

Legal responsibilities in applying pesticides

March 2016, Primefact 1464, First edition

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The main national and NSW government agencies involved in legislation related to pesticides are the Australian Pesticides and Veterinary Medicines Authority (APVMA), NSW Environment Protection Authority (EPA) and Safe Work NSW.

Australian Pesticides and Veterinary Medicines Authority (APVMA)

Pesticides are controlled in Australia through an inter-governmental arrangement known as the National Registration Scheme for Agricultural and Veterinary Chemicals. Under this scheme, the APVMA is the Commonwealth agency responsible for assessment and registration of pesticides in Australia and their regulation up to and including the point of sale under the *Agricultural and Veterinary Chemicals Code Act 1994*.

The States and Territories are responsible for controlling the use of pesticides beyond the point of sale, that is, for their use, handling, storage and disposal.

Before registering a product, the APVMA is required to conduct an assessment of the potential impacts of the pesticide on the environment, human health and trade, and of the likely effectiveness of the pesticide for its proposed uses. When a pesticide contains an active constituent not previously used in Australia, the APVMA must seek public comment before registering the product.

Only registered pesticides can be used in NSW. Registration includes approval of label directions for each pesticide product. Label directions specify how, and under what circumstances, the pesticide may be used to treat the relevant target pest or pests. Labels also give directions on clean-up, storage and disposal, and personal and environmental safety.

The APVMA's Chemical Review Program reviews the registration of existing agricultural and veterinary chemicals if new information regarding a higher risk to human health, the environment or trade becomes available. The public, the Office of Chemical Safety and the Australian Department of Environment can report problems known as 'adverse events' regarding specific chemicals or products to the APVMA. The new and existing information is reviewed by the Office of Chemical Safety, the Department of Environment and the APVMA. The APVMA also invites public comment for chemicals under review as part of the process.

Permits for off-label use

Special provisions exist under legislation administered by the APVMA to allow people to use pesticides in a way that is not described on the approved label. The APVMA can approve off-label use of the pesticide by issuing a minor use permit. In NSW off-label use is not allowed unless a permit has been issued. A permit is similar to a label in that all instructions must be strictly followed.

Permits

A permit is issued for a limited use over a specified period of time if the Australian Pesticides and Veterinary Medicines Authority (APVMA) are convinced that such a use is justified. Justification is usually on the grounds that a suitable registered alternative is not available, it is required as part of an emergency management response program or to manage a pest or resistance management strategy.

In addition the pesticide:

- will not cause undue hazard to the safety of people exposed to it, during handling the pesticide or anything containing its residues,
- should not have an unintended effect that is harmful to animals, plants or the environment,
- will not unduly prejudice export trade and
- the use of the product as proposed would be effective against the intended pest.

Permits may be granted during the course of the 2015–16 season. Consult the APVMA for information about new permits. Growers wishing to use a chemical in the manner approved under a permit should obtain a copy of the relevant permit from the APVMA and must read and comply with all the details, conditions and limitations on the permit. Current permit and registration details are available on the APVMA web site: <http://apvma.gov.au/>

Industry bodies, organisations and corporations can apply for permits for off-label use. Inquiries should be made through: the APVMA

PO Box 6182

Kingston ACT 2604

Phone: 6210 4700

Web: <http://apvma.gov.au/>

The EPA - The Pesticides Act 1999 and Regulation 2009

The Pesticides Act 1999 and the Regulation 2009 are two of the primary legislative instruments controlling the use of pesticides in NSW. They control the use of pesticides after the point of sale. They aim to reduce the risks associated with the use of pesticides to human health, the environment, property, industry and trade. It also aims to promote collaborative and integrated policies for the use of pesticides.

The Environment Protection Authority (EPA) enforces the proper use of all pesticides in NSW.

The underlying principle of the Pesticides Act is:

Pesticides must only be used for the purpose described on the product label and all the instructions on the label must be followed.

The Act and Regulation 2009 require all commercial pesticide users to:

Only use pesticides registered or permitted by the APVMA

Obtain an APVMA permit if they wish to use a pesticide in a way not covered by the label

Read the approved label and/or APVMA permit for the pesticide product (or have the label/permit read to them) and strictly follow the directions on the label

Only keep registered pesticides in containers bearing an approved label

Prevent injury to people, damage to property and harm to non-target plants and animals, the environment and trade through the use of a pesticide.

Undertake approved training in pesticide application and renew this qualification every 5 years.

Keep records of their pesticide application.

Compulsory training in pesticide use

Since 1 September 2003 training in the use of pesticides has been compulsory in NSW. If you use pesticides in your job or business you must now achieve and maintain a specific level of competency in pesticide use.

There is a range of training available to suit all types of pesticide users. In most cases the training involves a two-day course, based on competencies from the Agriculture, Horticulture and Conservation and Land Management (AHCIO) Training Package. You can also become qualified by demonstrating to a registered training organisation that you know how to use pesticides in your job or business.

The minimum prescribed training qualification is the AQF2 unit of competency, 'Apply chemicals under supervision'. Owner-applicators are encouraged to train and be assessed in the two higher AQF3 competencies, 'Prepare and apply chemicals' and 'Transport, handle and store chemicals'.

Note: the lower level AQF2 competency will provide a minimum qualification that satisfies the Regulation.

For more information on compulsory training in pesticide and a full list of training providers go to the [EPA website](#).

These training requirements do not apply where the pesticide is all of the below:

- Ordinarily used in the home or garden and
- Widely available to the general public at retail outlets and
- Being used in small quantities:
 - for outdoors use, in quantities of no more than 5 litres/5 kilograms of concentrated product or 20 litres/20 kilograms of the ready-to-use product, or
 - for indoors use, in quantities of no more than 1 litre/1 kilogram of concentrated product or 5 litres/5 kilograms of the ready-to-use product and
- Being applied by hand or using hand-held equipment only.

Pesticide Record Keeping

Adapted from the [NSW Environment Protection Authority](#).

The EPA's Pesticides Regulation 2009 makes it compulsory for all people who use pesticides for commercial or occupational purposes, to make a record of their pesticide use (Spray Diary). Pesticides include herbicides, fungicides, insecticides, fumigants, nematicides, defoliant, desiccants, bactericides and vertebrate pest poisons. A small use exemption, similar to that for training, applies to record keeping.

To comply with the record keeping rules set out in the Regulation you must record:

- Date, start and finish time.
- The operator details - name, address and contact details.
- The crop you treated e.g. Shiraz grapes. The property address and a clear delineation of the area where the pesticide was applied – you can mark this on a rough sketch or map of your property if this is easiest for you
- Type of equipment used to apply the pesticide e.g. knapsack, air blast sprayer, tractor mounted boom-spray etc.
- The full product name of the pesticide applied (e.g. Bayfidan 250 EC Fungicide® – not just 'Bayfidan'). If you mixed two pesticides together, you can record both on the same form.
- The total amount of concentrate product used.
- The total amount of water, oil or other things mixed in the tank with concentrated product.
- Size of block sprayed.
- Order blocks were treated.
- An estimate of the wind speed and direction at the start of spraying. You can use a wind meter (anemometer) or the Beaufort scale to help estimate the wind speed.
- Beaufort scale [available from BOM](#).

- If other weather conditions are specified on the label as relevant to the proper use of that pesticide (such as temperature, humidity, rainfall etc.) you must record a description of these weather conditions at the start of the application.
- If wind and weather conditions change significantly while you are spraying you need to record these changes.
- Records must be made in English.

The EPA's Pesticides Regulation 2009 requires you to make a record within 24 hours of applying the pesticide.

If you already keep records for other purposes (e.g. for the winery you are supplying), you can simply add to that record any of the requirements listed above that are not already in that record.

Records must be kept for three years. If you are the owner or the person who has the management or control of the property on which you, your employees or a contractor applied the pesticide, you are responsible for keeping the record.

Note: If you applied the pesticide yourself, then it is your responsibility to make the record. You can get someone else to write it down for you but it is up to you to make sure the record is made and that it is accurate. If you employed someone to apply the pesticide then that person must record their name as well as your name, address and contact details as their employer. If the pesticide was applied by a contractor, the contractor must record their own name, address and contact details, the name, address and contact details of the owner or the person who has the management or control of the land where the pesticide was applied. You only have to record this additional information if the person who owns or manages the property and the person who applied the pesticide are different.

See over page for EPA's example record keeping form (Spray Diary).

Dangerous goods and Hazardous substances (chemicals)

Dangerous goods are substances, mixtures or articles that, because of their physical, chemical (physicochemical) or acute toxicity properties, present an immediate hazard to people, property or the environment. Types of substances classified as dangerous goods include explosives, flammable liquids and gases, corrosives, chemically reactive or acutely (highly) toxic substances.

The criteria used to determine whether substances are classified as dangerous goods are contained in the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code). The ADG Code contains a list of substances classified as dangerous goods.

Hazardous substances (chemicals) are those that, following worker exposure, can have an adverse effect on health. Examples of hazardous substances include poisons, substances that cause burns or skin and eye irritation, and substances that may cause cancer.

A substance is deemed to be a hazardous substance if it meets the classification criteria specified in the Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)] (Approved Criteria).

Substances that have been classified according to the Approved Criteria are provided in the online database called the [Hazardous Substances Information System \(HSIS\)](#).

Many hazardous substances are also classified as dangerous goods.



Pesticides: Example record keeping form

Note: It is not compulsory to use this format. If you use a short name for something in filling out this form, you must write the full name somewhere else such as a book or farm diary.

Pesticides application record sheet. Record the name, address and contact details of the owner or occupier of the land where the pesticide was applied:											
Date, start and finish time 	Operator details 	Crop or place where pesticide was applied 	Type of equipment used 	Name of pesticide used 	Amount of concentrated product used 	Total quantity applied 	Size of block sprayed 	Order blocks were treated 	Estimated wind speed and direction 	Other weather details 	
	Name, address and contact details	Also record spraying of fallow and any pesticides used in and around crops*		Record all the pesticides you used.	If you mixed two Pesticides together, you can record both on the same form.	Total amount of water, oil or other things mixed with concentrated product.	Refer to your farm map**	Write which block was sprayed first, second, third, etc.	If these conditions change significantly during spraying then also record the changes.		Only if they are specified on label the label or APVMA permit
									Speed	Direction	

* It is not compulsory to record the pest or disease but it is recommended as part of good operating practices.

** A farm map is recommended because it would make recording this information easier.

(Records must be in English)

Form reproduced with the permission of NSW EPA

Safe Work NSW

Under the Work Health and Safety Act 2011 (WHS Act), Safe Work NSW seeks to protect workers in the workplace. Regulations under the WHS Act control hazardous substances including most pesticides. The Work Health and Safety Regulation 2011 is the most recent and important of these. It covers identification of hazardous substances in the workplace and the assessment and control of risks associated with their use.

- [Work Health and Safety Act 2011](#)
- [Work Health and Safety Regulation 2011](#)

The Act and accompanying Regulation are intended to protect workers from both the short and long term health effects of exposure to hazardous chemicals and to improve current health and safety practices by:

- Provision of health and safety information to workers (including a list or register of all hazardous chemicals and an SDS (Safety Data Sheet) for each hazardous chemical),
- Consultation with workers,
- Training of workers,
- Minimising the risks arising from hazardous chemicals exposure, and
- Health surveillance (if organophosphates are used).

To help industries implement the Act and Regulation, Safe Work NSW developed a code of practice: [Safe Use and Storage of Chemicals \(Including Pesticides and Herbicides\) In Agriculture 2006](#). This does not replace the WHS laws, but can help understanding what you have to do.

Note: this code of practice is the 2006 edition. The Pesticides Regulation 2009 and the Work Health and Safety Act and Regulation 2011 have been enacted after this code of practice was published. Safe Work's statement on this issue, on their web site, is:

"These codes of practice were developed based on the Occupational Health and Safety Act and Regulation (or older laws) which were replaced with the [Work Health and Safety Act and Regulation in NSW from 1 January 2012](#). These codes are taken to have been made under the Work Health and Safety Act, which means they are current and can still be used to help you meet your WHS requirements, however to ensure you comply with your legal obligations you must refer to the appropriate legislation."

For further guidance see - [Managing risks of hazardous chemicals in the workplace July 2014](#).

The WHS Regulations 2011 include specific responsibilities of a person conducting a business or managing risks to health and safety associated with handling and storing hazardous chemicals at a workplace. These include:

- correct labelling of containers, using warning placards and outer warning placards and displaying of safety signs
- maintaining a register and manifest (where relevant) of hazardous chemicals and providing notification to the regulator of manifest quantities if required
- identifying risk of physical or chemical reaction of hazardous chemicals and ensuring the stability of hazardous chemicals
- ensuring that exposure standards are not exceeded
- provision of health monitoring to workers
- provision of information, training, instruction and supervision to workers
- provision of spill containment system for hazardous chemicals if necessary
- obtaining the current Safety Data Sheet (SDS) from the manufacturer, importer or supplier of the chemical
- controlling ignition sources and accumulation of flammable and combustible substances
- provision and availability of fire protection, firefighting equipment, emergency and safety equipment
- preparing an emergency plan if the quantity of a class of hazardous chemical at

a workplace exceeds the manifest quantity for that hazardous chemical

- stability and support for containers of bulk hazardous chemicals including pipework and attachments
- decommissioning underground storage and handling systems
- notifying the regulator of abandoned tanks in certain circumstances

NSW dangerous goods and hazardous substances transport legislation

Not all pesticides are dangerous goods or hazardous substances but many are. If a pesticide is a dangerous goods or hazardous substance it will say so on the label and SDS.

Prior to the implementation of the Work Health and Safety Regulations 2011 (WHS), workplace storage, handling and use of hazardous chemicals were regulated under separate instruments for hazardous substances and for dangerous goods.

The new WHS Regulations cover workplace hazardous substances and dangerous goods under a single framework for hazardous chemicals and introduce a new hazard classification and hazard communication system based on the United Nations' Globally Harmonised System of Classification and Labelling of Chemicals (GHS). The specific requirements of the ADG Code for the transport of dangerous goods do not usually apply to the transport of chemicals on a farm because they are normally small quantities.

Large operations should check the amounts for which marking of the vehicle and other special conditions are required by the ADG code.

The following rules apply to small quantities of pesticides;

Following purchase – unopened containers

When obtaining chemicals from a supplier in the original unopened containers;

- keep them in a compartment of the vehicle separate from persons or foodstuffs
- the vehicle must be locked to prevent public access to chemicals when parked near a public road
- do not leave your loaded vehicle unlocked or unattended
- protect the load from the weather
- do not accept or load damaged or leaking containers. Secure the load and limit its movement.

Transporting chemicals in opened containers

When transporting chemicals once the container has been opened observe the following precautions:

- keep in a separate airtight compartment, or on the rear section of an open vehicle (ute, truck or trailer)
- personal protective equipment, a change of clothes, food and drink, should be carried in clean containers preventing contact with any chemical pest control equipment and chemicals carried on the vehicle should not be in contact with porous surfaces
- the internal and external surfaces of the vehicle, chemical containers and spray equipment should be kept clean
- protect the load from the weather
- do not leave your loaded vehicle unlocked or unattended
- do not load damaged or leaking containers
- secure the load and limit its movement

Some Critical Elements of the Label

Re-entry intervals

The re-entry interval is the time which must elapse between applying the pesticide and re-entry into the sprayed crop, unless the person is wearing the personal protective equipment specified for re-entry on the label. The reason for setting a re-entry interval is that pesticides sometimes remain on crops in the form of foliar aerosol particles. Residues can be dislodged by contact with the crop and absorbed through the skin by those working in the crop.

Re-entry intervals only appear on the label of a small number of newer products and older products that have recently been reviewed by the Australian Pesticides & Veterinary Medicines Authority (APVMA). If

there is no re-entry period on the label, the general rule is to wait 24 hours after application or until the crop is dry, whichever is the longer.

Crops should not be re-entered when wet from dew or light rain within the re-entry period unless appropriate personal protective equipment, as described on the label, for handling the pesticide, is worn.

Pesticides and the environment

Many insecticides are toxic to aquatic organisms, bees and birds. Fungicides and herbicides are relatively safe to bees in terms of their active ingredients, but their carriers and surfactants may be toxic.

Protecting the aquatic environment

The risk to aquatic organisms can be managed by following label instructions:

Protecting bees

Many pesticides are toxic to bees, however this risk can be reduced by following label instructions. The label provides the following special statement.

Dangerous to bees.

DO NOT spray any plants in flower while bees are foraging.

Protecting birds

Organophosphate and carbamate insecticides can be toxic to birds, especially in granular formulations. See label for details on how to minimize the danger to birds.

Managing residues resulting from pesticide application

Withholding periods (WHPs)

The withholding period (WHP) is the minimum time which must elapse between the last application of a pesticide and harvest. The purpose of the WHP is to avoid residues in raw agricultural commodities and in foods for consumption by humans and animals.

- Pesticides used on crops may have WHPs for both harvest and grazing.
- WHPs are specific to use patterns, i.e. to chemical, crop and pest.
- WHPs are also product specific.
- Harvest WHPs may vary with formulation (e.g. ULV or EC), rate (which may vary with the pest controlled), and whether or not the crop can be harvested green or dry.
- Not all labels include all registered use patterns for a particular active ingredient. Consequently, not all labels carry the same information on WHPs. On some labels the WHP is contained within the tables giving Directions for Use; on other labels the WHP appears separately below the Directions for Use.
- Where no WHP is given on the label, it will carry a statement to the effect that no WHP is necessary if label directions are followed.
- Where appropriate, growers are advised to contact the chemical manufacturer or the winery they are supplying for advice on managing chemical residues in the crop or in stock.

Export requirements

Some export markets have a lower maximum residue limit (MRL) than Australia or no MRL. Contact your winery to determine their requirements

Managing spray drift

Spray drift is the airborne movement of agricultural chemicals onto a non-target area. There may be a risk of injury or damage to humans, plants, animals, the environment or property. If you are responsible for spray drift that causes off-target damage you may be fined or required to pay compensation. See Managing spray drift section elsewhere in this publication.

Buffer zones

Buffer zones assist in minimising drift into sensitive and non-target areas. A buffer zone may consist of fallow, pasture, a non-sprayed strip of the crop or purpose planted vegetation such as a crop or wind

break. Vegetative buffer zones should be sufficiently open to allow the spray to penetrate and of sufficient depth to trap the bulk of any drift.

Analytical laboratories

In some situations a chemical analysis of fruit may be required. Listed below are some laboratories which undertake this type of work.

Laboratory address

Agrisearch Analytical

Level 1, 48 Victoria Road

Rozelle 2039

Phone 02 9810 3666

Fax 02 9810 3866

E-mail: contact@agrisearchanalytical.com.au

National Measurement Institute

36 Bradfield Road

Lindfield NSW 2070

Phone 02 8467 3600

Fax 02 8467 3610

Email: info@measurement.gov.au

National Association of Testing Authorities

P.O. Box 7507

Silverwater NSW 2128

Phone 02 9736 8222

Fax 02 9743 5311

More labs can be found at [National Association of Testing Authorities](#).

Poison Schedules

Pesticides are classified into four categories in the Poisons Schedule based on the acute health hazard to the user of the pesticide. They are either Unscheduled or Schedule 5, 6 or 7. Each schedule has a corresponding signal heading which appears in large contrasting lettering on the label of the pesticide product, generally above the brand name on the front of the label.

NOTE: Some active ingredients can appear under more than one schedule, generally because the carrier is more hazardous than active ingredient or due to the concentration of active e.g. parathion is a schedule 6 poison if the concentration of the active ingredient is 45% or less of the total formulation Penncap-M which contains 240 g/L parathion is schedule 6, on the other hand, the product Folidol M500 which contains 500 g/L parathion, is a schedule 7.

The Safety Directions specify what personal protective equipment should be worn, and what safety precautions should be taken, e.g. 'do not inhale spray mist'. The First Aid Instructions specify what action should be taken in the event of a poisoning. Safety Directions and First Aid Instructions may be different for different formulations of the same pesticides.

Note: Before opening and using any farm chemical, consult the label and the Safety Data Sheet (SDS) for specific safety directions.

Poisons Schedule

Schedule 1 This Schedule is

	intentionally blank.		
Schedule 2	Pharmacy Medicine		
Schedule 3	Pharmacist Only Medicine		
Schedule 4	Prescription Only Medicine, or Prescription Animal Remedy		
Unscheduled	Very low toxicity	No heading required	
Schedule 5	Slightly toxic	Caution	Caution – Substances with a low potential for causing harm
Schedule 6	Moderately toxic	Poison	Poison – Substances with a moderate potential for causing harm.
Schedule 7	Highly toxic	Dangerous Poison	Dangerous Poison – Substances with a high potential for causing harm at low doses. Requires special precautions during manufacture, handling or use. Access is by authorised users only. Schedule 7 poisons are not permitted for domestic use.
Schedule 8	Controlled Drug restricted access to minimize misuse.	Restricted access to minimize misuse.	
Schedule 9	Prohibited Substance	Substances required for research	

More information on Poisons Scheduling: <https://www.tga.gov.au/scheduling-medicines-poisons>

Applying Pesticides by Aircraft

Additional legal obligations apply if the pesticide is to be applied by aircraft. More information on the legal requirements for aerial application is available on the EPA website:

<http://www.epa.nsw.gov.au/pesticides/aerialapplicators.htm>

Acknowledgement

Thanks to Jenene Kidston Technical Specialist Farm Chemicals NSW DPI, Brian McKinnon

Non Graduate Lecturer Farm Mechanisation NSW DPI and Natalie O'Leary

Profarm Trainer NSW DPI for reviewing this article.

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (March 2016). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent adviser.

Published by the NSW Department of Primary Industries.

RM8 – V15/4265#8