## Schedule 4 Good Management Practices for Agrichemical Application

This schedule is based on the information contained in the New Zealand Standard 8409:1999: *Code of Practice for the Management of Agrichemicals*, August 1999, developed by the New Zealand Agrichemical Education Trust. It has been included in the Plan in a simple and convenient form for general public information and education purposes. The information contained in this Schedule also provides general guidance on the best practice for avoiding or minimising adverse effects on the environment from agrichemical application. This information may be useful for those carrying out discharges of agrichemicals into air under rules in 16.3.9, but it does not negate the conditions in any such rule.

This information caters for a wide range of purposes for spraying. Some, not all, will be applicable depending on the purpose and scale of spraying.

For further, more detailed information reference should be made to the Code of Practice itself. This document can be obtained from Standards New Zealand (Private Bag 2439, Wellington, Ph (04) 498 5990 or Fax (04) 498 5990), e-mail: snz@standards.co.nz, website: www.standards.co.nz, or can be viewed at the Otago Regional Council's Dunedin Office.

## To achieve the Plan's objectives, any person discharging agrichemical sprays is requested to observe the following, in conjunction with the accompanying chart. All such persons should:

- (a) Not spray upwind of the sensitive areas (listed in the explanation to Policy 12.1.1), unless adequate buffer distances are observed, or additional techniques for avoiding spray drift are used.
- (b) Not spray when wind direction is unpredictable or when there are high winds, or very low or no wind conditions. Some wind may assist in correct targeting of spray.
- (c) Not spray during inversion conditions.
- (d) Make use of appropriate and effective buffer zones and/or shelter belts to minimise the risk of spray drifting to non-target areas.
- (e) Have particular regard to the selection of nozzle size and pressure from the spray unit, in order to minimise the risk of spray drift. (Use equipment generating a droplet size of at least 50 microns in diameter and preferably greater than 250 microns.)
- (f) In the case of ground application methods, apply spray at a height preferably less than 0.5 metres above, but no greater than 1.5 metres above the target.
- (g) In the case of aerial application methods, be a person who holds a Growsafe Pilots' Agrichemical Rating Certificate of Qualification.
- (h) Comply with the manufacturer's instructions, as stated on the container label or in information sheets.
- (i) Preferably use spray formulations of low volatility and toxicity.
- (j) Dispose of surplus spray solution and spray containers according to the *Code of Practice for the Management of Agrichemicals*, 1999 and the recommendations of the manufacturer or supplier, as stated in the directions on the product container label.
- (k) Keep specific records of the type of each spray and any additive applied, the pest species targeted, the volume of spray, the volume of product, concentrations used, the time, date and locality, identification of any sensitive area (see (a) above), the meeting of any notification requirements, and equipment calibration details, as well as a specific inventory of the types and volumes of any chemicals in storage.

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- (1) Use only those agrichemicals currently authorised for use in New Zealand.
- (m) Also take into account the information provided on the following chart to minimise the risk of drift hazard:

		Conditions that cause potential hazard from spray drift to be:	
	Factor	High	Low
Site factors	Sensitive area	Close (less than 100 m away)	More than 1 km distant
	Buffer Zone	None	Yes (>100 m)
	Shelter Belts	No shelter	Live shelter >3 m high and 1 m thick
	Wind Direction	Unpredictable	Predictable, and away from sensitive areas
	Wind Speed	Zero / very low (less than 1 m/s) or greater than 6 m/s	Steady (1 - 3 m/s)
	Humidity	Low (delta $T > 8^{\circ}C$ )	High (delta $T < 4^{\circ}C$ )
	Atmospheric stability	Inversion layer present	No inversion layer present
Technique factors	Particle (droplet size)	Less than 50 microns diameter	Greater than 250 microns diameter
	Maximum height of release	Greater than 1.5 m above the target	Less than 0.5 m above the target
Material factors	Volatility	High (vapour pressure > 10 mPa)	Low (vapour pressure < 0.1 mPa)
	Toxicity	Substance is classed as a 'Poison' in terms of Section 2 of the Toxic Substances Act 1979	No substance used is classed as a 'Poison' in terms of Section 2 of the Toxic Substances Act 1979