



ENVIRONMENT TOPICS

AIR QUALITY MANAGEMENT

Agrichemical Application Rules

Due to the environmental and health risks associated with the effects of spray drift, the Regional Council has included a number of policies and rules in the Proposed Hawke's Bay Regional Resource Management Plan to deal with spray drift. These promote the safe and responsible use of agrichemicals, and are consistent with the Code of Practice for the Management of Agrichemicals (NZS8409:1999). The Code provides valuable information on the use of agrichemicals and the avoidance of spray drift.

Hawke's Bay Regional Council is aware of changes to legislation relating to agrichemicals, and proposed changes to the Code of Practice for the Management of Agrichemicals NZS: 8409:1999 and GROWSAFE® Certification. For legislative reasons, the rules in the Proposed Regional Resource Management Plan must refer to legislation and standards that existed at the time the plan was publicly proposed. Changes may be made in the future through Plan Review or Plan Change processes.

Introduction

The discharge of agrichemicals does not require a resource consent provided certain conditions are met. These are listed in the Rules section of the Proposed Regional Resource Management Plan. Quoted from the plan, the purpose of the conditions are to ensure that:

- (a) Agrichemicals to be discharged are approved for their intended use;
- (b) The proposed method of application, including the type of spray equipment to be used, the spray volume and droplet size, the direction of spraying and the height of release above the ground, is appropriate for the types of agrichemicals to be used and for the minimisation of spray drift;
- (c) Agrichemical user has appropriate training in respect of agrichemical use;
- (d) The discharge does not cause any adverse effect on human health;
- (e) The discharge does not cause any adverse effects on dwellinghouses, public land, or other areas where people reside or congregate;
- (f) The discharge does not cause any adverse effects on sensitive neighbouring land uses;
- (g) The discharge does not cause any adverse effects on non-target flora and fauna;
- (h) The discharge does not adversely affect the water quality of any water body;
- (i) The discharge does not result in any spray drift being deposited on any roof or other structure used as a catchment for water supply.

Rules subject to appeals

The Regional Resource Management Plan was proposed in April 2000. Following the release of decisions on submissions, it is

effectively operative except for those parts on which appeals have been lodged with the Environment Court as at July 2002. Parts of both Rule 9 and Rule 10 described below are subject to appeal and therefore may be subject to change.

Small scale application of agrichemicals

Rule 9 of the proposed plan covers the discharge of contaminants into air or onto land arising from the use or disposal of:

- Any agrichemicals for domestic purposes¹;
¹Definition of domestic purposes - "domestic purposes" means the use of agrichemicals by a person, group or organisation in a private capacity, who do not use agrichemicals in the course of their business activities.
- or
- Any licensed animal remedies; or
- Any agrichemicals using a hand-held appliance² excluding the use of any agrichemicals approved for aquatic use.
² Definition of hand-held appliance -a "hand-held appliance" refers to a knapsack sprayer, a non-motorised handgun sprayer, or a sprayer with a rate and volume of application no greater than these devices (under appeal).

Rule 9

Rule 9 is a permitted activity provided that the following conditions are met:

- a. The discharge shall be undertaken in a manner which does not exceed any rate, or contravene any other requirement, specified in the agrichemical manufacturer's instructions;
- b. There shall be no discharge or drift of any agrichemical beyond the boundary of the subject property;
- c. The discharge shall not result in any agrichemical entering a water body;
- d. Where the agrichemical is used for non-domestic purposes, the discharge shall be undertaken in accordance with all mandatory requirements set out in Sections 2, 5 and 6 of the Code of Practice for the Management of Agrichemicals (NZS 8409:1999, NZAET 1999).

Widespread application of agrichemicals

Rule 10 covers the discharge of contaminants into air or onto land, or into water, arising from the use or disposal of any agrichemical, except as provided for by Rule 9.

Rule 10

Rule 10 is a permitted activity provided that the following conditions are met:

- a. The discharge shall be undertaken in a manner which does not exceed any rate, or contravene any other requirement, specified in the agrichemical manufacturer's instructions.
- b. The discharge shall be undertaken in accordance with all mandatory requirements set out in Sections 2, 5 and 6 of the Code of Practice for the Management of Agrichemicals (NZS 8409:1999, NZAET 1999).
- c. Except for the use of Controlled Pesticides, the following qualifications shall be held at all times –
 - (i) Every person undertaking the application of agrichemicals shall hold a current GROWSAFE® Introductory Certificate or an equivalent qualification (*under appeal*).
 - (ii) Every contractor undertaking the land-based application of agrichemicals shall hold the National Certificate in Agrichemical Application, and hold or be under training for the GROWSAFE® Registered Chemical Applicators Certificate or an equivalent qualification, or be under training and be supervised by a licensed operator.
 - (iii) Every employee of a contractor undertaking the land-based application of agrichemicals shall hold or be under training for the GROWSAFE® Applied Certificate, or hold an equivalent qualification.
- d. For the use of Controlled Pesticides the following qualifications shall be held at all times- every person undertaking the application of a controlled pesticides for the purpose of

- pest control must hold a current licence issued by the Pesticides Board under the Pesticides Act 1979 and Pesticide Vertebrate Pest Control Regulations 1983, or be under training and supervised by a licensed operator.
- e. Every pilot undertaking the aerial application of agrichemicals shall hold the National Certificate in Agrichemical Application (Aerial), and hold or be under training for a Pilots Chemical Rating issued by the Civil Aviation Authority, or an equivalent qualification.
- f. The discharge shall not result in any agrichemical being deposited on any roof or other structure used as a catchment for water supply other than in compliance with condition (g).
- g. Where the discharge is onto land or onto water for the purpose of eradicating, modifying or controlling unwanted aquatic plants:
- (i) Only agrichemicals approved for aquatic use may be used;
 - (ii) The applications shall not exceed the quantity and concentration required for that purpose;
 - (iii) The discharge shall not include disposal to water of any agrichemical; and
 - (iv) The discharger shall notify at least 1 week before commencing the discharge—
 - Every person taking water for domestic supply within 1 km downstream of the proposed discharge; and
 - Every holder of a resource consent for the taking of water for public water supply purposes downstream of the proposed discharge.
- h. For aerial discharges, all reasonable measures shall be taken to prevent any discharge of agrichemicals within 20 m of:
- (i) Any continually flowing river which has a bed width of 3 m or more; and
 - (ii) Any lake or wetland which has an area of 1 ha or more (*under appeal*).
- i. For aerial discharges of agrichemicals listed as “controlled pesticides” under

the Pesticides (Vertebrate Pest Control) Regulations 1983, a method for positional navigation shall be used (see advisory note 2);

- j. Aerial and land based discharges shall be notified by the property owner, manager or contractor in accordance with the following requirements:
- (i) Where the application is on private land, occurs on any land within 50m of an adjacent property twice in any 12 month period, and occurs in circumstances where spray drift beyond the property boundary cannot be avoided (such as for many horticultural activities), a property spray plan shall be prepared at the beginning of each year or spray season, in accordance with Appendix N4 of the Code of Practice for the Management of Agrichemicals (NZS 8409:1999, NZAET 1999.) The plan shall be given upon request to the owner or occupier of any adjacent property, or to a Council officer.
 - (ii) Where the application is on private land, signs shall be used to clearly indicate the use of any agrichemicals –
 - within 10m of public land where there is a shelter belt giving effective protection between the application and the public land; or
 - within 30m of public land where there is no shelter belt giving effective protection between the application and the public land;
 - (iii) Where the application is on public land –
 - notification shall be given in local newspapers or by door-to-door advice to land occupiers adjacent to the intended application at least 1 week prior to the application (*under appeal*); and
 - signs shall be used to clearly indicate the agrichemical use;
 - (iv) Where the application may affect bee keeping, prior notification shall be given to the affected parties.

ADVISORY NOTES:

1. **Non-compliance with rules** - If Rule 9 or 10 cannot be complied with, then the activity is a restricted discretionary activity or a discretionary activity, whichever is relevant i.e. the activity will require a resource consent.
2. **Controlled pesticides** - Agrichemicals are listed as “controlled pesticides” under the First, Second and Third Schedules of the Pesticides Act. Under the Pesticides (Vertebrate Pest Control) Regulations 1983, approval is required from the Medical Officer of Health and the appropriate territorial local authority for the use of a controlled pesticide: on a public road; in any other place to which the public is entitled to have access; within 60m of a public road, or of any other place to which the public is entitled to have access; inside or within 400m of the boundaries of any area or district that is controlled by a territorial authority; inside or within 400m of the boundaries of any community; or in any catchment area from which water for human consumption is drawn. The permission of affected land owners is also required before any controlled pesticide can be used on their land.
3. Rule 10, condition (j) - For the avoidance of doubt, the notification requirements set out in condition j(i) do not apply to discharges of agrichemicals where there is never any spray drift beyond the property boundary.
4. Rule 10 does not cover the disposal of agrichemical containers.

5. Agrichemical spray drift hazard - Table Y1 from the Code of Practice for the Management of Agrichemicals (NZS 8409: 1999 NZAET 1999) includes the following guidance chart for assessing agrichemical spray drift hazard. Dischargers should note that adequate notification of those who may be at risk, so that they can take precautionary action, effectively reduces drift hazard.
6. Section 2 of the Code of Practice for the Management of Agrichemicals deals with the management of agrichemicals (including risk management, user responsibility and identification of most suitable agrichemicals). Section 5 deals with the use of agrichemicals (including handling, mixing and drift hazard). Section 6 deals with the disposal of agrichemicals and their containers.

What happens if the permitted activity conditions cannot be met?

If either the small-scale or widespread application of agrichemicals activity does not comply with one or more of its relevant conditions then resource consent approval is required from the Regional Council before the activity is carried out.

For further information
 Please contact Regional Council for further information or advice or ask for the related Environment Topic ‘Preparing a Property Spray Plan’ or to obtain a copy of the Proposed Hawke’s Bay Regional Resource Management Plan.
 Phone 06 835 9200
 Fax 06 835 3601
 Toll Free 0800 108 838
www.hbrc.govt.nz

Table Y1

FACTOR	POTENTIAL DRIFT HAZARD SCALE	
	HIGH	LOW
Wind speed	Zero/very low (<1 m/s) or >6 m/s	Steady (1-3 m/s)
Wind direction	Unpredictable	Predictable, and away from sensitive areas
Humidity	Low (delta T>8°C)	High (delta T<4°C)
Atmospheric stability	Inversion layer present	No inversion layer
Maximum height of release	>1.5 m above the target	<0.5 m above the target
Particle (droplet) size	<50 microns diameter	>250 microns diameter
Volatility	High (vapour pressure >10 mPa)	Low (vapour pressure <0.1 mPa)
Sensitive area	Close (<100 m away)	None, or more than 1 km distant
Buffer zone	None	Yes (>100 m)
Shelter belts	No shelter	Live shelter, >3m high and 1 m thick
Toxicity	Scheduled agrichemicals	Unscheduled agrichemicals