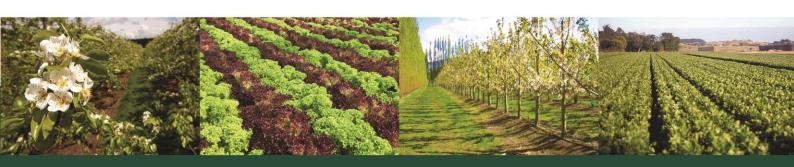
SUBMISSION ON Draft Standard DZ8409:2021 Management of Agrichemicals

5 February 2020

TO: New Zealand Standards Committee

NAME OF SUBMITTER: Horticulture New Zealand, New Zealand Avocado, New Zealand Good Agricultural Practice, New Zealand Kiwifruit Growers Incorporated, New Zealand Asparagus Council, Onions New Zealand, Process Vegetables NZ, Strawberry Growers NZ, Tomatoes New Zealand and Vegetables New Zealand



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Introduction

This submission is made by Horticulture NZ (HortNZ) and on behalf of New Zealand Avocado, New Zealand Good Agricultural Practice (NZGAP), New Zealand Kiwifruit Growers Incorporated, New Zealand Asparagus Council, Onions New Zealand, Process Vegetables NZ, Strawberry Growers NZ, Tomatoes New Zealand and Vegetables New Zealand. Where a submission point refers only to HortNZ, this is the position of the listed groups.

HortNZ and the product groups thank Standards NZ for the opportunity to comment on the draft of DZ8409:2021 (8409).

Growers that HortNZ represent are a key user constituency of agrichemicals and therefore use 8409 on a regular basis. We seek to ensure that it is practical and reflects best practice for agrichemical use.

There are a number of overall key concerns that have emerged while assessing the document. Comments on specific provisions may refer back to these overall comments.

Comments

Use of terminology – agrichemicals, plant protection products

The format of 8409 is substantially different to previous versions in that it makes a clear distinction between plant protection products as a subset of agrichemicals and uses the specific plant protection product term in place of agrichemicals. While the rationale for this is understood there should be a clear description at the start of the document of the various terms and how they are used. In Section 5.1 there is a description of the various agrichemical groups and what they comprise. It would assist the use of the Standard if this description was included at the start of the document so the approach is clear.

The change to use 'plant protection products' presents challenges to regional plans that are based on NZS8409:2004 which refer to 'agrichemicals'. Plans which rely on 8409 will therefore not be consistent with the 2021 version given this change. This is a matter of concern as it will require a different approach to regional plans and use of the Standard.

There is also inconsistency with how the exclusions from the definition of agrichemical are referred to. Section 1.1.3 states that the standard does not apply to fumigants and Vertebrate toxic agents (VTA's) yet does not exclude them in the definition of agrichemicals which apply for the purposes of the standard. This is inconsistent.

Interface with the Resource Management Act (RMA)

DZ8409:2021 has clearly been designed to give effect to the requirements of the Health and Safety at Work Act (HSWA) and Hazardous Substances and New Organisms Act (HSNO) requirements for agrichemicals. It is important that the Standard is also consistent with the RMA as 8409 is used as a tool for councils implementing requirements in regional and district plans. There are a number of areas where the RMA context could be enhanced and these are identified in the submission points below.

Of particular concern is the use of the word 'avoid' which has a specific meaning in RMA case law that means something should not be allowed. Therefore, if a council adopts 8409

for a regional or district plan there could be conflict over the use of the word avoid which is defined in 8409 as meaning 'take all practicable steps to prevent occurrence.'

To avoid the potential for such conflict the submission points identify key uses of the word 'avoid' that are relevant to regional and district plans and seek alternative wording that would ensure that there is not inconsistency with the RMA context.

Allocation of responsibilities

One area of concern is that there needs to be clear allocation of responsibilities between user, applicator, Person In Charge (PIC) and contractors. In some cases, the Standard has allocated a task to an inappropriate person or has used the generic term 'user' when a more specific responsibility is appropriate. For instance, it should be clear that it is the applicator that undertakes an on-site risk assessment, but not the spray plan.

Changes are sought in the submission below to better describe responsibilities.

Consistency between chapters and appendices/ format of document

In a number of instances, there appears to be inconsistency between the requirements in the sections and the appendices. A number are identified in the submission but a cross reference check should occur to ensure that there are not inconsistencies.

Biopesticides

There is some uncertainty as to how the standards apply to biopesticides and whether they should apply. Part of the uncertainty comes from difficulty in defining biopesticides. HortNZ understands that this is a global issue. A number of countries have applied different definitions and there are a range of issues arising from these definitions including misuse of biopesticides and market irregularities. A significant body of research and engagement is required in order to determine an appropriate definition in New Zealand. HortNZ encourages Central Government agencies and the Standards New Zealand Committee to begin the conversation as soon as possible.

SUBMISSION

1. Introduction

Provision	Comment	Change sought
1.1.2 Inclusions	As per the comment above, there needs to be clarity about the use of terminology to ensure there is	Include descriptions of the various agrichemical groups from Section 5.1 in Section 1.1.2.
	consistency.	Include a statement that where the term 'agrichemicals' is used it applies to all groups of agrichemicals. Where provisions relate to
	The various groups of agrichemicals should be described at the beginning of the Standard, rather than in Section 5.1.	a specific group the group name is used.
1.1.3 Exclusions	The exclusions should also be included in the definition of agrichemical.	Amend the definition of agrichemical to include all exclusions, including VTA's and fumigants.
1.1.4 Target audience	The standard is intended to apply to any person using agrichemicals in the workplace. It is not clear that this would include volunteers as well as employees. For instance, the Standard should apply to volunteers in the DOC estate as it is a workplace or volunteers such as River Care groups who undertake spraying in public places.	Clarify that the Standard applies to both employees and volunteers in the workplace and ensure that the Standard applies voluntary groups working in public places, such as river care groups.

1.3 Definitions

Term	Comment	Change sought
Accreditation	There is often confusion between accreditation and certification. For clarity it should state that certification is for an individual.	Add to the definition: Accreditation and certification are different in that certification is of an individual, not an organisation.
Adverse effect	Adverse effect or adverse event has been changed from 'undesirable or unwanted outcomes' to 'unfavourable or unintended outcomes'. It is not clear why the wording has been changed. Adverse effect is a term used in an RMA context and needs to be consistent. Inappropriate or unwanted would be more clearly determined.	Replace 'unfavourable or unintended outcomes' with 'inappropriate or unwanted outcomes'
Agrichemical	The definition lists some groups of agrichemicals that apply for the purposes of the standard but not all. It should be complete.	Amend 2 nd sentence of definition as follows: For the purposes of this standard agrichemicals includes plant protection products, dairy detergents and sanitisers, veterinary medicines and animal health products but excludes fertilisers, animal feed, oral nutritional products, vertebrate toxic agents and fumigants.
Agricultural use	Agricultural use is used but it applies to more than just pastoral agriculture so needs to be clear that it is broader, hence the reference to primary production. Agricultural use is more that cultivating soil – the definition should also refer to plants.	Amend the 1 st sentence of the definition: Used in the management of soil, plants or animals.

Term	Comment	Change sought
Amenity areas	The definition of amenity area is potentially problematic. If should be clear that amenity areas are where the public have access, rather than ownership status.	Amend the definition: Areas used for recreational purposes such as parks, playgrounds and reserves where there is public access. Delete 2 nd sentence.
Application rate	Application rate should also refer to volume.	Amend the definition by adding 'or volume' after 'm² or ha'
Applicator	HortNZ supports the use of person with 'specific responsibility for the application of agrichemicals' but consider that the definition could be clarified by stating that an applicator could be either a contractor or individual.	Add to the definition. An applicator may be a contractor or an individual.
Approved handler	The term approved handler is deleted as it is no longer used in regulation. However, it is sometimes used in a generic way. A definition acknowledging the status and referring to certified handler may assist in providing clarity.	Include a definition for Approved Handler: Approved Handler is a not a term used in regulations. Refer to Certified Handler.
Avoid	The definition of avoid is a new definition but it is inconsistent with RMA case law and could raise issues about adoption of the Standard by Regional Councils. An analysis shows that the word 'avoid' or avoidance is used 73 times throughout the Standard. The draft definition would mean that in all instances 'all practicable steps should be taken'. The RMA has a much stricter	Amend uses of the word 'avoid' as sought elsewhere in this submission.

Term	Comment	Change sought
	interpretation where to avoid means that something does not occur at all. This is relevant where a regional plan may adopt the Standard. Therefore, some uses of the word 'avoid' are sought to be changed to another term to overcome differences in interpretation.	
Buffer zone	It is considered that the definition of buffer zone could be more clearly described. It should be clear that drift may fall within a buffer zone but not beyond.	Amend the definition: A horizontal distance between the edge of the area where agrichemicals are being applied in which drift may fall and an identified sensitive area downwind of the application area.
Certification	It is confusing that the definition uses the term 'accredited' as it suggests that accreditation and certification are the same thing. It is suggested that the definition be reworded similar to the definition for accreditation which starts with the person being certified.	Amend the definition: Formal recognition that an individual meets the requirements of a specified standard of competency when assessed and verified by an authorised person or agency who issues a certificate.
Certified Handler	To avoid confusion with Approved Handler the definition should state that Certified Handler replaces Approved Handler.	Amend the definition to add: Certifier Handler replaces Approved Handler.
Commercial use	The definition of 'commercial use' has been deleted but as the term is used in the Standard it is important that there is clarity about the use of the term.	Reinsert the definition for commercial use as in NZS8409:2004
Contractor/contract use	It is considered that the use of the words 'causes to be applied' is misleading as	Amend the definition: Any person or organisation (including management companies) that administers, applies or

Term	Comment	Change sought
	to the role of a contractor. It would be more appropriate that a contractor administers, applies or 'directs to be applied'. There should be clarity as to roles and responsibilities in that a contractor may also be an applicator in terms of how the terminology is used in the Standard.	directs to be applied any agrichemical for hire or reward upon agreement with the owner, occupier, or manager of any land or animals. A contractor may also be an 'applicator' as defined in this Standard. It does not include an employee, an owner, an occupier or a manager.
Drift/drift hazard	There is concern that the definition of drift and drift hazard implies that movement away from the target area will cause adverse effects. There are some situations where drift is used as part of the application technique. The focus in the definitions should be on 'off target' drift which is the matter the Standard seeks to manage – not drift per se.	Amend the definition of drift and drift hazard to 'off target drift' and 'off target drift hazard'.
Fertiliser	Definition is still limited to essential nutrients which is inconsistent with the ACVM definition which is referred to in the National Planning Standards. As such the definition is inaccurate as it does not include soil conditioners, such as lime which are included in the ACVM definition.	Amend the definition to be consistent with ACVM definition of fertiliser: Fertiliser a) means a substance or biological compound or mix of substances or biological compounds that is described as, or held out to be for, or suitable for, sustaining or increasing the growth, productivity, or quality of plants or, indirectly, animals through the application to plants or soil of— (i) nitrogen, phosphorus, potassium, sulphur, magnesium, calcium, chlorine, and sodium as major nutrients; or

Term	Comment	Change sought
		 (ii) manganese, iron, zinc, copper, boron, cobalt, molybdenum, iodine, and selenium as minor nutrients; or (iii) fertiliser additives; and (b) includes non-nutrient attributes of the materials used in fertiliser; but (c) does not include substances that are plant growth regulators that modify the physiological functions of plants.
Fumigant	The definition of fumigant has been amended to refer to high human toxicity. It is considered that the definition should be generic to all fumigants. The definition in the Standard should refer to the specific nature and function that determines if a substance is a fumigant.	This definition is from the ACVM Regulations. Fumigant means a substance which when applied produces fumes used to disinfect or purify an area for the purpose of destruction of rodents, pests, other plant or animal organisms, or fungi
Good agricultural practice GAP	This definition is too confusing and not appropriate. Management of residue is only one part of good agricultural practices relating to agrichemicals. The term is only used in two specific sections (D2.1 and D2.2). These sections then also provide detail on GAP as it relates to residue management. Given the specific nature of the term in how it is applied in this Standard, it is considered more appropriate that this definition be deleted and explanation be provided D2.1 and D2.2.	Delete definition and amend D2.1 and D2.2 as suggested further in this submission.

Term	Comment	Change sought
HSNO approval number	The definition refers to HSR numbers and then uses HSC – it appears it should be HSR.	Amend HSC to HSR
On-site risk assessment	A new definition is provided for on-site risk assessment which is to be undertaken at the application site immediately prior to spraying. It should also be clear that the applicator should undertake the on-site risk assessment.	Amend the definition: A risk assessment undertaken by the applicator at the application site immediately prior to spraying. Refer to 5.2.4.3.
Plant protection product	As stated in general comments above there are concerns about the use of plant protection products rather than the more general term agrichemicals. Changes are sought to how the different types of agrichemicals are described elsewhere in the Standard which should assist with users understanding the difference and change in approach.	Make changes elsewhere in DZ8409:2021 to better describe the relationship between the different types of agrichemicals.
Pre-harvest interval (PHI)	HortNZ understands that both PHI and withholding period (WHP) are used commonly. However, we note that there is inconsistency in the referencing of the terms throughout the standard. PHI is only used twice (excluding definition and acronyms) and, in those instances, WHP is referenced as well to demonstrate/remind readers that the two terms are the same. However, WHP is used an additional 18 times (excluding definition and acronyms) without referencing PHI.	Either delete the definition and references to PHI in the Standard. Or amend the Standard to ensure both terms are referenced consistently.

Term	Comment	Change sought
	HortNZ is concerned that having two similar definitions could lead to confusion. We recommend either deleting PHI or amending the Standard to ensure both terms are referenced together consistently.	
Protected place	The definition of protected place is not dissimilar to the definition of sensitive areas and care needs to be had as to which is the appropriate term to use so there is no confusion.	Ensure that usage of 'protected place' is clearly linked to requirements in the Hazardous Substances Regulations and not confused with 'sensitive areas'.
Regulators	The definition for regulators should include Regional Councils and TA's as they are also regulators under the RMA.	Include Regional councils and territorial authorities as regulators.
Regulatory conditions	The definition of regulatory conditions refers to 2.2.6 which lists types of controls. It does not include RMA regulatory controls through regional and district plans which also control the use of agrichemicals.	Include regional and district plans in 2.2.6
Sensitive area	The definition has been amended from NZS8409:2004. It links the sensitive area to the potential for an adverse effects.	Retain definition for sensitive area
Spot spraying	A new definition for spot spraying is included and refers to 'small areas'. It is ambiguous how small areas may be applied. Spot spraying should be	Amend definition of spot spraying: Application by handheld application device to a specific or discrete application site for managing individual or small group of weeds or plants.

Term	Comment	Change sought
	undertaken by a handheld application device and applied to a specific or discrete application site.	
Spray plan	The definition of spray plan is different to that in NZS8409 and does not adequately include all components of a spray plan as it is more than a document that identifies who may be affected by an application and strategies to minimise risk. A spray plan also includes identifying areas, substances to be used and timing of applications – as described in Appendix C3.	Amend the definition of spray plan: A document developed by the landowner, occupier or manager that describes the areas to be sprayed, information regarding the application, identifies sensitive areas and strategies to minimise risks associated with any off-target spray drift. Refer to Appendix C2.
Sprayer/ application equipment	The definition for sprayer/application equipment provides a list of the range of application equipment. It is noted that there is no distinction between motorised or non-motorised and also does not include syringes which are also an application device.	Amend definition to be clear that equipment could be motorised or non-motorised and include syringes in the list of equipment.
Territorial authority	A unitary council is legally known as a unitary authority.	Replace unitary council with unitary authority.
User	The term user is used extensively throughout the Standard and is important for allocating roles and responsibilities. There are a number of terms that refers to users – applicator, contractor, PIC and the definition for user should include a cross reference to those terms so it is clear that the 'user'	Amend the definition of user so that it includes terms in the Standard that describe users and also the types of use: Any person who purchases, transports, stores, applies or disposes of agrichemicals. User includes applicator, contractor, Person in charge. Ensure that the term 'user' is used appropriately rather than terms for specific users.

Term	Comment	Change sought
	encompasses all such terms. NZS8409:2004 had a definition of user that referred to specific actions – purchase, transport, storage, application or disposal. These actions are now incorporated into the definition of 'use'. It needs to be clear in the definition of user that the term applies more broadly than the actual application of agrichemicals.	
Vertebrate toxic agents (VTA's)	There is no definition of VTA's even though they are referred to in the Standard. As stated above there is confusion in the document about the status of VTA's in respect of the Standard in that 1.1.3 excludes them from the scope of the Standard but the definition of agrichemical does not. This needs to be clarified as the Standard is not intended to manage the application of VTA's.	Include a definition for VTA's as follows: Vertebrate toxic agents (VTA's) means any substance, whether inorganic, human made or naturally occurring, modified or in its original state, that is used to eradicate, modify or control vertebrate animals, including possums, rats and mustelids. VTA's are regulated under the Hazardous Substances and New Organisms Act 1996 and includes vertebrate pest control products.

Section 2 Management of agrichemicals

Section	Comment	Change sought
2.2.3	2.2.3 sets out considerations of	Reword 2.2.3 Para 3 as follows:
Identification of	identification of risk. Paragraph 3 relates	A prime consideration for identifying risks to the environment
risk	to risks to the environment. Use of the words 'avoiding impacts on the environment' is a concern because of the	will be the potential for any adverse effects from off-target spray drift, contamination of water, disposal of unused agrichemical solution and agrichemical containers and
	RMA context of avoid.	measures to avoid, remedy or mitigate such potential effects.

Section	Comment	Change sought
	The focus should be on the prime consideration of identifying risk so rewording the paraph would assist.	
2.2.6 Controls	As noted under the definition of regulatory controls section 2.2.6 focuses only on HSNO and HSW controls. Controls also exist in regional and district plans and should be included in 2.2.6.	Add a further point to 2.2.6: e) Regional and district plans control use and application of agrichemicals, including notification to affected parties, competency requirements and storage. A user should refer to local plans to ensure compliance with the regulations.
2.3.1 Responsibilities General	Section 2.3.1 sets out a range of mandatory requirements, including taking all reasonable steps to avoid risk. It may be impossible to avoid risk and the first sentence seeks to 'avoid, remedy or mitigate any adverse effects'. As such effects arise from the risks an approach of minimising would be appropriate. In addition the PIC does not necessarily have to physically have the SDS but be able to access in a timely manner. A change of wording is sought to reflect this.	Amend 2.3.1 3 rd and 4 th sentences For any activity related to the supply or use of agrichemical, the health of the user, other people, and the environment shall be considered and all reasonable steps taken to minimise risk. For both suppliers and users the PIC shall have timely access to up-to-date safety data sheets (SDS) for the agrichemical used on the property and shall prepare emergency plans according to the quantity and type of agrichemicals and the situation involved.
2.5.1 Documentation General	District plan may also have requirements for documentation relating to storage. Therefore, district plans should also be included in the legislative requirements list.	Include 'district plans' after regional plans in 2.5.1 1st para
2.5.3 Documentation Users	Section 2.5.3 sets out a list of documentation that 'users' shall keep. There is difficulty with this section as some of the documentation relates to specific users such as applicators or PIC	Amend 2.5.3 as follows: The following documentation must be available: a) Owners, occupiers or managers shall have a spray plan, written cleaning procedure, authorisations for RVM's

Section	Comment	Change sought
	rather than users generically. For instance the spray plan is prepared by the owner, occupier or manager – not by all users.	 b) The applicator shall have an on-site risk assessment for the application of plant protection products c) Users shall have product use records for veterinary medicines and plant protection productions d) The PIC should have training records e) The PIC should have certification and licensing f) The PIC should have tracking records if required g) The PIC should have PPE maintenance records h) The PIC shall have the emergency plan and testing i) The PIC shall have a storage inventory and have available an SDS for each product in the store
2.6 Competency of personnel	Section 2.6 sets out competency requirements for HSNO regulations but does not include that regional plans may also require specific training requirements. For completeness all training requirements should be stated.	Amend 2.6 by adding: Regional plans may have specific training requirements for agrichemical users. Users should refer to their local regional plan for training requirements.

Section 4 Storage and supply of agrichemicals

Section	Comment	Change sought
4.2.1	4.2.1 Paragraph 2 The section needs to be	Amend 4.2.1 Para 2:
Risk	clear that storage is a land use matter so	Under the RMA there is a duty for suppliers and users to
management	is a district council function – not regional	avoid, remedy or mitigate adverse effects on the environment
General	council. Permitted activity conditions may	associated with the storage of hazardous substances.
	also need to be met so should be included	Agrichemical storage facilities may need to meet permitted
	in the paragraph.	activity conditions or require resource consent from a district
		council or unitary authority. This may include assessment
		under rules in a district plan if significant quantities of
		hazardous substances are to be stored.

Section	Comment	Change sought
4.2.2 Risk identification	4.2.2 includes requiring an inventory of products - being a complete list of the maximum likely quantity of each hazardous substance that may be held onsite at any one time. This requirement means that site certificates are being triggered even though thresholds may not be exceeded at any one point in time and provides an inaccurate picture of what may be in the store at a specific point in time. It is important that this list is not taken as a cumulative list as that does not reflect the reality as to what is stored at any one point in time. It is our understanding that this issue has been raised with Worksafe and the Standard should be cognisant of any changes in the regulations.	That the Standard reflect the need to better describe agrichemicals stored on site at a specific time rather than the maximum likely quantity overall.
4.3.3 Certification	Not all stores will require the various licences consents or permits so the section should state 'where required'.	Amend 4.3.3: Where required any licences, consents or permits shall be acquired, including the following:
4.5.1.1 Location	Requirements for zoning and buildings are a district council function. There is no need to refer to 'regional rules' in this section.	Amend 4.5.1.1 3 rd sentence: Suppliers and users shall take account of the relevant district plan zonings and rule requirements for buildings. Conditions off supply agreements such as NZCP1 and NZGAP also need to be complied with.
4.5.1.2 Specifications	Specific setback requirements are set out in App J3.1 so should be included in the list in 4.5.1.2 for specifications.	Amend 4.5.1.2 by adding: j) Required setback distances.
4.5.1.3 Transit storage/transit depots	There should also be recognition that field storage may occur prior to application. A reference to 5.2.5.4 would assist.	Include a note that refers to 5.2.5.4 for field storage requirements

Section	Comment	Change sought
4.6.2 User	The requirements in 4.6.2 apply to 'users', which includes applicators. It is not appropriate that all users keep documentation of the agrichemical store. The requirement should be to the PIC.	Amend 4.6.2: The PIC shall hold the following documentation relating to the agrichemical store: a) Inventory (see 4.2.2) b) Product information relating to each agrichemical stored and have access to the SDS for each product stored c) Tracking records (see 5.2.6.2) d) Emergency response plan (see App H)

Section 5 Use of agrichemicals

Section	Comment	Change sought
5.1 Scope	Section 5.1 includes a description of the range of agrichemicals. It is sought that this description be located within Section 1 of the Standard.	Locate the description in 5.1 3 rd para in Section 1 describing the various types of agrichemicals.
5.2.3 Responsibilities	It needs to be clear exactly who is responsible for which activities. There is also concern that clause c) applies a 'shall' when the decision should be on a case by case basis.	Amend 5.2.3 c) Application methods shall be used which minimise the risk of adverse effects on any off-target areas. For spray applications where the potential for drift hazard is high, all practicable steps shall be taken to provide a reduction of the hazard. (see Appendix B and Table B1.) d) Applicators shall minimise personal exposure (oral, dermal and respiratory) at all times during handling, application and disposal of plant protection products e) Applicators shall take precautions to minimise the likelihood of spills occurring. (Refer to Appendix L3.)

Section	Comment	Change sought
5.2.4 Information	The allocation of responsibilities needs to be clear. All users should follow regulatory conditions, not just applicators Requirements to follow industry requirements should be 'where applicable'. 5.2.5.1 requires that spray plans are used (shall) so 5.2.4 should be consistent.	Amend 5.2.4 1 st para – replace applicators with users 2 nd para add 'where applicable' after agrichemical use programmes. 3 rd para Amend requirement for spray plan to 'shall'
5.2.5.1 Planning	The allocation of responsibilities needs to be clear. In particular the 2 nd para – needs to make clear who prepares a spray plan. The focus should be on minimising the risk.	Amend 5.2.5.1 first para by adding or 'owner or occupier or manager' after PIC. Amend Para 2: The PIC, owner, occupier or manager shall prepare a spray plan and identify any sensitive areas and describe any situations likely to result in off-target drift hazard. The spray plan shall describe the measures that will be taken to minimise the drift hazard. The spray plan should also identify any particular regulatory conditions that apply to the use of the planned product so these are incorporated into the planning process.
5.2.5.2 Notification	It is confusing as to what is appropriate in 5.2.5.2 and Appendix C3 as there is considerable overlap. In addition the sections should be consistent. Previously there was a list of examples where parties are likely to be affected and this assists with determining if notification is required. In addition there should be a requirement for an applicator to confirm that notification has been undertaken.	Ensure consistency with Appendix C3. Add examples of parties likely to be affected. Add a new para: Applicators should confirm that notification has been undertaken prior to commencing application.

Section	Comment	Change sought
5.2.5.3 On-site risk	It needs to be clear that it is the applicator who undertakes the on-site risk	Amend 5.2.5.3: Prior to commencing application, the applicator shall undertake a risk assessment for the
assessment.	assessment.	application site.
5.2.5.4 Mixing sites	The allocation of responsibilities needs to be clear between 'users' and 'applicators'. It is generally the applicator mixing agrichemical products.	Amend 5.2.5.4 Para 3 by replacing 'user' with 'applicator'.
5.2.5.5 Mixing procedures	The allocation of responsibilities needs to be clear between 'users' and 'applicators'. Not all users will be mixing the agrichemical. It should refer to the person mixing the agrichemical.	Amend 5.2.5.5 by replacing 'users' with 'the person mixing the agrichemicals'
5.2.5.6 Application equipment	The section uses 'should'. It is considered that the requirement should be a 'shall' to ensure that appropriate application equipment in used.	Amend 5.2.5.6 1st para by replacing 'should' with 'shall'
5.2.5.7 Spray drift	The approach of minimising spray drift is supported and seek other changes to ensure consistency with this approach. The responsibility for managing the application is the applicator Para b) sets out a list of possible actions but it is not an inclusive list so should be clear that it is examples.	Amend 5.2.5.7 Para 1 2 nd sentence: Replace 'user' with applicator'. Amend 5.2.5.7 b) 3rd sentence: Applicators should take all reasonable care to minimise potential for off target drift hazard beyond the application area by applying appropriate techniques such as: After v) Refer to Table B1 for details of appropriate techniques. Where appropriate (or required as part of a product approval)
		buffers zones should be used to minimise spray drift hazard to sensitive areas. However applicators should not rely

Section	Comment	Change sought
		exclusively on buffer zones or shelter belts to eliminate off-target spray drift hazard.
5.2.5.8 Summary of task	The allocation of responsibilities needs to be clear between 'users' and 'applicators'. During application the responsibility is with the applicator. Clause b) requires the lowest hazard product that will be effective. The most effective product may not be the lowest hazard product. Rather it should be the lowest hazard that can be effective as both long and short term resistance needs to be taken into account.	Amend 5.2.5.8 b) Identifying the lowest hazard product that can be effective Amend 5.2.5.8 n) replace user with applicator
5.2.6.1 Record of application	The record of application in clauses q - t makes a differentiation between different classes of agrichemicals. It is considered that the record should be applied to all plant protection product applications – not just the listed classes.	Amend 5.2.6.1 by applying clauses q, r, s and t to all agrichemicals or rewording as follows: The following information shall be retained where: • the application has been with motorised equipment • applications of organophosphates and carbamates or • applications of high human toxicity q) r) s) The following information shall be retained where the application was highly ecotoxic: t)

Appendix A Legislation and Agrichemical Use

Provision	Comment	Change sought
A2.2 Regional Authorities	Regional councils do not control storage of hazardous substances so the reference to storage in d) should be deleted.	Delete 'storage' from clause d)
Table A2 GHS hazard classification	It is confusing that EPA are changing the hazard classification system. There needs to be a readily accessible comparison table to enable users to ascertain the new classification based on the current Classes 1-9.	Include a comparison of hazard classifications or provide a link or direction to where such a comparison may be found.

Appendix B Spray drift hazard and weather conditions

Provision	Comment	Change sought
General	It is noted that the appendix is 'informative' but includes 'shall' statements. The status of such statements needs to be clear.	Either change the appendix to normative or clarify the status of the 'shall' statements or move the shall statements to Section 5.
B1 Scope	The appendix is limited to management of plant protection products that are applied using pressurised spray equipment. It is unclear what this statement is intended to limit. All spray applications have potential for off-target drift so the scope should not be limited.	Delete: that are applied using pressurised spray equipment
B2 Responsibilities	HortNZ supports that any person applying agrichemicals shall take all reasonable steps to ensure that there are no significant adverse effects beyond the target application area. However, 'reasonable steps' could be quantified as following methods in this Standard.	Amend B2 Responsibilities 2 nd para by adding: Reasonable steps would include adopting methods for reducing potential for off-target spray drift set out in this Standard.

Provision	Comment	Change sought
B4 Sensitive areas	It is the applicator who undertakes the on- site risk assessment so B4 should be amended. Users should identify sensitive areas as part of a spray plan.	Users shall identify and record any sensitive areas located near the target area as part of a spray plan and an applicator should assess the risk to sensitive areas as part of an on-site risk assessment.
	It would be better to refer to educational facilities rather than school playgrounds and care facilities. Educational facilities is a defined term in the National Planning Standards.	Amend c) by deleting schools playgrounds and care facilities and replacing with educational facilities
B5 Drift hazard	There is concern with the use of the word 'avoid' in the 3 rd para given the RMA interpretation of the word. The implication would be that anything in the High hazard column of Table B1 would mean that spraying should not occur.	Amend 3 rd Para 2 nd sentence: Where there is a high hazard factor present careful management and additional actions will need to be taken to minimise the potential for off-target drift.
	This is not how B1 is intended to work as there are a matrix of actions that can be undertaken to reduce potential for off-target drift and no one factor should trigger the application to be avoided. Elsewhere responsibilities are clearly set out and that potential for off-target drift is minimised. The Standard needs to be consistent in its approach.	
B7 Buffer zones and shelter belts	Use of buffer zones is a contentious area and the Standard needs to be clear on their use. Section 5.2.5.7 last paragraph makes it clear that applicators shall not rely exclusively on buffer zones or shelterbelts to eliminate spray drift hazard. That statement is supported and	Amend 1st Para 2nd sentence: A buffer zone downwind between the application site and a sensitive area may reduce the risk to that sensitive area. However a buffer zone should not be relied on exclusively to eliminate the risk of off target spray drift hazard as other factors contribute to mitigating risk.

Provision	Comment	Change sought
	considered that it may be useful to repeat in B7. It is important that all factors relevant to reducing potential for off-target drift are utilised. It also needs to be clear that any buffer zone is 'downwind'.	
B7.2 Buffer zone guidelines	HortNZ has concerns about the guidelines as they are only for guidance yet some councils want to use them as mandatory setbacks. Therefore, it is important to emphasise that buffer zones are only one tool in the tool box of actions that can be taken.	Amend 1st para last sentence by adding: Therefore buffer zones are only one of many methods to manage and reduce drift hazard and should be used in conjunction with other appropriate methods. Amend 2nd Para 1st sentence by adding: where no other actions are taken to manage potential for off target drift.
B7.3 Shelter belt characteristics	There is increasing use of artificial shelter – both vertical and horizontal – in orchard and berry crops. There are also horticultural crops grown under impermeable cover which greatly reduces the potential for off target drift. While there is currently research being undertaken by the kiwifruit industry on the efficacy of artificial shelter, there should be recognition that it may contribute to a reduction of risk. This is particularly relevant where there is horizontal shelter which greatly reduces the wind presence under the shelter, therefore reducing the potential for off target drift movement.	Amend a) Natural (live) shelter is more effective than vertical artificial shelter. Horizontal artificial shelter may assist with reducing wind movement in the application area. Include a recognition that spraying crops in enclosed impermeable structures is unlikely to lead to off-target drift hazard.

Appendix C – Planning, notification and signage for application of plant protection products

Provision	Comment	Change sought
General	The section refers to 'local authority' throughout. Regional Councils are responsible for the matters that are addressed in Appendix C. All references to local authority should be changed to Regional Council so it is clear which local authority a user should consider.	Amend all uses of 'local authority' to 'Regional Council.'
General	This section covers planning for application but does not include any specific information for on-site risk assessment. This is covered in 5.2.5.3. Spray plans are also covered in 5.2. but are addressed in more detail in Appendix C for planning. The Standard should be consistent in how it addresses matters. As on-site risk assessment is a key part of the planning there should be a reference in Appendix C so it is clear that it is part of the planning process.	Include a new section in Appendix C: On-site risk assessment. Prior to the application an applicator shall undertake an onsite risk assessment as set out in 5.2.5.3. Alternatively move details of the on-site risk assessment to Appendix C.
C2.1 Development of a spray plan - General	Section C.2.1 states that a PIC is responsible for preparing a spray plan. Section 5.2.5.1 also sets out requirements for preparing a spray plan and requires that an applicator prepare the plan. This submission seeks that 5.2.5.1 be changed to the PIC, owner,	Amend Para 1 1 st sentence: The purpose of a spray plan is to describe the areas to be sprayed, provide information regarding the application, identify sensitive areas and risks to the environment and strategies to minimise risks associated with any off-target spray drift.

	occupier or manager shall prepare a spray plan. C2.1 should be consistent with 5.2.5.1. The purpose of the spray plan is broader than just assessing risks. This submission seeks changes to the definition of spray plan to ensure that it is a comprehensive document consistent with the content outlined in C2.2. The description in C.2.1 should be consistent with this approach.	Amend C2.1 2 nd para 1 st sentence: The PIC, owner, occupier or manager shall prepare a spray plan.
C2.2 Contents of a spray plan	Section b) sensitive areas refers to the definition for sensitive areas in 1.3. However, a more comprehensive description of sensitive areas is in Appendix B4 and should be referred to. HortNZ supports that the on-site risk assessment is undertaken by the applicator just prior to application and ensure that this is consistent across the various sections in the Standard. e.g definition on-site risk assessment, 2.5.3, 5.2.5.3 and Appendix B4. The note should refer to discharges into air, land or water – not just air.	Include in Note under b) See Appendix B4 for Sensitive areas Retain requirement for applicator to undertake on-site risk assessment but ensure that this requirement is consistent across all sections in the Standard. Amend the Note by adding: discharges into air, land or water
C2.3 Communication of spray plan	It should be clear that it is the owner or occupier of any sensitive area who should be notified. This is consistent with C3.2 below.	Amend C2.3 Para 1 sentence 1: Any owner or occupier of any sensitive area Amend the title of C.2.3 to Provision of spray plan.

	The spray plan is to be provided so the section may be better titled: Provision of spray plan.	
C3.1 Notification - General	It should be clear that notification is the action taken prior to an application as opposed to the annual spray plan.	Amend C.3.1 1st para: Notification of the intention to spray is undertaken prior to a specific application and is intended to inform people who could be affected. This provides them an opportunity to take action
C3.2 Application on private property	The provision includes specific distances and timeframes for undertaking notification. The distances and timings are similar to some regional council plans and are generally seen as practical and reasonable for all parties. Councils may choose to have different distances and timings in a plan if they consider the specifications are not appropriate. Clause c) provides that notification be given verbally or in writing and has a note that says writing includes electronic means such as text or email. It would be better that the contents of the Note are in the provision. All applicators should ensure that appropriate notification has been given.	Amend C3.2 c) Notification may be given verbally or in writing, including by electronic means such as text or email. Delete Note. Add d) Applicators should ensure that appropriate notification has been given.
C3.4 Application in public places and amenity areas	This submission seeks changes to the definition of amenity areas to ensure that notification requirements are clear, certain and reasonable. Amenity areas	Amend the definition of amenity areas as sought in this submission.

	should be linked to areas where the public have access.	
C4.2 Signage application on private property	Para 3 requires that signs should remain in place for a period equivalent to the REI. The signs may actually be left out longer so the words 'at least' would provide for this.	Amend Para 3: Signs should be in pace during agrichemical application and should remain in place, at least, for a period equivalent to the REI for the agrichemical being used.

Appendix D - Agrichemical selection

Provision	Comment	Change sought
D2.1 and D2.2.	The term GAP is used in these sections only. The intended meaning is already described in these sections. It is appropriate that the definition be deleted as it is not used in relation to any other section in the Standard.	D2.1 Label claims for any agrichemical used on food-producing crops and animals require an assessment of the agrichemical's residues. This residue information is assessed in relation to the good agricultural practice (GAP) use of the agrichemical. Sections D2.1 and D2.2 set out the meaning of GAP as it relates to residue management. In this instance, GAP means

Appendix F – Competency and training

Provision	Comment	Change sought
F3 Training and certification – General	HortNZ supports specifying the requirements for training course that would meet the competency requirements for the Standard.	Retain F3.1

Appendix H- Emergency Management

Provision	Comment	Change sought
Table H2 Spill	HortNZ is concerned about the use of	Amend column 2 to Low risk
hazard guidance	minor and major and how the table may	Amend column 3 to Higher risk
	be applied – will it be collectively for all	
	factors or individually? The columns of	Add a statement that no one factor in isolation would trigger a
	minor and major are essentially risk	risk level but that at least four or more factors would
	factors and an assessment would	collectively contribute to a risk determination.
	determine if the risk was minor or major.	
	While the table is only 'guidance there	
	are concerns about how the table may	
	be used and applied in different	
	contexts - e.g. regional and district	
	plans. Therefore, caution needs to be	
	taken in this regard.	

Appendix J General storage requirements

Provision	Comment	Change sought
J2.1 Inventory	The Standard states that an SDS for each product shall be included with the inventory. It is our understanding that the SDS should be readily available.	Amend J.2.1 2 nd Para: an SDS shall be readily available
J3.1 Location - Users	The Standard proposes including specific setback distances for storage. It is our understanding that these have been derived from a compilation of various regulatory requirements and district plan provisions. However, the requirement in c) of 15m from public places, protected plans and areas of	Amend J3.1 c & d: (c) At least 15 m away from public places <u>and</u> protected places, and areas of possible pollution risk. These include dwellings, livestock buildings, packhouses, fodder, feeds, crops; (d) At least 20 m from any water body, well, or bore and other environmentally sensitive areas; and

possible pollution risk, including dwellings, livestock buildings, packhouses, fodder, feeds and crops is impractical for on-farm situations.	
Protected places provides for areas where people are employed and that should be the focus of provision c).	

Appendix M – Disposal of agrichemicals and containers

Provision	Comment	Change sought
General	HortNZ supports the approach in Appendix M disposal.	Retain App M.