

Organic Agrichemical Management

What is the issue?

Organic growers' spraying practices can have an effect on the environment and human health if not managed correctly. Although organic materials are considered natural, they still contain chemical compounds that can be unpleasant and harmful.

Agrichemical spray drift is an issue of considerable concern in the Hawke's Bay region due to the variety and quantities of agrichemicals that are used in the horticultural, viticultural and pastoral farming sectors, as well as in residential areas.

Within the Proposed Hawke's Bay Regional Resource Management Plan an agrichemical is defined as any substance that is used to eradicate, modify or control flora or fauna, but doesn't include fertiliser or pheromones. Agrichemicals may be inorganic, man-made, naturally occurring, or organic.

Public Concerns

Hawke's Bay Regional Council regularly investigates complaints from members of the public about the spraying of organic agrichemicals.

The most common complaints received about organic production are about odour arising from lime sulphur applications. This can create a problem for hours, even days, after its application. For asthmatics, the elderly and the sick, this odour can cause breathing difficulties requiring medical treatment.

Lime sulphur has relatively low toxicity when compared to other sprays, but is considered an irritant to the respiratory system, can be very unpleasant if it gets onto unprotected skin and can sting the eyes. This may affect people passing the spray operation or neighbours.

Odour Management

Unpleasant odours can be very offensive and invasive, significantly affecting neighbours' everyday lives.

To manage the effects of activities affecting air quality, the environmental guidelines for air quality in the

Proposed Hawke's Bay Regional Resource Management Plan requires that there should be no offensive or objectionable odour beyond the property boundary.

When determining whether or not an odour is a problem there are several factors to consider, known as the FI-DOL factors:

- Frequency - how often the odour occurs
- Intensity - how strong the odour is, ie. its concentration
- Duration - how long the odour is in the air
- Offensive - how bad (or pleasant) the odour is
- Location - where the source of the odour is located.

Managing odour from your agrichemical applications is similar to managing spray drift. This should include:

- The identification of areas sensitive to odour such as neighbouring houses and schools.
- The identification of the best methods of minimising the odour from applications such as lime sulphur.

The following are guidelines:

- apply sprays when the wind is blowing away from sensitive areas
- apply sprays outside school hours
- apply sprays when neighbours are not home
- do not apply sprays when the neighbour is having a Sunday family barbecue!

Application Requirements

Organic growers are required to comply with the same rules as the more conventional sprayers.

Because of the environmental and health issues 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. These promote the safe and responsible use of agrichemicals which are consistent with the Code of Practice for the Management of Agrichemicals (NZS8409:1999). This code provides valuable information on the use of agrichemicals and the avoidance of spray drift.

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. The purpose of the conditions are to ensure that:

- (a) The 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) The 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.

For the full rules and policies relating to the use of agrichemicals and the management of odour refer to the Proposed Hawke's Bay Regional Resource Management Plan.

For further information:

Please contact Regional Council Compliance Officers for information or advice on any air issues, or to obtain a copy of the Regional Resource Management Plan.

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