers are exempt from licensing under health regulations but are captured under the *Biosecurity and Agriculture Management Act* 2007 (BAM Act) which is also administered by the DPIRD. The BAM Act provides regulations capturing all aerial applications of pesticides as well as regulations capturing the use of pesticides within the agricultural sector.

The DPIRD provides the definition of a declared pest for the purposes of the pesticide industry.

5.1.5 The Department of Mines, Industry Regulation and Safety

The Occupational Safety and Health Act 1984 (OSH Act) establishes the regulatory controls within the workplace that cover employee duty of care considerations as well as employer duty of care considerations. The jurisdictional boundary between the OSH Act and the current Regulations would precisely follow the physical boundary of a worksite. All safety issues recognised within the worksite would fall within the OSH Act, all considerations for risk and safety beyond a physical worksite would lie within a public health jurisdiction.

General precautions for chemical safety for all employees are required under the OSH Act.

5.1.6 The Department of Water and Environmental Regulation

The Department of Water and Environmental Regulation (DWER) is responsible for responding to pollution events which may include pesticides. The threshold for a pollution event is under the jurisdictional control of the DWER. DWER provides advice to the DOH with regard to content within the Code of Practice for the Disposal of Pesticide Residues from Pesticide Spray Applications.

For issues of pollution of a public water supply, the DOH would become involved through the CHO under the powers of the Health (MP) Act.

5.1.7 The Department of Biodiversity, Conservation and Attractions

The Department of Biodiversity, Conservation and Attractions (DBCA) is responsible for all activities conducted in national parks including pesticide use and safety. The DBCA is an authorised department under the Code of Practice for the Safe Use and Management of Registered Pesticides containing 1080, PAPP and STRYCHNINE. The DBCA issues its own set of regulations for the use of Schedule 7 pesticides for the locations applicable to their jurisdiction.

5.2 Industry responsibilities

All registrants and licensees are currently required to comply with all parts of the Regulations. Individuals using pesticides that are exempt from licensing are required to comply with Part 6 of the current Regulations; possession, use and disposal of pesticides.

The DOH provides guidelines that are available for industry to use as a reference for good practice. The <u>Guidelines for the safe</u> <u>use of pesticides in non-agricultural</u> <u>workplaces</u> provide some basic structure for industry to minimise public health issues.

5.3 Examples of interstate approaches

Jurisdictional management of pesticide use varies across the country however all states and territories are party to aligning record keeping and licensing requirements with the Council of Australian Governments (COAG) agreed national harmonisation model. All states manage pesticide use through regulation.

Figure 1 provides a summary of the particular approaches that are undertaken in the states and territories of Australia. A few common themes across the country are:

- responsibility at a business level;
- individual licensing including the requirement for demonstrating competencies for chemical use;
- separate endorsement and controls for fumigations;
- Health departments are generally the enforcement agencies across jurisdictions.

5.4 Benefits, limitations and challenges of current system

5.4.1 Benefits

The current system of licensing is in line with the requirements of COAG- endorsed national harmonisation model. It aims to reduce harm to people and the environment from misuse by requiring levels of training commensurate with the activity and approvals for high risk activities.

The current licensing and registration requirements allow verification that individuals have the necessary training in pesticide use. The record keeping requirements provide a method by which misapplication can be traced and PMTs held to account. Pest management businesses recognise they have legal accountability for misapplications and misuse of pesticides by their employees.

5.4.2 Limitations and challenges

There are some areas of the legislation that need to be amended to provide further clarity

and ease of administration of the legislative requirements. For example:

- Exemption from registration and licensing applies to primary producers e.g. farmers. This exemption also extends to fumigations but only to soil fumigations. Other fumigations are not exempt and require licences as pest management technicians (PMTs) to operate. This also applies to feral vertebrate control (restricted use chemicals) on pastoral properties and farms.
- Local government and State government employees are currently exempt from licensing; however many of these individuals may not have the experience of PMTs and this exemption presents a public health risk when pesticides are applied in urban locations.
- There is a general absence of industry documentation relating to compliance requirements for applications of higher risk pesticides.
- The current system allows for penalties only after a public health incident has occurred. Penalties can be imposed only after a successful prosecution. The prosecution process can be long, complex and take years to complete.
 Fuller consideration of this aspect of the regulations is considered in the *Public Health Act 2016*.

Northern Territory

The Medicines. Poisons and Therapeutic Goods Act 2017 controls the use of pesticides in the Northern Territory and the Department of Health is the responsible authority. To undertake pest control activities individuals require either a pest management (PM) technician licence. Individuals in the primary production sector require an authorisation under the Agricultural and Veterinary Chemicals Act. Evidence of successful completion of competency in pest management or equivalent is required. Provisional licence holders must be supervised by a fully licensed PM technician. For a fumigation endorsement, proof of successful completed competence and training are required.

Queensland

Any person undertaking a pest management (PM) activity in Queensland must possess a PM licence. Applicants must provide evidence of completion of required competencies. There is no requirement for PM businesses to be registered. Trainee PMTs in Queensland are exempt under licensing requirements. Fumigation endorsement on a licence enables the holder to undertake fumigation activities for sites listed on their licence. The *Pest Management Act 2001* and *Pest Management Regulation 2003* is set to be integrated with the Medicines Poisons and Therapeutic Goods (MPTG) 2017 which provides for a licensing system that relates to poisons management. The integration considered items as follows: restriction of Schedule 7 dangerous poisons, additional competency requirements in primary production and commercial invasive animal baiting, and led to Substance Management Plans (SMPs) to be introduced.

NSW

The Pesticides Act 1999 regulates and controls the use of pesticides in NSW for both urban and agricultural situations and is administered by the NSW EPA. Authorisation is by way of either a pesticide control order or a restricted pesticide authorisation. Pest management technician licences are also issued by the NSW EPA. A pest management technician or fumigation certificate of competency is required for the occupational use of pesticides in NSW. There is a requirement to renew training every five years and training is mandatory for specified industries. Pest management businesses who undertake pest management technician and fumigation work also have a responsibility under occupational health and safety laws.

South Australia

The South Australian Controlled Substances Act 1984 and Controlled Substances (Pesticides) Regulations 2003 require that any person who carries out pest control work in the course of a pest control business must hold an appropriate licence endorsed for the type of work being carried out. The regulating body is the Department of Health. A pest controller's licence is required to operate a pest control business. All pest management technicians must work under a pest controller's licence. Some exemptions exist from the need to hold a pest controller's licence. Limited (provisional) Pest Management Technicians are required to undertake training in a prescribed course of instruction.

Victoria

The Department of Health and Human Services licenses and regulates pest control operators under the *Public Health and Wellbeing Act 2008* and the *Public Health and Wellbeing Regulations 2009*. To be granted a full licence, the applicant must have obtained the appropriate qualifications. A licence may be granted for three categories: applications (other than pest animals), the control of pest animals and pesticides in the form of fumigants. The Agricultural and Veterinary Chemicals (Control of Use) Act 1992 requires any person who carries on a business or offers a service for fee or reward involving the use of a prescribed class of agricultural chemical to have a commercial operator licence.

Figure 1: Examples of approaches to pesticide safety licensing in other states

6 Future management options

Future management approaches must consider how to continue to manage the medium and high risks associated with the application of pesticides, without placing unnecessary burden upon industry and small business.

Key considerations:

- Use of pesticides may be associated with medium and high risks to public health.
- Failure to accurately manage risks can result in poisonings, loss of human life and financial costs.
- Historically these risks have been managed through legislation under the DOH, therefore the body of knowledge currently sits with DOH officers.

The risk of chemical poisoning in the transport, storage, application and disposal of pesticides is a universal consideration and while WA has not experienced a fatality scenario, it is worth noting the potential impacts of poor management. This is demonstrated in Section 5.1.7, where some of the health issues arising from pesticide incidents have been reported.

A master list of the questions raised in this discussion document is available in Appendix 4.

Please note that offences, penalties and powers for authorised officers have not been discussed in this paper in full, as they are provided for by the Public Health Act. This includes powers of entry, inspection and seizure which are outlined in Part 16 of the Public Health Act.

The Department of Health has identified the following 3 options:

Option A: Take no action (repeal without replacement)

Or

Option B: Retention of the existing regulatory regime by making new regulations under the *Public Health Act 2016* identical to those in force under the *Health (Miscellaneous Provisions) Act 1911*

Or

Option C: Provide new, updated regulations under the *Public Health Act 2016*

Proposals under Option C:

Proposal 1: continue registration under the Public Health Act Proposal 2: continue licensing under the Public Health Act Proposal 3: licensing exemption criteria for individuals Proposal 4: the control of the use of pesticides in public places Proposal 5: provide controls for safe fumigations under the new Public Health Act Proposal 6: provide controls for management of registered pesticides Proposal 7: local government replacing DOH as the enforcement agency Proposal 8: variable frequency of renewal for registrations and licences Proposal 9: introduce substance management plan (SMP) requirements

6.1 Option A: Take no action (repeal without replacement)

Without action, the existing Regulations would be repealed without replacement and individual local government authorities would become responsible for determining pesticide application safety within their jurisdiction. Local government would have the potential to draft and publish local laws to regulate the use of pesticides within their jurisdiction boundary.

The DOH would provide guidance documents on minimising health risks in pesticide management. These would be enforced using the general public health duty provided by the *Public Health Act 2016*. The documentation would primarily be aimed at assisting local government to achieve a level of standardisation among local government local laws.

If a complaint or issue arose, authorised officers would have a number of options under the Public Health Act, including issuing improvement notices, enforcement orders and/or commencing prosecution. The DOH would provide guidance documents for authorised officers on how to apply the general public health duty.

The pesticide industry would need to adjust to the likelihood that any requirements to comply with local health requirements may be inconsistent across the many different local government jurisdictions.

Option A: Take no action (repeal without replacement)

Advantages

- reduced regulatory burden for State government and industry;
- allows for a more informal approach to information to be provided in the form of guidelines and recommendations; and
- may encourage more efficient business models without restrictive rules, whereby savings can be passed on to the public

Disadvantages

- little incentive to maintain high safety standards;
- industry confusion over requirements as this area has historically been regulated by the health portfolio;
- inconsistency in approach and reduced public confidence in the safety of pesticide applications;
- no cost recovery for local government, and no fines are able to be issued under the general public health duty;
- sections of industry may try to cut corners and operate in unsafe environments, increasing risk;
- more difficult to proactively respond to emerging risks;
- issues with cross-jurisdictional boundary applications of pesticides.
- more difficult to manage public complaints due to a lack of specific legislation; and
- local government can be a significant user of pesticides chemicals presenting conflict of interest issues

Question 1: Do you support the adoption of **Option A: Repeal without replacement**? Why or why not?

Question 2: Can you identify any further advantages or disadvantages of **Option A**:?

6.2 Option B: Retention of the existing regulatory regime by making new regulations under the *Public Health Act 2016* identical to those in force under the *Health (Miscellaneous Provisions) Act 1911*

Option B: provides for the maintenance of the status quo regarding regulatory practices of the pesticide industry, as far as practicable. However, this does not make use of the risk based nature of the *Public Health Act 2016* and this option does not address any current challenges of the industry.

While there would be no requirement for any local or State government agency to do anything differently and no additional regulatory burden or red tape for the public or industry, the current prescriptive regulatory requirements do not align with the risk based nature of the Act. This approach would continue industry requirements for complying with registration and licensing requirements, regular inspections of businesses and industry vehicles, site inspections and investigations as required.

Proposals

If Option B: Retention of the existing regulatory regime by making new regulations under the *Public Health Act 2016* identical to those in force under the *Health (Miscellaneous Provisions) Act 1911* is chosen, the DOH will look to replicate all of the current regulatory provisions, as far as practicable, in the new system. Option B: Retention of the existing regulatory regime by making new regulations under the *Public Health Act* 2016 identical to those in force under the *Health (Miscellaneous Provisions) Act* 1911.

Advantages

- adequate management of public health risks associated with the application of pesticide chemicals;
- public safety maintained at a consistently high standard;
- enforcement remains with authorised officers with existing expertise in this area;
- consistency in the application and enforcement of legal obligations.

Disadvantages

- maintains current regulatory burden;
- current regulatory requirements do not align with the risk based nature of the Act
- current prescriptive regulatory framework will not adapt to evolving technologies and changing practices of the industry
- the opportunity to reduce the public health risk may be missed
- inconsistency in the requirement for fumigations
- inconsistency in the control of feral pests; and
- difficult to assess skills and knowledge for primary producers.

Question 3: Do you support the adoption of Option B: Retention of the existing regulatory regime by making new regulations under the *Public Health Act* 2016 identical to those in force under the *Health (Miscellaneous Provisions) Act* 1911? Why or why not? **Question 4**: Can you identify any further advantages or disadvantages of **Option B**:?

6.3 Option C: Provide new, updated regulations under the *Public Health Act 2016*

The preferred option of the DOH is to repeal the current Regulations and replace them with new regulations under the *Public Health Act 2016*.

As demonstrated, there are a number of medium and high risks to public health associated with pesticide applications. In continuing regulation, authorised officers would remain responsible for administering the regulations; however, a consideration of State versus local government as the enforcement agency is to be discussed as a proposal in this process. A proactive approach to pesticide management would continue, with universal industry requirements for compliance under the registration and licensing system, regular inspections of businesses, industry vehicles, site inspections and investigations as required.

Proposed changes

If Option C: Provide new, updated regulations under the *Public Health Act*

2016 is adopted, a number of changes are proposed in order to create updated, effective and consistent legislation.

Option C: Provide new, updated regulations under the *Public Health Act 2016*

Advantages

- adequate management of public health risks associated with the use and operation of pesticide chemicals;
- public safety maintained at a consistently high standard;
- local government may utilise cost recovery for registration and inspection;
- consistency in the application and enforcement of legal obligations; and
- recommends SMPs for directing greater responsibility onto high risk pesticide users.
- reduces current State government regulatory burden, as proposed changes seek to remove and reduce unnecessary requirements;

Disadvantages

- changes to regulation may initially result in confusion and extra costs to enforcement agencies upon commencement; and
- will require provision of information and training to those impacted.

Question 5: Do you support the adoption of Option C: Provide new, updated regulations under the *Public Health Act* 2016? Why or why not?

Question 6: Can you identify any further advantages or disadvantages of **Option C**:?

7 Improving administration and protecting public safety

7.1 Proposal 1: continue registration under the Public Health Act

The Public Health Act establishes a system for the licensing and registration of public health risk activities.

Proposal: It is proposed that pesticide management businesses are required to hold a valid registration.

Registration

The rationale behind requiring registration is that the nature of the business being conducted is such that without certain standards of operation, there is an increased risk of chemical exposure to the public. Registration requirements will not restrict entry to the market or impose quotas.

Businesses are expected to comply with both legislative requirements and industry standards in order to achieve an outcome that is both achievable and acceptable from a public health perspective and an industry perspective. The costs of complying with the proposed legislation is not likely to be significant because relevant businesses have strong commercial incentives to minimise risks of operation, and hence would be adopting risk minimisation strategies as a normal course of business. The likely financial impact of registration fees will be small, which will ensure proprietors are able to apply for registration. Penalties for operating without registering will act to deter proprietors from not taking the matter of registration seriously.

It is recommended that all pesticide management businesses be captured under registration requirements that include the following specific details:

- a requirement for the identification of the pest management business on all vehicles used by the business. This allows members of the public to identify specific businesses where they may have cause for complaint.
- a requirement for registrants to keep a record of details of all technicians employed by the business for a minimum of 3 years. This will assist enforcement agencies to track the activities of PMTs following complaints or issues of pesticide exposure.
- registrants will be required to keep a record of all pest management treatments undertaken. This will assist enforcement agencies to track the activities of PMTs following complaints or issues of pesticide exposure.

Question 7: Do you support the listed recommendations to maintain registration requirements for pest management businesses? Please explain your reasoning.

Question 8: Do you believe that there are any recommendations for registration not listed that should be included? Please provide specific examples.

7.2 Proposal 2: continue licensing under the Public Health Act

The Public Health Act establishes system for the licensing and registration of public health risk activities.

Proposal: It is proposed that a valid licence will be required in order to undertake pesticide applications.

Licensing

The rationale behind licensing is that the individuals involved are undertaking an activity where there is an increased risk of pesticide exposure to the public.

Licensing requirements do not restrict numbers of technicians, but require certain standards to be maintained, based on the level of risk. They are primarily designed to ensure that activities, such as pesticide applications, are managed in accordance with recognised national or international protocols. The risks associated from inadequate regulation can, for instance, include health effects leading to significant disability or death, contamination of products and commodities, property destruction through poor application practices and loss of amenity.

The purposes of licensing will be to secure the general objectives of the Act and will only operate for the purposes of public health and safety. Licensing requirements will be imposed when there is a public need and will not restrict entry to the market or impose quotas. Any person who wishes to undertake the activity can apply for a licence and, subject to their willingness to comply with the conditions imposed (and these will only be imposed for demonstrable public health reasons), will have a legitimate expectation that the licence will be granted. A refusal to grant a licence (conditionally or otherwise) could give grounds for an appeal to the State Administrative Tribunal.

Individuals will be expected to comply with both industry and legislative standards in order to achieve an outcome that is both achievable and acceptable from a public health perspective and an industry perspective. Individuals have strong commercial incentives to minimise risks, and hence would be adopting risk minimisation strategies as a normal course of business. The likely financial impact of licensing fees will be small and will ensure individuals are able to apply for licences. Penalties act to deter from not complying with the conditions of their licence.

The following recommendations are proposed:

- pesticide management technicians (PMTs) and pesticide management sales technicians will be required to hold a valid licence in order to undertake their activities.
- when an applicant does not meet the criteria of qualifications or experience for a full PMT licence, a provisional PMT licence will be required with appropriate supervision under a full PMT licence.
- the CHO will determine the definition of 'adequately qualified' for the purpose of each licence endorsement area
- restricted-use pesticides will be listed on licences
- any conditions imposed on the licensee will be listed on the licence.

Question 9: Do you support the listed recommendations to maintain licensing requirements for individuals undertaking pest management treatments unless they meet the criteria to qualify for an exemption from licensing? Please explain your reasoning.

Question 10: Do you believe that there are other recommendations that should be included for licensing? Please provide specific examples.

7.3 Proposal 3: licensing exemption criteria for individuals

Pesticide licensing exemption criteria for individuals on land owned or occupied by that person

In the current Regulations, there are three broad stakeholder categories that provide for exemption from licensing: primary producers, local government employees and State government employees.

Proposal: That the criteria to exempt individuals from licensing be amended to better reflect the reduced public health risk to those using pesticides in remote locations and be applicable to individuals currently exempt in non-remote locations.

Under the current Regulations, licences are required by all individuals who, for remuneration, undertake pest management treatments and businesses that employ pest management technicians. An exemption from licensing is provided for:

- individuals employed by a single employer and only undertake pest management treatments of places or things are owned, occupied or used by that employer (and do not include fumigations).
- individuals who undertake soil fumigations only on land owned or occupied by that person.

 individuals employed by a registered proprietor on a casual basis to assist in pesticide treatments of broad hectare crop farming and pasture production under supervision and having completed a basic training course.

7.3.1 Expanding licensing criteria for individuals on land owned or occupied by that person

The exemption from licensing for fumigations on land owned or occupied by the person using the fumigant is for soil fumigations only. While other types of on-farm fumigations (e.g. bunker fumigations and feral animal fumigations, etc) on the same property are currently not exempt. In addition, feral vertebrate pest baiting activities using restricted-use pesticides are also exempt. It is suggested that a more consistent regulatory approach would be to provide a full exemption from licensing requirements for all pesticide activities in remote sites. The public health risk is low for these individuals and the surrounding areas due to the absence of population.

This proposal reflects the limited public health risk of pesticides for remote site applications. This is typically on land used for primary production. Primary producer means a person who carries on farming or grazing business on land that is zoned for rural purposes and used solely or principally for farming or grazing purposes.

Expanding pesticide licensing exemption criteria for individuals on land owned or occupied by that person

Advantages

- reduced regulatory burden for both enforcement agency and primary producers and their employees;
- allows for a more measured approach to risk management, rather than a one size fits all approach;
- reduces inconsistency where for primary producers some applications of pesticides are exempt and others require licensing.

Disadvantages

- possible confusion over legal requirements;
- inconsistency in safety measures between different primary producers;
- no cost recovery for enforcement agencies, and no fines are able to be issued under the general public health duty;
- primary producers may try to cut corners and operate in unsafe environments, increasing risk;
- more difficult to proactively respond to emerging risks.

Question 11: Do you support the proposal to expand the criteria for exemption from licensing on primary production sites in remote locations to include all forms of pesticide applications?

Question 12: Can you identify any situations where expanding the exemption criteria from licensing for individuals on primary production sites could lead to a high risk scenario?

7.3.2 Pesticide licensing exemption criteria for individuals employed exclusively by local government authorities and State government departments

The current regulations exempt from licensing:

 individuals employed exclusively by State and local government authorities (and do not include fumigations).

All individuals must observe general safety principles in the possession, use and disposal of pesticides. Also, the general Occupational Safety and Health (OSH) duty of care will be applicable for individuals. Local government employees must hold a current licence to undertake fumigations.

7.3.3 Removing licensing exemption criteria for individuals employed exclusively by local government authorities and State government departments

Based on a risk comparison of local and State government employees with other licensed industry pest management operators, there is no reason to continue a licensing exemption for these individuals. Although local government authorities are not registered proprietors and as organisations do not charge for pesticide services, there is a strong case to remove the current exemption from licensing for local government employees because they undertake pest management treatments in public places. The preferred option of the DOH is to license all operators of local and State government whether employed directly or indirectly as contractors. There is no intent to register local government authorities regardless of whether they receive payment for pesticide services on private land or not.

Question 13: Do you support the proposal to remove the current exemption from licensing for State and local government employees? Do you have further comments on the local and State government employee licensing exemption?

7.4 Proposal 4: the control of the use of pesticides in public places

Proposal: Controls for signage are required in regulations for spraying of pesticides in public places.

Minimum signage designating pesticide use in public places

The signage requirement in the application of pesticides in public places is a wellestablished practice and acts as a public contract between the pesticide industry and members of the public. When signage is not clearly visible, complaints from the public are often received.

The following considerations are recommended for Proposal 4:

- It is proposed that signage will be required to meet a minimum lettering dimension with all exceptions to be approved by CHO permit. It is proposed that signage be displayed in prominent locations that can be readily seen by members of the public.
- Vehicles will be required to display flashing yellow warning lights during spraying in public places.

Question 14: Do you believe that the recommendations for minimum standard signage indicating pesticide use in public places should be prescribed? Please explain your reasoning.

7.5 Proposal 5: provide controls for safe fumigations under the Public Health Act

Controls for fumigations are operating successfully in the current environment.

Proposal: It is proposed that controls for fumigation are established in the regulations.

Fumigations

Fumigations represent the highest risk in the applications of pesticides. When pesticides are applied in gaseous form, the potential for public harm rises significantly. Due to the significance of the risk, additional controls for undertaking fumigations are recommended and closely follow requirements of the current Regulations. The following recommendations are made for Proposal 5:

- the CHO to have powers to approve the site of fumigations and issue conditions based on that approval.
- the CHO to have powers to specify that all individuals undertaking a fumigation are responsible for ensuring the area of a fumigation is secure, determining who must be present, who can be present and who cannot be present during fumigations. This includes measures such as erecting warning signs and securing access paths to the area. Restrictions applying to who can access and have entry to the area which should also align with OSH requirements.
- the CHO to have powers to specify to all individuals undertaking a fumigation that they must carry out a risk assessment, fumigation plan and emergency management plan prior to performing fumigations and to minimise the identified risks which

should also align with OSH requirements.

- the CHO to have powers to specify to all individuals undertaking a fumigation that they must clean up after fumigation including removing warning signage and
- the CHO must be satisfied that concentrations of fumigant in the fumigation area and any residual fumigant including in the commodity being treated must be managed in order to protect public health.

Question 15: Do you consider that any of the recommendations for prescription regarding fumigations should be excluded from regulation? Please explain your reasoning.

Question 16: Do you believe that there are any recommendations not included for fumigations that should be prescribed? Please provide specific examples.

7.6 Proposal 6: provide controls for management of registered pesticides

Registered pesticides can be managed across the following areas: storage, use, transport, decontamination and disposal. Unregistered pesticides should only be used with CHO authorisation.

Proposal: Provide controls for registered pesticides under the Public Health Act.

Registered pesticides

Registered pesticides need to be managed in a manner such that the products are not accessible by unauthorised individuals. Management of registered pesticides is the first point of control for minimising risk within the pesticide industry. The following are recommendations for Proposal 6:

Storage

- that registered pesticides must be stored in approved and labelled containers with any exceptions to be approved by CHO permit. Appropriate containers are essential if operators are to follow the label instructions.
- that all registered pesticides are stored and kept safely. The safe storage and maintenance of registered pesticide containers will assist to restrict appropriately qualified individuals only to access these chemicals.

Use

 the CHO to have powers to restrict the possession and use of controlled pesticides, restricted pesticides or registered pesticides with any exceptions to be approved by CHO permit. This permits the CHO to address particular pesticides of public concern and to remove their use from the industry if required.

- that all registered pesticides are used safely and in accordance with their label with any exceptions to be approved by CHO or APVMA permit. If pesticides are used according to labels, risk to the public is minimised.
- restrict the use of registered pesticides on cereal seed dressing to ensure that that a dye is used to make it easily distinguishable from untreated seeds.
- restrict termite treatments being applied to cavity walls unless specifically approved by label with all exceptions to be approved by CHO permit. This recommendation should act to limit inappropriate chemicals being used for dwelling construction where cost savings may be identified using inappropriate chemicals as termite barriers.
- restrict the sale and supply of domestic dispensing devices containing chemical pesticides unless clearly labelled for purpose.

Transport

 require that all registered pesticides are to be transported safely and in labelled containers. This recommendation should reduce the number of transport related incidents involving pesticide chemicals.

Decontamination

 the CHO to have powers to direct responsibility for decontamination and have powers to specify decontamination procedures to any person or entity responsible for a contamination event.

Disposal

 the disposal of registered pesticides to comply with the directions on the label with all exceptions to be approved by CHO permit.

- the disposal of used pesticide containers to comply with the directions on the label, so they are rendered unusable and free of chemicals with all exceptions to be approved by CHO permit. Collection of used containers should be undertaken by approved individuals in accordance with written CHO authorisation.
- reuse of used pesticide containers to comply with particular conditions or in accordance with written CHO authorisation or CHO permit.

Unregistered pesticides

 prohibit the use and disposal of unregistered pesticides with all exceptions to be approved by CHO permit. Unregistered pesticides have not been assessed and approved through the APVMA assessment process and should not be used without specific purpose.

Question 17: Do you consider that any of the recommendations for prescription regarding registered pesticides should be excluded from regulation? Please explain your reasoning.

Question 18: Do you believe that there are any recommendations not included for registered pesticides that should be prescribed? Please provide specific examples.

7.7 Proposal 7: local government replacing DOH as the enforcement agency

The DOH is currently the sole regulatory authority in approving and issuing pest management technicians licenses and pest management business registrations.

Proposal: Authorise local government enforcement agencies to perform all administrative, assessment, inspection and approvals tasks required under the regulations including the authorisation to issue registrations for pest management businesses and licences for pest management technicians.

Proposal 7 has been recommended to address the logistical considerations of regulating local services from a centralised agency. The DOH is located in the metropolitan area and has minimal exposure to regional and remote sites across the state. Local government by contrast has authorised officers located throughout the state and is better placed to regulate and monitor activities of pesticide operators in their jurisdictions.

Currently the DOH undertakes the assessing of applications for registration or licence across WA. It is proposed that this administrative role would be devolved to local government enforcement agencies. Local governments would manage the approval and assessment process within their local district. This role currently requires the following:

Table 3: Number of pest management business registrations processed and pest management technician licences currently processed (by financial year) and new vehicle inspections by region - provides an indication of the current distribution across Western Australia for the processing of registrations and licences during the last financial year by region.

- Assess new applications for registration of pest management businesses and licensing of pest management technicians.
- 2. Issue certificates of registration and licence ID cards.
- 3. Undertake inspections of new pest management businesses and vehicles.
- 4. Assess and issue renewals of registration and renewals of licence as required.
- 5. Investigate breaches of the regulations and conduct ad-hoc inspections of businesses and vehicles.

As part of this proposal, local government would be required to keep and maintain a public register of pest management businesses and pest management technicians within their local district.

Section 294 of the *Public Health Act 2016* now empowers local governments to recover costs under the *Local Government Act 1995*, Part 6, and Division 5. This means local government could charge a fee for any administrative service that is required under the new regulations.

The number of pest management businesses and technicians for each local government varies significantly across WA. Over 80% of licensed technicians and 50% of all pest management businesses are located in the metropolitan or Peel region.

Appendix 5 provides a full listing of the number of pesticide registration and licences by LGA.

The DOH does not record on-site inspections within their recording system. No specifics of on-site inspections are available for this discussion paper.

Table 3: Number of Pest management business registrations processed and pest management	
technician licences currently processed and new vehicle inspections by region	

	Numbers of pest management businesses (2017/2018)	Numbers of pest management technicians (2017/2018)	Numbers of new pest management vehicles inspected
Metropolitan	443	1705	15-22
Peel	52	572	2-6
South West	76	182	2-6
Wheat belt	75	144	2-6
Pilbara	13	76	1-2
Midwest	56	110	2-4
Goldfields- Esperance	25	63	2-6
Great Southern	49	99	2-5
Kimberley	14	39	2-4
Gascoyne	9	17	1-3
Leschenault	33	102	2-4

Local government replaces DOH as the enforcement agency

Advantages

- More local control and knowledge of pesticide businesses residing with the local government (LG) jurisdiction;
- Increased enforcement of the requirement of the regulations as authorised officers will be located across the state instead of in the metropolitan area only;
- Application approvals process within LG already exists. LG currently provides registration for other risk areas such as food businesses;
- LG could charge a fee for any administrative service to recover costs;
- Inspection of new pesticides vehicles closer and easier for metropolitan pest management businesses however the majority of regional inspections are already held locally. LG would be able to charge a fee to recover costs for this in the future;
- LG takes on a more comprehensive approach to regulating risks in their jurisdiction;
- Quicker identification and investigation of issues by local authorised officers; and
- Permits DOH to align with the system manager role, and focus attention and expertise in surveillance, policy development, training and education.

Local government replaces DOH as the enforcement agency

Disadvantages

- There would be increased administrative responsibility for local governments (LG);
- Potential for conflict of interest to arise as pesticide chemicals are applied by LG employees or by contractors on council land;
- Many PMTs will be operating across jurisdictional boundaries as the pesticide industry is a highly mobile industry;
- Pest management businesses may register in one LG and may operate in another LG complicating cost recovery;
- Different fees may exist between different LGs; and
- Authorised officers may require training to ensure competency in assessment of applications and assessment of vehicles.

Question 19: Do you support the proposal that local government replaces Department of Health as the enforcement agency?

Question 20: Do you agree or disagree with any of the listed advantages and disadvantages for local government authorities as enforcement agency? Please detail any views that you have.

Question 21: Do you have any suggestions about how Proposal 7 (local government authorities as enforcement agency) could be implemented?

7.8 Proposal 8: variable frequency of renewal for registrations and

licences

The current regulations specify that registrations and licences are valid for 12 months only.

Proposal: Options for registration and licence validity be amended to include a 3-year option.

The current Regulations specify that registrations and licences are valid for exactly 12 months. It is proposed that the option for payment for 3 year registrations and licences becomes available.

Requiring an annual fee ensures that registrants and licensees contribute towards the cost recovery of both the application approval and compliance processes of the relevant enforcement agency. The process ensures responsibility for maintaining current information and documentation.

Change in the period of validity

It is proposed that the provisions for annual renewal of registration and licensing are amended to specify a new renewal process and provide for a 3 year period of validity for a registration or licence. This administrative change permits a reduction in the resource burden in assessing applications and issuing licences.

The DOH is of the opinion that there will not be any increase in risk to the overall system if renewals were to run on a multi-year cycle. Risk in the pesticide industry is more likely to be influenced by non-compliance within the industry or by individual competencies than by particulars of the renewal process.

A positive response to a 3 year licensing period was received in a survey of the pest industry conducted in 2018.

Appendix 6 provides a summary of costs across Australia for registration and licences.

Consideration for introducing 3-year validity for registrations and licences

Advantages

 reduced regulatory burden allowing cost recovery to be applied towards monitoring and compliance activities.

Disadvantages

 formal information exchange between DOH and regulated individuals becomes less frequent.

Question 22: Do you support the proposal that registration and licence validity be amended to include a 3-year option? Do you have any other comments on this proposal?

7.9 Proposal 9: introduce substance management plan (SMP) requirements

Due to the risk based approach of the *Public Health Act 2016*, the requirements for industry and operator compliance will not continue to be a one-size-fits-all as set out by the existing Regulations. A risk based approach to compliance ideally customises management requirements to the risk activities of each individual operator.

The proposed solution draws its base from a recent legislative review in Queensland (see adjacent info box). The legislative review sought to establish a contemporary framework for the control-of-use of medicines, poisons and therapeutic goods. The objective of the review was to combine obligations from two different poisons legislation. Queensland's introduction of substance management plans (SMPs) as a mechanism for operators to document risk is yet to achieve parliamentary approval.

A SMP is a document that sets out a plan for managing known and foreseeable risks associated with carrying out a regulated activity for a regulated substance. SMPs are intended to be high level management plans that details matters such as: SMPs would allow for flexibility for each operator to develop their own risk measures based on the particular chemicals that they

- where the substance will be stored;
- how it will be transported;
- the risks associated with the substance;
- any safety measures to be implemented;
- roles and responsibilities;
- competency criteria;
- emergency plans;
- how staff will be trained in or kept informed about revised plans; and
- records maintenance

Substance Management Plans

The Medicines Poisons and Therapeutic Goods legislation in Queensland will introduce a new requirement for the preparation of SMPs for industrial users of dangerous poisons. A SMP is a document that sets out a plan for managing known and foreseeable risks associated with carrying out a regulated activity for a regulated substance. It is intended to be a high level, overall management plan that details matters such as where the substance will be stored, how it will be transported, the risks associated with the substance, any safety measures to be implemented, roles and responsibilities, and how staff will be trained in or kept informed about the plan. Existing risk management systems or plans can be recognised as SMPs for the purposes of compliance if they meet the relevant criteria. A SMP may be required if administrative action has been taken due to significant noncompliance issues or is imposed as a condition of a pest management licence.

https://www.health.qld.gov.au/__data/assets/pdf_file/ 0029/633377/mptg-consultation-paper.pdf

SMPs would allow for flexibility for each operator to develop their own risk measures based on the particular chemicals that they require for their operations. The DOH would recommend that SMPs should be reviewed at least every 5 years or if the risk environment changes sufficiently such as the addition of a new chemical type (i.e. a change in risk profile).

The SMP could be used to list the specific chemicals that are being used as well as operator competencies for each specific chemical i.e. required public health based competencies, training or course attendance. The requirement for the inclusion of other safety information such as emergency procedures, appropriate PPE or other safety equipment requirements could mean that an SMP becomes an essential reference for responding to safety issues. Auditing of SMPs would enable an enforcement agency to determine the quality and the operator's awareness of the details within their SMP.

It is proposed that SMPs be required for high risk chemicals (e.g. Schedule 7 chemicals). This responsibility would be applicable for pest management businesses to provide each of their licensed employees with up-todate SMP.

It is also proposed that all individuals exempt from licensing that use restricted (e.g. Schedule 7) chemicals be required to develop a SMP due to the risk level of risk of the chemicals being used.

Development to a minimum standard

It is proposed that SMPs be developed in accordance with a minimum standard template to be provided by DOH publication. The DOH will provide guidelines, checklists and training to support authorised officers in assessing SMPs.

SMPs as a compliance mechanism

Basing compliance requirements on risk rather than a set of prescriptive requirements is a more effective way to ensure responsibility is scaled appropriately. The SMP should be an evolving, practical document, and the onus is upon the owner/occupier to ensure currency and compliance with required standards.

The proposed approach is intended to:

- capture high risk operators that are not currently required to provide SMPs or any other documentation;
- provide operators with a simple reference document for operational risk management details; and
- provide templates to document risk.

The role of the enforcement agency

Authorised officers would not be expected to approve the SMP as part of the registration application or renewal process. It is proposed that authorised officers could:

- view a SMP on request;
- comment on a SMP; and
- request amendments to be made to a SMP based on risk.

Introduce substance management plan (SMP) requirements

Advantages

- represents an individual risk consideration and provides the enforcement agency with a plan for how the operator will manage their risk;
- provides a high level, overall management plan;
- operators will benefit from having emergency information and procedures available immediately should there be an incident; and
- SMPs can be integrated with other risk plans to provide better overall risk management for operators.

Disadvantages

- increased burden for operators including registrants and exempt individuals using high risk chemicals; and
- SMPs may not be inspected or audited.

Question 23: Do you support the proposal to include a substance management plan in the requirements for registered proprietors and any individuals exempt from licensing that use restricted chemicals? Please detail the positive and negative impacts on you or your organisation.

8 Conclusion

This discussion paper presents a series of options and proposals for regulating the application of pesticides. The paper has identified 25 questions that will assist stakeholders in providing input into the decision making process to modernise pesticide management.

Community input is sought on the proposed methods for management, and comments will inform the development of a final approach.

8.1 Summary for Western Australia

The DOH is reviewing all regulations adopted under the *Health (Miscellaneous Provisions) Act 1911.* The review needs to determine whether the associated public health risks should continue to be regulated under the new regulatory framework, or whether they can be effectively managed through a guideline, local law or other legislation instead.

The current Regulations provide for registration, licensing and regulatory approvals under the delegation of the Chief Health Officer (CHO). The current regulations provide a licensing exemption for individuals employed by local government and State government as well as those involved in primary production. The current Regulations generally capture all individuals involved in the use of fumigants.

The consensus within the Environmental Health Directorate of the DOH is that the routine registration and licensing structure is not in need of significant change.

8.2 Should we continue to regulate?

This discussion paper has examined the risks and issues associated with the operation of the pesticide industry. The

DOH is seeking comment on the proposed 3 options for management. Benefits and risks have been compared for both continued regulation and deregulation.

The preferred direction of the DOH is to pursue Option C: which is to repeal the current Regulations and replace them with new regulations under the *Public Health Act 2016*. The DOH as a central agency located in the metropolitan area, has had limited funding available for intrastate travel to undertake industry-wide inspections and audits. Therefore, one of the proposals considered for public consultation under Option C: is to devolve the enforcement function of the regulations to local government.

The discussion paper also presents a minimum approach to retaining the status quo with Option B: which as far as practicable, will continue the prescriptive approach of the regulation regime in place; however does not make use of the risk based nature of the *Public Health Act 2016*.

Option A: repeal the current Regulations without replacement, would be accompanied with DOH guidance documents on minimising health risks by using the general public health duty provided by the *Public Health Act 2016* in conjunction with local government local laws.

Question 24: Do you have any suggestions for alternative options that have not been considered? Please explain your ideas by providing examples of complaints, case studies, data or other evidence.

Question 25: Do you have any other comments to make on how public health risks associated with pesticides are managed in Western Australia?

9 Appendices

Appendix 1 – Risk assessment guide

A number of risk assessment tools need to be used to determine the risk level for each identified public health risk. These tools include a health consequences table (Table 5), a risk likelihood table (Table 6) and a risk qualitative matrix (Table 7).

These risk assessment tools are from the Health Risk Assessment (Scoping) Guidelines.

The Department of Health has five Public Health Risk levels (Table 4), each requiring a varying degree of DOH involvement in their management.

Table 4:	Definition	of risk	levels
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Risk Level	DOH management requirements		
Very Low Public Health Risk	No further assessment required		
	Some mitigation/management may be required – no		
Low Public Health Risk	detailed assessment of health hazards required but		
	addressed with routine controls		
Moderate/Medium Public	Substantial mitigation/management required –		
Health Risk	assessment required of health hazards		
	Not an acceptable risk. The DOH needs to be involved in		
High Dublic Health Dick	the management of high public health risks.		
nigh Public nealth Risk	Major mitigation/management (including offsets) may be		
	required – assessment required of health hazards		
Extrama Public Health Pick	Potentially unacceptable: modification of proposal		
	required		

Table 5: Health consequences table adapted from the 2011 Health Risk Assessment (Scoping) Guidelines, Department of Health WA

Category	Acute health consequences (per hazard or outbreak)	Chronic health consequences (per project lifecycle)
1 Catastrophic	 >1 fatality OR >5 permanent disabilities OR Non-permanent injuries requiring hospitalisation for 5 – 10 % of populations at risk OR Acute health effect requiring hospitalisation for 5 – 10 % of populations at risk 	Chronic health effect requiring medical treatment for 10 – 15 % of population at risk
2 Massive	 1 fatality OR 2 – 5 permanent disabilities OR Non-permanent injuries requiring hospitalisation for 2 - 5 % of populations at risk OR Acute health effect requiring hospitalisation for 2 - 5 % of populations at risk 	Chronic health effect requiring medical treatment for 5 - 10 % of population at risk
3 Major	 No fatality AND 1 permanent disability OR Non-permanent injuries requiring hospitalisation for 1 – 2 % of populations at risk OR Acute health effect requiring hospitalisation for 1 - 2 % of populations at risk OR Evacuation is necessary 	Chronic health effect requiring medical treatment for 2 - 5 % of population at risk
4 Moderate/ Significant	 No fatality AND No permanent disability AND Non-permanent injuries requiring hospitalisation for 1 – 2 % of populations at risk OR Acute health effect requiring hospitalisation for 1 – 2 % of populations at risk AND No evacuation 	Chronic health effect requiring medical treatment for 1 - 2 % of population at risk
5 Minor	 No fatality AND No permanent disability AND Non-permanent injuries requiring hospitalisation for 1 – 5 persons OR No Acute health effect requiring hospitalisation AND No evacuation 	Chronic health effect requiring medical treatment for 0 - 1 % of population at risk
6 Negligible/ Slight	 No fatality AND No permanent disability AND No Non-permanent injuries requiring hospitalisation AND No Acute health effect requiring hospitalisation AND No evacuation 	No chronic health effect requiring medical treatment

Table 6: Risk likelihood table adopted from the 2011 Health Risk Assessment (Scoping) Guidelines, Department of Health WA

Likelihood	Expected or Actual	% Chance of chronic health		
	Frequency	effect during life of project		
Almost Certain	More than once a year	Over 90%		
Likely	Once in 1 to 3 years	61 – 90%		
Possible/ Occasionally	Once in 3 – 5 years	31 – 60%		
Unlikely	Once in 5 – 10 years	6 – 30%		
Rare/Remote	Once in more than 10 years	Up to 5%		

Table 7: Risk matrix (qualitative)

	Consequences					
Likelihood	Slight/ Negligible	Minor	Moderate	Major	Massive	Catastrophic
Almost certain	Low	Medium	High	Extreme	Extreme	Extreme
Likely	Low	Low	Medium	High	Extreme	Extreme
Possible	Very Low	Low	Low	Medium	High	Extreme
Unlikely	Very Low	Very Low	Low	Low	Medium	High
Rare/ Remote	Very Low	Very Low	Very Low	Low	Low	Medium

Appendix 2 - Risk Assessment of Schedule 6 and Schedule 7 pesticides

The likelihood of impact has been interpreted as the likelihood of a toxic exposure to humans. This interpretation is slightly differentiated from the likelihood of a simple exposure to humans where a small amount of chemical may be present when human are present. While this exposure could cause some general discomfort this does not equate to the threshold for a toxic exposure. This interpretation does however need to take into account the possibility of repeated small exposures causing long term chronic debilitation.

Severity of impact has been interpreted as a toxic exposure leading to hours lost (through medical requirements or hospitalisation)

Pesticide group	Impact on humans	Severity of impact	Likelihood of impact	Risk level assuming regulatory controls	Risk level without regulatory controls
Schedule 6 pesticides (without	toxic to humans	Minor/Moderate (Minor/Moderate)	Possible/Unlikely (Likely/Possible)	Low	(Low/Medium)
Schedule 7 restricted	toxic to humans, affecting many	Major	Unlikely	Low	
pesticides (without regulation)	organ systems including the respiratory (lungs), renal (kidney), hepatic (liver), and nervous systems after intense (acute) or ongoing (chronic) exposure	(Major)	(Likely/Possible)		(Medium/High)
Schedule 7 pesticides – fumigations – urban and peri-urban sites (without regulation)	toxic to humans, affecting many organ systems including the respiratory (lungs), renal (kidney), hepatic (liver), and nervous systems after intense (acute) or ongoing (chronic) exposure	Major/Massive	Possible/Unlikely	Medium	(High)
Schedule 7 pesticides - fumigations in remote sites (without regulation)	toxic to humans, affecting many organ systems including the respiratory (lungs), renal (kidney), hepatic (liver), and nervous systems after intense (acute) or ongoing (chronic) exposure	Major (Major)	Unlikely/Rare (Unlikely)	Low	(Low)

Table 8: Risk matrix for schedule 6 and schedule 7 pesticides (qualitative)

Appendix 3 – Regulatory tools

Once fully implemented, the *Public Health Act 2016* has a number of mechanisms to deal with public health risk management and offences under the Act. These include:

- General public health duty
- Infringement notices
- Improvement notices and enforcement orders
- Prosecution; and
- Registration and licensing.

General public health duty

The general public health duty requires that a person must take all reasonable and practicable steps to prevent or minimise any harm to public health that might foreseeably result from anything done or omitted to be done by the person.

Where the general duty is to be applied, there must be some clear *harm* (or foreseeable harm) to public health. In cases where matters are a nuisance or amenity problem but no health effect can be proven, such as unsightly yards, neighbourhood disputes and inconveniences, the general duty will <u>not</u> apply.

Non-compliance with the general duty is not an offence in itself, but may lead to the application of improvement notices and enforcement orders under Part 14 of the Public Health Act. Guidelines may be used to clarify the application of the general public health duty and provide guidance as to the measures that may constitute compliance or non-compliance with the general duty.

Infringement notices

An infringement notice is a written notice that a person has allegedly committed a specified offence which requires the payment of a fine within a specified time or the election to have the matter heard in court. Infringement notices provide a cost effective and efficient method of dealing with some offences.

The Public Health Act is silent on the ability to issue infringement notices. However, as it is a prescribed Act under the *Criminal Procedures Act 2004*, it enables the making of regulations that prescribe offences for which an infringement notice can be issued.

Infringement notices can only be issued where prescribed by a regulation or local law.

Improvement notices and enforcement orders

An improvement notice is an order that either requires or prohibits a person from taking specified action. There may be a specified period in which the person has to comply with the improvement notice. While an authorised officer may extend the period given to take action, once that period has elapsed an authorised officer may:

- Issue a notice of compliance if the officer is satisfied, after carrying out an appropriate assessment that the improvement notice has been complied with.
- Issue a notice that sets out the reasons why the officer is not satisfied that the improvement notice has been complied with; and
- Report the non-compliance to the enforcement agency with a recommendation to issue an enforcement order.

An enforcement order is an order that either requires or prohibits a person from taking specified action. A prohibition with respect to specified action may be limited, absolute or conditional.

An enforcement order can be issued by an enforcement agency if it reasonably believes that an improvement notice has not been complied with, or if the issue of the order is necessary to prevent or mitigate a serious public health risk. An enforcement agency may issue an enforcement order in respect of non-compliance with an improvement notice irrespective of whether the improvement notice was issued by a person who was an authorised officer of that or another enforcement agency.

Prosecution

In accordance with Part 18, section 280 of the Public Health Act, an enforcement agency may commence proceedings for an offence under the Act or its regulations. A prosecution is separate from action under Part 14 relating to improvement notices and enforcement orders. So prosecution can be commenced irrespective of any action being undertaken under that part.

Registration and licensing

Part 8 of the Public Health Act provides a framework for the registration and/or licensing of activities declared by the regulations to be public health risk activities. The regulations will prescribe who the appropriate enforcement agency is for each registrable and/or licensable activity. This may be the local government, the Chief Health Officer or both. Regulations may prescribe offences in relation to an activity and provide modified penalties for which an infringement notice may be issued.

Appendix 4 - Question list

The following is a master list of all questions contained in this discussion paper. You are encouraged to respond to these questions through the <u>online survey</u>, which can be accessed using the link on page 7 of this document.

Question 1: Do you support the adoption of Option A: Repeal without replacement? Why or why not?

Question 2: Can you identify any further advantages or disadvantages of Option A?

Question 3: Do you support the adoption of Option B: Retention of the existing regulatory scheme by making new regulations identical to those in force under the *Health (Miscellaneous Provisions) Act 1911*? Why or why not?

Question 4: Can you identify any further advantages or disadvantages of Option B?

Question 5: Do you support the adoption of Option C: Provide new, updated regulations under the *Public Health Act 2016*? Why or why not?

Question 6: Can you identify any further advantages or disadvantages of Option C?

Question 7: Do you support the listed recommendations to maintain registration requirements for pest management businesses? Please explain your reasoning.

Question 8: Do you believe that there are any recommendations for registration not listed that should be included? Please provide specific examples.

Question 9: Do you support the listed recommendations to maintain licensing requirements for individuals undertaking pest management treatments unless they meet the criteria to qualify for an exemption from licensing? Please explain your reasoning.

Question 10: Do you believe that there are other recommendations that should be included for licensing? Please provide specific examples.

Question 11: Do you support the proposal to expand the criteria for exemption from licensing on primary production sites in remote locations to include all forms of pesticide applications?

Question 12: Can you identify any situations where expanding the exemption criteria from licensing for individuals on primary production sites could lead to a high risk scenario?

Question 13: Do you support the proposal to remove the current exemption from licensing for State and local government employees? Do you have further thoughts on the local and State government employee licensing exemption?

Question 14: Do you believe that the recommendations for minimum standard signage indicating pesticide use in public places should be prescribed? Please explain your reasoning.

Question 15: Do you consider that any of the recommendations for prescription regarding fumigations should be excluded from regulation? Please explain your reasoning.

Question 16: Do you believe that there are any recommendations not included for fumigations that should be prescribed? Please provide specific examples.

Question 17: Do you consider that any of the recommendations for prescription regarding registered pesticides should be excluded from regulation? Please explain your reasoning.

Question 18: Do you believe that there are any recommendations not included for registered pesticides that should be prescribed? Please provide specific examples.

Question 19: Do you support the proposal that local government replaces Department of Health as the enforcement agency?

Question 20: Do you agree or disagree with any of the listed advantages and disadvantages for local government authorities as enforcement agency? Please detail any views that you have.

Question 21: Do you have any suggestions about how Proposal 7 (local government authorities as enforcement agency) could be implemented?

Question 22: Do you support the proposal that options for registration and licence validity be amended to include a 3 year option?

Question 23: Do you support the proposal to include a substance management plan in the requirements for registered proprietors and any individuals exempt from licensing that use restricted chemicals? Please detail the positive and negative impacts on you or your organisation.

Question 24: Do you have any suggestions for alternative options that have not been considered? Please explain your ideas by providing examples of complaints, case studies, data or other evidence.

Question 25: Do you have any other comments to make on how public health risks associated with pesticides are managed in Western Australia?

Appendix 5 – Summary of pest management businesses and pest management technicians across Western Australia by LGA

LGA	CountOfFirms	CountOfTechs	Inspections per year (avg)
ALBANY	23	44	0.8
ARMADALE	27	97	1.8
ASHBURTON		8	
AUGUSTA- MARGARET RIVER	16	32	1
BASSENDEAN	5	13	0.3
BAYSWATER	13	47	0.4
BELMONT	21	37	0.9
BEVERLEY	2	2	
BODDINGTON	1	1	
BOYUP BROOK	3	3	
BRIDGETOWN- GREENBUSHES	2	5	
BROOKTON	1	4	
BROOME	7	22	0.6
BROOMEHILL- TAMBELLUP	2	2	
BRUCE ROCK	2	2	0.1
BUNBURY	21	52	0.5
BUSSELTON	26	69	1.5
CAMBRIDGE	4	10	0.4
CANNING	35	78	1.3
CAPEL	11	20	0.9
CARNAMAH	1	2	
CARNARVON	15	16	0.8
CHAPMAN VALLEY	6	2	0.7
CHITTERING	13	17	0.6
CHRISTMAS ISLAND	1	1	
CLAREMONT	1	4	
COCKBURN	35	103	1.5

COLLIE	7	10	0.4
COOROW	3	2	
CORRIGIN	2	3	
COTTESLOE		4	
CUBALLING	2	1	
CUE	1	1	
CUNDERDIN	2	5	
DALWALLINU	5	5	
DANDARAGAN	6	7	0.2
DARDANUP	15	16	2.4
DENMARK	5	8	1
DERBY-WEST KIMBERLEY	5	5	0.4
DONNYBROOK- BALINGUP	5	10	
DOWERIN	1	1	
DUNDAS	3	4	
EAST FREMANTLE	1	4	
EAST PILBARA	1	2	
ESPERANCE	14	25	0.7
EXMOUTH	1	2	
FREMANTLE	25	28	13
GINGIN	8	10	0.5
GNOWANGERUP	2	1	
GOOMALLING	1	1	
GOSNELLS	28	87	0.9
GREATER GERALDTON	28	67	0.7
HARVEY	7	23	1
IRWIN	5	9	3
JERRAMUNGUP	4	3	
JOONDALUP	39	134	1.8
KALAMUNDA	16	56	0.6
KALGOORLIE- BOULDER	9	20	0.9
KARRATHA	9	48	0.4
·			

KATANNING	9	13	0.2
KELLERBERRIN	2	3	
KENT	5	4	4.8
KOJONUP	2	4	
KONDININ	1	1	
KULIN	2	2	
KWINANA	10	35	0.4
LAKE GRACE	5	9	0.8
LEONORA	3		
MANDURAH	28	81	1
MANJIMUP	8	15	0.7
MEEKATHARRA	2	1	
MELVILLE	15	52	0.6
MENZIES	2	1	
MERREDIN	3	3	
MINGENEW	1	2	
MOORA	5	7	0.4
MORAWA	1	1	
MOSMAN PARK	4	5	
MOUNT MAGNET		1	
MOUNT MARSHALL	1	1	
MUKINBUDIN	1	2	
MUNDARING	18	52	0.7
MURRAY	8	19	0.2
NANNUP	1	2	
NAREMBEEN	2	2	
NARROGIN	4	10	0.4
NEDLANDS	5	7	0.4
NORTHAM	3	9	
NORTHAMPTON	3	2	
NUNGARIN	2	1	
PERENJORI	1	1	
PERTH	6	23	0.4
PINGELLY	2	3	0.2
L		1	1

PLANTAGENET	2	10	
PORT HEDLAND	6	16	0.6
QUAIRADING	1	1	
RAVENSTHORPE	3	4	0.4
ROCKINGHAM	16	129	0.4
SANDSTONE	2		
SERPENTINE- JARRAHDALE	13	43	0.7
SOUTH PERTH	2	32	0.5
STIRLING	60	146	2
SUBIACO	5	5	0.1
SWAN	72	146	2.8
TAMMIN	1		
THREE SPRINGS	2	1	
TOODYAY	3	5	
TRAYNING	3	2	
VICTORIA PARK	4	10	0.9
VICTORIA PLAINS	1	6	
VINCENT	4	17	
WAGIN	5	8	0.9
WANNEROO	62	295	2.3
WAROONA	3	12	0.3
WILLIAMS	1	1	
WONGAN-BALLIDU	2	3	
WYALKATCHEM	1	1	
WYNDHAM-EAST KIMBERLEY	5	14	0.2
YALGOO	1		
YILGARN	6	5	0.8
YORK	1	3	

Appendix 6 – Summary of regulatory fees across Australia

Summary of pesticide registration and licensing fees across Australia

Table 9: Schedule of fees charged in the regulation of pesticide industry operations

	WA	Vic	NSW	Qld	SA	Tas	NT
Technicians (full) licence 1 yr	\$190	\$642	-	\$277	\$77	\$77	\$57
Technicians (full) licence 3 yr					\$232		\$171
Technicians (full) licence 5 yr			\$191	\$883			
Technicians (trainee) licence 1 yr	\$190	\$213			\$77		
Pest Management business / Controllers licence 1 yr	\$360			-	\$314	\$155	

10 References

- 1. Grosshandler, W.B., N Madrzykowski, D and K. Kuntz, *Report of the Technical Investigation of The Station Nightclub Fire*, in *National Institute of Standards and Technology NCST Act Report (NCSTAR) 2*. 2005. p. 246.
- 2. The Senate Economics References Committee, *Non-conforming building products Interim report: aluminium composite cladding.* 2017.
- 3. United States District Court, Passa v Derderian. 2004.
- 4. Office of Best Practice Regulation, *Best Practice Regulation Guidance Note: Value of a statistical life*, D.o.P.M.a. Cabinet, Editor. 2014.
- 5. Hendrie, D., et al., *Incidence and costs of injury in Western Australia 2012*. 2012.
- 6. Seligson, S., Damages, in Bostonia. 2013.
- 7. Australian Bureau of Statistics, *4114.0 Attendance at Selected Cultural Venues and Events, Australia 2013* - 14. 2014.
- 8. Patrikios, A. *What is the Whisky Au Go Go firebombing*? [Website] 2017; Available from: <u>http://www.news.com.au/national/breaking-news/what-is-the-whiskey-au-go-go-firebombing/news-story/713729e9e179278e12c19c8da665d248</u>.
- 9. Coffey, P. Report of the independent examination of the Stardust Victims Committee's case for a reopened inquiry into the Stardust fire disaster. 2009.
- 10. Popplewell, J., Committee of Inquiry into Crowd Safety and Control at Sports Grounds, Interim Report 1985.
- 11. Berger, J. The crush at City College; an inquiry spreads blame for deaths at a New York gym. 1992.
- 12. Venkatesan, V., *Tragic Errors*, in *Frontline*. 2007: New Delhi.
- 13. Peachey, P. *Teenagers killed in Bulgarian nightclub stampede*. 2001.
- 14. *People ex rel. City of Chicago v. Le Mirage, Inc.* 2011, Illinois Appellate Court.
- 15. Tidwell, J. *The Station Nightclub Fire: Revisiting the Lessons*. 2012; Available from: <u>http://www.fireengineering.com/articles/print/volume-165/issue-1/features/station-nightclub-fire-revisiting-lessons-full.html</u>.
- 16. Aunion, J., Promoter behind Madrid Arena tragedy given four-year jail sentence. 2016.
- 17. Darlington, S., and C. Carter, . *Brazil nightclub fire: 'Like a war zone' with bodies piled*. [website] 2013; Available from: <u>http://edition.cnn.com/2013/01/28/world/americas/brazil-nightclub-fire/index.html</u>.
- 18. Velin, B. *Crowd incident at Mayweather fight was 'wild scene'*. [Website] 2014; Available from: <u>https://www.usatoday.com/story/sports/boxing/2014/05/04/floyd-mayweather-marcos-maidana-stampede/8700763/</u>.
- 19. Oakland Fire Department, *Origin and Cause Report: Incident # 2016-085231*. 2017.
- 20. Baker, K. Concert goers slam lax security Ariana Grande show. 2017; Available from: <u>http://www.dailymail.co.uk/news/article-4533248/Concert-goers-slam-lax-security-Ariana-Grande-show.html</u>.
- 21. Green, B.L. and J.D. Lindy, *Post-Traumatic Stress Disorder in Victims of Disasters*. Psychiatric Clinics of North America, 1994. **17**(2).
- 22. Challenger, R. and C. Clegg, *Crowd disasters: a socio-technical systems perspective.* Contemporary Social Science, 2011. **6**(3): p. 343-360.
- 23. Coroner's Court of Western Australia, Office of the State Coroner Annual Report 2001/2002. 2002.
- 24. Ceranic, I. *Man dies in balcony fall at Fremantle's Sail and Anchor pub* 2017; Available from: http://www.abc.net.au/news/2017-07-16/man-dead-after-falling-from-sail-and-anchor-balcony/8712768.
- 25. SKIP Consulting Pty Ltd, *Report comparing a Class 6 hotel bar area against a Class 9b bar area with live music or a dance floor.* 2015.
- 26. Shergold, P.W., B, Building Confidence: Improving effectiveness of compliance and enforcement systems for the building and construction industry across Australia. 2018.
- Wilson, L. Preparation of performance solutions (alternative solutions) 2015; Available from: <u>https://accesspeerreviews.com.au/performance-based-building-codes/preparation-of-alternative-solutions/</u>.
 Standarda Avatable A S(MZS USO 21000:2000 Pick menoment - Principles and suidelines 2000)
- Standards Australia, AS/NZS ISO 31000:2009 Risk management Principles and guidelines. 2009, Standards Australia/Standards New Zealand.
- 29. Government of Western Australia, *Health Risk Assessment (Scoping) Guidelines*, Department of Health, Editor. 2010: Perth, Western Australia.

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