

## Hazardous Substances Consideration Committee

### TOPIC: Consideration of Application for the Modified Reassessment of “Emulsifiable concentrate containing 50 g/litre esfenvalerate”

#### Introduction

- 1 Nufarm Limited is seeking the modified reassessment of the substance Sumi-Alpha transferred under the generic substance description “*Emulsifiable concentrate containing 50 g/litre esfenvalerate*”. The substance was approved under the Hazardous Substances and New Organisms Act 1996 (“the Act”) via the Hazardous Substances (Pesticides) Transfer Notice 2004 and was given the HSNO Approval Number HSR000320.
- 2 On transfer to the Act, the substance “*emulsifiable concentrate containing 50 g/litre esfenvalerate*”, was assigned the following hazard classifications: 6.1D, 6.3B, 6.5B, 6.9B, 9.1A, 9.3C, 9.4A.
- 3 The proposed modification relates to an additional flammability classification so that “*emulsifiable concentrate containing 50 g/litre esfenvalerate*” is also assigned a 3.1D hazard classification in addition to those identified in paragraph 2.

#### Legislative criteria for the application

- 4 Unless otherwise stated, references to section numbers in this report refer to sections of the Act and clauses to clauses of the Hazardous Substances and New Organisms (Methodology) Order 1998 (“the Methodology”).
- 5 In its decision dated 4 June 2009 (Application Number: RES09003), the Authority determined that significant new information relating to the effects of the substance has become available and therefore constitutes grounds for its reassessment (section 62(2)(a)). Consequently, the applicant is able to make an application for the modified reassessment of the substance.
- 6 The application was lodged on 7 October 2009 in accordance with section 63A on the basis that:
  - (a) a reassessment of the hazardous substance under section 63 is not appropriate because the reassessment will involve only a specific aspect of the approval (i.e. the addition of a classification as a result of new information); and
  - (b) the amendment is not a minor or technical amendment to which section 67A applies (i.e. new information has become available which has not previously been considered by the Authority).
- 7 The Authority may approve or decline an application for reassessment under this section, as it considers appropriate, after taking into account (see section 63A(6)):
  - (a) all the effects associated with the reassessment; and
  - (b) the best international practices and standards for the safe management of hazardous substances.
- 8 When making their decision, the Authority must follow the decision path outlined in Appendix 1.

## Notification and consultation

- 9 The Minister for the Environment was advised of the application<sup>1</sup> and given the opportunity to “call-in” the application<sup>2</sup>. This action was not initiated.
- 10 The Department of Labour (Workplace Group) and the New Zealand Food Safety Authority (Agricultural Compounds and Veterinary Medicines (ACVM) Group) were identified as having a specific interest in the application and were provided with a copy of the application summary (excluding the confidential information but with the opportunity to access this if necessary).
- No comments or submissions were received.
- 11 Other Government departments, Crown agencies and other interested parties, as listed in Appendix 4, were provided with a copy of the application summary and given the opportunity to comment or to make a submission.
- No comments or submissions were received.
- 12 The application was publicly notified on the ERMA New Zealand website on 21 October 2009 and subsequently advertised in The Dominion Post, the New Zealand Herald, the Christchurch Press and the Otago Daily Times<sup>3</sup>.
- No submissions were received.

## Agency evaluation

- 13 To enable the Agency to consider all the effects associated with the proposed reassessment, the Agency has undertaken an assessment of the risks, costs and benefits associated with the proposed classification addition to the approval of the generic transferred substance description, *emulsifiable concentrate containing 50 g/litre esfenvalerate*.
- 14 Grounds for reassessment were established on the basis that significant new information relating to the effects of the substance has become available.

## Background and nature of use of the substance

- 15 Sumi-Alpha, *an emulsifiable concentrate containing 50 g/litre esfenvalerate*, is formulated as a clear to slightly hazy yellow liquid. The substance is used as a synthetic pyrethroid insecticide for commercial use; domestic usage of Sumi-Alpha is not anticipated. Sumi-Alpha is manufactured overseas and imported to New Zealand where it is downpacked, labeled and then sold. The substance is stored in a warehouse at Nufarm Limited, Auckland and dispatched to retail outlets where it is stored on shelves for sale to the commercial end-user. The substance is diluted with water and sprayed on maize and vegetable crops using a boom sprayer to control cutworm and other pests. This reassessment is not proposing any changes to be made to the use pattern of the substance.
- 16 Sumi-Alpha was the only trade name product to be transferred to the Act under the generic substance description *emulsifiable concentrate containing 50 g/litre*

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<sup>1</sup> section 53(4)(a)

<sup>2</sup> section 68

<sup>3</sup> section 53

*esfenvalerate*. Currently, Sumi-Alpha is the only substance containing esfenvalerate registered in New Zealand with the Agricultural Compounds and Veterinary Medicines (ACVM) Group.

- 17 Sumi-Alpha is not presently classified as a flammable substance and as such the controls associated with flammable substances do not apply to Sumi-Alpha.
- 18 The applicant, Nufarm Limited, has submitted a modified reassessment to correct the current hazard classification of Sumi-Alpha. This is because, since this substance was approved, new information that was not available at the time the substance was transferred to the Act has become available. This information indicates that Sumi-Alpha should be assigned a flammability classification.

### **Hazard classification**

- 19 The applicant provided the flashpoint report for Sumi-Alpha in confidence. This flashpoint report has been provided to the Committee of the Authority in Confidential Appendix 5. The Agency notes that the flashpoint for this substance is 69 degrees Celsius.
- 20 Schedule 2 of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 defines the minimum degrees of hazard for substances with flammable properties. This schedule states “A substance with flammable properties is not hazardous for the purposes of the Act unless-  
(c)...”the substance is a liquid that has a flash point of less than or equal to 93 degrees Celsius...”
- 21 Based on the flashpoint of Sumi-Alpha being 69 degrees Celsius, Sumi-Alpha is a flammable substance as it meets the minimum degree of hazard prescribed in Schedule 2 for a substance with flammable properties.
- 22 More specifically, the Agency proposes Sumi-Alpha be classified as a low hazard flammable substance and assigned the 3.1D classification, in addition to its current classifications. Schedule 2 of the Hazardous Substances (Classification) Regulations 2001 specifies the classification criteria for flammable substances. The hazard classification defined in this schedule for ‘A flammable liquid that has a flash point of greater than 60 degrees Celsius, but less than or equal to 93 degrees Celsius’ is 3.1D – Flammable liquids: low hazard.
- 23 Sumi-Alpha was assigned classifications, as identified in paragraph 2 and in the table below, on transfer to the Act. The proposed classifications as a result of this modified reassessment are also listed in the table below.

<b>Hazardous Property</b>	<b>Hazard classification - current</b>	<b>Hazard classification - proposed</b>
Flammability	-	3.1D
Acute Oral Toxicity	6.1D	6.1D
Skin Irritancy	6.3B	6.3B
Skin Sensitisation	6.5B	6.5B
Target Organ Toxicity	6.9B	6.9B
Aquatic Ecotoxicity	9.1A	9.1A

Terrestrial Vertebrate Ecotoxicity	9.3C	9.3C
Terrestrial Invertebrate Ecotoxicity	9.4A	9.4A

### Overseas regulatory summary

- 24 Esfenvalerate has been approved as an active ingredient for use as an insecticide in Europe under Annex I and in Australia. Sumi-Alpha has also been approved for use as an insecticide in the European Union and in Australia.

### Risks and Costs Assessment

- 25 A “cost” is defined in Regulation 2 of the Methodology as “the value of a particular adverse effect expressed in monetary or non-monetary terms”.
- 26 The applicant has identified costs associated with the reassessment proposal as outlined below:
- The time taken to establish the Grounds for Reassessment application;
  - The time taken to compile the application for a modified reassessment; and
  - The costs associated with updating the product label and compliance with the additional controls.
- 27 The Agency notes it is the applicant’s intention to cover the identified costs with regards to ensuring compliance with the additional controls.
- 28 In accordance with sections 5 and 6 and clauses 9 and 12, the Agency has assessed the potentially non-negligible risks of the proposed classification addition in terms of risks to the environment, to human health and safety, to the relationship of Māori to the environment, to society and the community, to the market economy, and to New Zealand’s international obligations.

### *Assessment of the risks to human health and safety and the environment*

- 29 Sumi-Alpha, *an emulsifiable concentrate containing 50 g/litre esfenvalerate*, at present is classified as an acute oral toxicant (6.1D), a skin irritant (6.3B), a contact sensitiser (6.5B), a target organ toxicant (6.9B), an aquatic ecotoxicant (9.1A), a terrestrial vertebrate ecotoxicant (9.3C) and a terrestrial invertebrate ecotoxicant (9.4A).
- 30 The Agency notes the risks that currently exist during the various stages of the substance’s lifecycle are still present. The Agency considers adherence to the current controls that apply to toxic and ecotoxic substances will continue to manage the adverse effects to human health and the environment associated with the use of this substance that may arise as a result of the substance’s properties. As such, the Agency has not reassessed the risks to human health and the environment during the lifecycle of the substance from the substance’s properties as identified above. However, the Agency notes an additional risk which has now become evident, of the substance being ignited at any time, can occur during any stage of the substance’s lifecycle. This risk has the potential for adverse effects to occur to both the environment and to human health.
- 31 As noted above the Agency considers adverse effects to human health and the environment, associated with the ignition of flammable substances, can occur at any

stage during the substance’s lifecycle. The lifecycle stages and associated sources of risk are summarised in the table below.

Lifecycle Activity	Associated Source of Risk
Manufacture / Import	An incident during the manufacture or importation resulting in ignition of the substance and subsequently the potential for adverse health effects to be caused to human health or damage to the environment.
Packing	An incident during the packing of the substance resulting in ignition of the substance and subsequently the potential for adverse health effects to be caused to human health or damage to the environment.
Transport or storage	An incident during the transport or storage of the substance resulting in ignition of the substance and subsequently the potential for adverse health effects to be caused to human health or damage to the environment.
Use	An incident during use resulting in ignition of the substance and subsequently the potential for adverse health effects to be caused to human health or damage to the environment.
Disposal	Disposal of the substance or its packaging resulting in ignition of the substance and subsequently the potential for adverse health effects to be caused to human health or damage to the environment.

- 32 The Agency considers that there is potential for damage to the environment to occur if Sumi-Alpha were to be ignited at any stage of its lifecycle. However, the Agency considers that the addition of a flammability classification to the approval for Sumi-Alpha, and adherence to the HSNO controls on flammable substances, will ensure that the level of risk to the environment associated with its flammable properties is ***negligible***.
- 33 In addition, the Agency considers Sumi-Alpha has the potential to cause minimal to major adverse health effects (ranging from smoke inhalation to burns for example) if it were to be ignited at any stage of its lifecycle. However, the Agency considers that adherence to the HSNO controls on flammable substances will ensure that the level of risk to human health associated with its flammable properties is ***negligible***.
- 34 The additional controls that are proposed to apply to Sumi-Alpha are identified in the Controls section of this paper below.
- 35 The Agency considers the risks to human health and the environment from the proposed addition of a 3.1D classification to the approval for an *emulsifiable concentrate containing 50 g/litre esfenvalerate* (HSR000320) are ***negligible***. Furthermore, the present risks associated with the use of the substance are likely to be reduced by the addition of the proposed classification due to the risks associated with flammable substances being addressed.

#### *Relationship of Māori to the Environment*

- 36 The Agency has considered this application in accordance with the clauses 9(b)(i) and 9(c)(iv) and sections 6(d) and 8. In addition, the framework contained in the ERMA New Zealand user guide “Working with Māori under the HSNO Act 1996” has been

used to assess the effects of this application on the relationship of Māori to the environment.

- 37 The Agency notes that the substance triggers a number of hazardous properties giving rise to the potential for cultural risk including the deterioration of the mauri of taonga flora and fauna species, the environment and the general health and well-being of individuals and the community.
- 38 In addition, the use of this substance as an insecticide has the potential to inhibit the ability of iwi/Māori to fulfil their role as kaitiaki, particularly in relation to the guardianship of waterways given the highly ecotoxic nature of the substance to aquatic species, and potential risks to the mauri ora of human health under prolonged exposure to this substance.
- 39 On considering the information outlined here and elsewhere in this report, the Agency considers a minimal impact from the substance on the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, valued flora and fauna and other taonga to be highly improbable. In addition there is no evidence to suggest that the controlled use of the substance will breach the principles of the Treaty of Waitangi.
- 40 The overall level of risk is therefore considered to be *negligible* assuming that the substance will be handled, stored, transported, used, and disposed of, in accordance with the explicitly stated default and additional controls proposed in this report, and any other controls required by other legislation.
- 41 However, the Agency notes that should inappropriate use, or accident, result in the contamination of waterways or the environment generally, that users notify the appropriate authorities including the relevant iwi authorities in that region. This action should include advising them of the contamination and the measures taken to contain and remediate.

#### *Assessment of the risks to society and the community*

- 42 There are not expected to be any significant adverse impacts on the social environment from the addition of a flammability classification, and the relevant proposed controls, to this substance. In fact, the addition of a flammability classification to this substance may mitigate the present risks associated with the use of this substance. This will be due to the substance being correctly classified as a result of new information and the relevant controls put in place to ensure that the level of risk from the use of flammable substances is negligible. Consequently, the Agency considers that this aspect of potential risk need not be considered further.

#### *Assessment of the risks to the market economy*

- 43 Taking into account the level of risk to the environment and to human welfare, no sources of additional risk have been identified that could result in an adverse economic impact on a community.
- 44 The Agency notes that direct economic costs will be borne by the applicant and users of the substance. The HSNO default controls intentionally do not manage direct economic effects. These are for suppliers and users of the substance to address.

### *New Zealand's international obligations*

- 45 The Agency does not anticipate that the addition of a flammability classification to identify Sumi-Alpha as a flammable substance will pose any risks to New Zealand's international obligations.

### **Assessment of Beneficial Effects**

- 46 A "benefit" is defined in Regulation 2 of the Methodology as "the value of a particular positive effect expressed in monetary or non-monetary terms". Benefits that may arise from any of the matters set out in clauses 9 and 11 were considered in terms of clause 13.
- 47 The Agency considers that there are potentially significant benefits associated with the proposed addition of a flammability control to the approval for the transferred substance description '*emulsifiable concentrate containing 50 g/litre esfenvalerate*'.
- 48 The applicant claims that the proposed modification to the approval of the substance will provide the following benefits:
- Sumi-Alpha will be correctly classified; and
  - The relevant controls associated with flammable substances will be applicable to Sumi-Alpha and put in place throughout the lifecycle of the substance.
- 49 The Agency agrees with the applicant and considers the benefits that may result from the addition of a flammability classification, and the consequent adherence to relevant controls, are potentially significant.

### **Controls**

- 50 The current controls for *emulsifiable concentrate containing 50 g/litre esfenvalerate* are detailed in Appendix 2.
- 51 As a result of the proposed modification to the approval of this substance, a number of additional controls on the substance are necessary. Only those controls that are affected by the proposed modification are discussed below. A full list of controls and variations to the substance is provided in Appendix 3.

### *Proposed additions and modifications to controls*

- 52 The Agency notes that the existing controls for use of *an emulsifiable concentrate containing 50 g/litre esfenvalerate* do not address the risks associated with the unintended ignition of flammable substances.
- 53 The Agency considers based on the new information provided by the applicant that the approval for this substance (Approval number HSR000320) should be modified to add a flammability classification and include controls to address the risks associated with flammable substances. These additional proposed controls are identified in the table below.

Control Code	Regulation	Topic
<b>Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001 - Flammable</b>		
F2	8	Restrictions on the carriage of flammable substances on passenger service vehicles
F6	60-70	Requirements to prevent unintended ignition of class 2.1.1, 2.1.2 and 3.1 substances
F11	76	Segregation of incompatible substances
<b>Hazardous Substances (Disposal) Regulations 2001</b>		
D2	6	Disposal requirements for flammable substances
<b>Hazardous Substances (Emergency Management) Regulations 2001</b>		
EM9	17	Additional information requirements for flammable and oxidising substances and organic peroxides
EM10	21 – 24	Fire extinguisher requirements
<b>Hazardous Substances (Identification) Regulations 2001</b>		
I5	11	Priority identifiers for flammable substances
I13	22	Secondary identifiers for flammable substances
I25	43	Specific documentation requirements for flammable substances
<b>Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004</b>		
GN35A	Schedule 10	Controls relating to the adverse effects of unintended ignition of class 2 and class 3.1 hazardous substances

54 The Agency considers all the existing controls and variations that apply to *emulsifiable concentrate containing 50 g/litre esfenvalerate* remain applicable.

#### *Summary of controls*

55 The Agency has considered the controls imposed by the Authority in approvals given to flammable substances under Part 5 of the Act as well as those transferred to the Act under the *Hazardous Substances (Pesticides) Transfer Notice 2004 (as amended)* and considers that the controls listed in Appendix 3 should apply to the substance.

#### **Overall evaluation of risks, costs and benefits**

56 The Agency considers the risks of the substance to the environment and human health, with the proposed controls in place, to be *negligible*.

57 The Agency does not consider there to be significant risks to Māori cultural wellbeing, society and the community, the market economy, or to New Zealand's international obligations associated with the modified reassessment.

58 The Agency has taken the type and severity of the risks, and the characteristics of such risks into account, and considers that the overall level of risk posed by the substance is negligible.

- 59 The Agency considers that there are benefits associated with the modified reassessment of this substance as identified in paragraph 48 of this paper.
- 60 Thus, the Agency considers that the benefits of the modified reassessment outweigh the costs.

### **Best international practices and standards for the safe management of hazardous substances**

- 61 The requirement to consider best international practices and standards for the safe management of hazardous substances is demonstrated by assessing the proposed modified reassessment against:
- the Globally Harmonised System of Classification and Labelling of Chemicals;
  - international codes of practice and standards;
  - overseas legislative requirements.

#### *Globally Harmonised System*

- 62 The controls applied to the substance as a result of the modified reassessment are based on the HSNO Regulations. These regulations specify a number of controls aimed at managing the risk posed by hazardous substances throughout their lifecycle, such as the requirement for protective clothing and provision of appropriate information, disposal and emergency management requirements. These regulations have previously met the requirements of section 141(1)(b) on best international practices and standards for the safe management of hazardous substances. In particular, the Globally Harmonised System of Classification and Labelling of Chemicals (GHS), published by the United Nations, forms the basis of the HSNO hazard classification system and the requirements for the provision of information on hazards.

#### *International Codes of Practice and Standards*

- 63 The transportation controls on the substance requiring the segregation of incompatible substances are cross-references to the requirements of the Land Transport Rule, the Maritime Rule and the Civil Aviation Rule, which are themselves based on the International UN Transport of Dangerous Goods Model Regulations, the International Maritime Dangerous Goods Code and the International Civil Aviation Organization Regulations.

#### *Overseas Legislative Requirements*

- 64 The Agency notes that the substance is approved for use as an insecticide by the Australian Pesticides and Veterinary Medicines Authority (APVMA) and the European Union. The Agency notes the controls proposed by the Agency may not be consistent with those imposed by overseas regulators relating to the controls associated with flammable substances. The Agency considers that this substance may not be classified as flammable by some overseas regulators due to differing implementation of the Globally Harmonised System with respect to flammable substances.

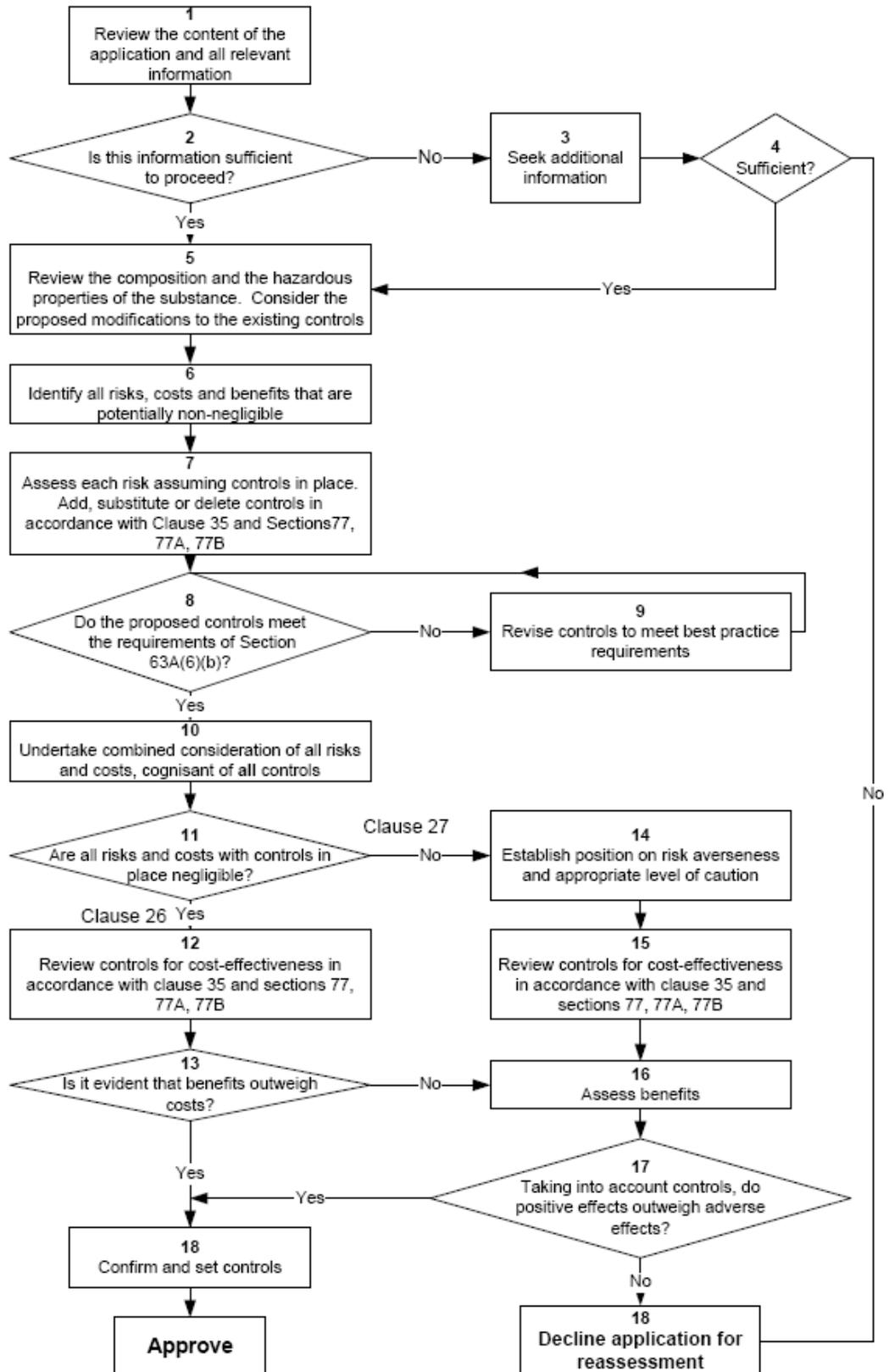
## Conclusions

- 65 Nufarm Limited is seeking the modified reassessment of the substance identified as “*Emulsifiable concentrate containing 50 g/litre esfenvalerate*” to add a flammability classification as a result of new information becoming available.
- 66 The Agency considers that there are negligible risks to the environment and human health, with the proposed controls in place, and that there are definite benefits associated with the modified reassessment of the substance to add a flammability classification (3.1D) to the approval for ‘*an emulsifiable concentrate containing 50 g/litre esfenvalerate*’.
- 67 The Agency considers that the modified reassessment meets the requirements of best international practices and standards for the safe management of hazardous substances.
- 68 The Agency considers that the application for the modified reassessment meets the requirements of section 63A(6) and, therefore, may be approved in accordance with clause 26.
- 69 The Agency considers that the controls listed in Appendix 3 should apply to emulsifiable concentrate containing 50 g/litre esfenvalerate.

# APPENDIX 1 DECISION PATH

*Decision path for modified reassessment for amendments to hazardous substance approvals: application made and determined under section 63A.*

For proper interpretation of the decision path it is important to work through the flowchart conjunction with the explanatory notes



## **APPENDIX 2: CURRENT CONTROLS FOR EMULSIFIABLE CONCENTRATE CONTAINING 50 G/LITRE ESFENVALERATE**

**Controls applying to this substance are given in the:**

1. Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations 2001.
2. Hazardous Substances (Packaging) Regulations 2001.
3. Hazardous Substances (Disposal) Regulations 2001.
4. Hazardous Substances (Personnel Qualifications) Regulations 2001.
5. Hazardous Substances (Emergency Management) Regulations 2001.
6. Hazardous Substances (Tracking) Regulations 2001.
7. Hazardous Substances (Identification) Regulations 2001.
8. Hazardous Substances (Tank Wagon and Transportable Containers) Regulations 2004.
9. Controls for Stationary Container Systems: Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004.

## Part A: Relevant Controls

The control codes in this table refer to the control codes as defined in the classification/controls matrix of the User Guide to the Control Regulations. The matrix uses a coding system whereby each unique code represents a regulatory provision or group of related provisions in the HSNO “regulatory toolbox”.

Details of the HSNO regulations relating to the control codes are available in the *Compilation of Hazardous Substances Regulations and Controls* available at <http://www.ermanz.govt.nz/hs/hs-regulations.html>.

The relevant controls from the HSNO “regulatory toolbox” that apply to this substance are listed below. Where a control has been changed this is indicated by a star (\*) next to the control code. The detail of this change, including deletion of a control, is given in Part B of this document.

### Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations 2001

Code T1	Regs 11 – 27	Limiting exposure to toxic substances through the setting of TELs
Code T2	Regs 29, 30	Controlling exposure in places of work through the setting of WESs.
Code T4	Reg 7	Requirements for equipment used to handle substances
Code T5	Reg 8	Requirements for protective clothing and equipment
Code T7	Reg 10	Restrictions on the carriage of toxic or corrosive substances on passenger service vehicles
Code E1*	Regs 32 – 45	Limiting exposure to ecotoxic substances through the setting of EELs
Code E2	Regs 46 – 48	Restrictions on use of substances in application areas
Code E3	Reg 49	Controls relating to protection of terrestrial invertebrates eg beneficial insects
Code E5	Regs 5(2), 6	Requirements for keeping records of use
Code E6	Reg 7	Requirements for equipment used to handle substances
Code E7*	Reg 9	Approved handler/security requirements for certain ecotoxic substances

### Hazardous Substances (Packaging) Regulations 2001

Code P1	Regs 5, 6, 7(1), 8	General packaging requirements
Code P3	Reg 9	Criteria that allow substances to be packaged to a standard not meeting Packing Group I, II or III criteria
Code P13	Reg 19	Packaging requirements for toxic substances
Code P15	Reg 21	Packaging requirements for ecotoxic substances
Code PG3	Schedule 3	Packaging requirements equivalent to UN Packing Group III

### Hazardous Substances (Disposal) Regulations 2001

Code D4	Reg 8	Disposal requirements for toxic and corrosive substances
Code D5	Reg 9	Disposal requirements for ecotoxic substances
Code D6	Reg 10	Disposal requirements for packages
Code D7	Regs 11, 12	Information requirements for manufacturers, importers and suppliers, and persons in charge
Code D8	Regs 13, 14	Documentation requirements for manufacturers, importers and suppliers, and persons in charge

### **Hazardous Substances (Personnel Qualifications) Regulations 2001**

Code AH1\* Regs 4 – 6 Approved Handler requirements (including test certificate and qualification requirements)

### **Hazardous Substances (Tracking) Regulations 2001**

Code TR1\* Regs 4(1), 5, 6 General tracking requirements

### **Hazardous Substances (Emergency Management) Regulations 2001**

Code EM1 Regs 6, 7, 9 – 11 Level 1 information requirements for suppliers and persons in charge

Code EM6 Reg 8(e) Information requirements for toxic substances

Code EM7 Reg 8(f) Information requirements for ecotoxic substances

Code EM8 Regs 12-16, 18-20 Level 2 information requirements for suppliers and persons in charge

Code EM11 Regs 25 – 34 Level 3 emergency management requirements: duties of person in charge, emergency response plans

Code EM12\* Regs 35 – 41 Level 3 emergency management requirements: secondary containment

Code EM13 Reg 42 Level 3 emergency management requirements: signage

### **Hazardous Substances (Identification) Regulations 2001**

Code I1 Regs 6, 7, 32–35, 36(1) – (7) Identification requirements, duties of persons in charge, accessibility, comprehensibility, clarity and durability

Code I3 Reg 9 Priority identifiers for ecotoxic substances

Code I8 Reg 14 Priority identifiers for toxic substances

Code I9 Reg 18 Secondary identifiers for all hazardous substances

Code I11 Reg 20 Secondary identifiers for ecotoxic substances

Code I16\* Reg 25 Secondary identifiers for toxic substances

Code I17 Reg 26 Use of generic names

Code I18 Reg 27 Requirements for using concentration ranges

Code I19 Regs 29 – 31 Additional information requirements, including situations where substances are in multiple packaging

Code I20 Reg 36(8) Durability of information for class 6.1 substances

Code I21 Regs 37-39, 47-50 General documentation requirements

Code I23 Reg 41 Specific documentation requirements for ecotoxic substances

Code I28 Reg 46 Specific documentation requirements for toxic substances

Code I29 Regs 51, 52 Signage requirements

Code I30 Reg 53 Advertising corrosive and toxic substances

### **Hazardous Substances (Tank Wagon and Transportable Containers) Regulations 2004**

#### **Controls for Stationary Container Systems**

These controls are set out in Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004\*

#### **HSNO regulations details:**

Details for the HSNO regulations relating to the control codes (unless otherwise changed as listed in Part B) are available in the *Compilation of Hazardous Substances Regulations and Controls* available at <http://www.ermanz.govt.nz/hs/hs-regulations.html>.

## Part B: Changes to Controls

The wording of the varied regulations given below may be different to that in the Hazardous Substances (Pesticides) Transfer Notice (*New Zealand Gazette*, Issue No. 72). This is because the varied regulations in the transfer notice are written to apply to more than one substance at a time. For this particular substance register entry (this document), the wording has been simplified to apply solely to this substance. Nonetheless, this simplification of the text has not changed the meaning or the requirements as they are set out in the Pesticides Transfer Notice.

**Code E7/AH1 Regulation 9 of the Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001**

*Regulation 9(1) is replaced by:*

- (1) *This hazardous substance must be under the personal control of an approved handler when the substance is—*
- (a) *applied in a wide dispersive manner; or*
  - (b) *used by a commercial contractor; or*
  - (c) *applied directly onto or into water.*

**Code TR1 Regulations 4 to 6 of the Hazardous Substances (Tracking) Regulations 2001**

*Regulations 4 to 6 are omitted for this substance.*

*This means that this substance does not need to be tracked.*

**Code EM1 Regulations 35-42 of the Hazardous Substances (Emergency Management) Regulations 2001**

*The following subclauses are added after subclause (3) of regulation 36:*

- (4) *For the purposes of this regulation, and regulations 37 to 40, where this substance is contained in pipework that is installed and operated so as to manage any loss of containment in the pipework it—*
- (a) *is not to be taken into account in determining whether a place is required to have a secondary containment system; and*
  - (b) *is not required to be located in a secondary containment system.*
- (5) *In this clause, pipework—*
- (a) *means piping that—*
    - (i) *is connected to a stationary container; and*
    - (ii) *is used to transfer a hazardous substance into or out of the stationary container; and*
  - (b) *includes a process pipeline or a transfer line.*

**Code I16 Regulation 25 of the Hazardous Substances (Identification) Regulations 2001**

*Regulation 25 applies as if the following were inserted after paragraph (f):*

- (g) *a warning of the effects of paresthesia and how to avoid it.*

**Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004**

*Clause 1: This clause applies as if the words “a hazardous substance described in Schedules 1 and 2” in subclause (1) was replaced by:*

*“this substance”.*

*Clause 100: This clause applies as if subclause (1) was replaced by:*

*(1) In this Part, existing stationary container system means a stationary container system to which this Schedule applies that, immediately before 1 July 2004,—*

*(a) was being used to contain this substance; or*

*(b) was designed to be used to contain this substance, and construction of the stationary container system to that design had commenced.*

**Exposure limits:**

**Code T1 Tolerable Exposure Limits:**

No tolerable exposure limit (TEL) is set for this substance at this time.

**Code E1 Environmental Exposure Limits :**

No environmental exposure limit (EEL) is set for this substance at this time. The default EELs given under regulation 32 are deleted.

**Code T2 Workplace Exposure Standards:**

*Under regulation 29(2) of the Hazardous Substance (Classes 6, 8, and 9 Controls) Regulations 2001, the Authority adopts as a workplace exposure standard for this substance, and each component of this substance, the value or values specified in the document described in “Workplace Exposure Standards”, published by the Occupational Safety and Health Service, Department of Labour, January 2002, ISBN 0-477-03660-0. Also available at [www.osh.govt.nz/order/catalogue/pdf/wes2002.pdf](http://www.osh.govt.nz/order/catalogue/pdf/wes2002.pdf).*

**Explanatory Note for Interpretation of Control Codes:**

**Code I16** This substance has an additional labeling requirement to warn of the effects of paresthesia and how to avoid it. This requirement will be met by a labeling statement such as “facial skin contact may cause temporary facial numbness”.

## APPENDIX 3: LIST OF REVISED CONTROLS PROPOSED FOR EMULSIFIABLE CONCENTRATE CONTAINING 50 G/LITRE ESFENVALERATE

**Table A3.1: Revised controls proposed for emulsifiable concentrate containing 50 g/litre esfenvalerate – codes, regulations and variations.**

Control Code <sup>4</sup>	Regulation <sup>5</sup>	Topic	Variations
<b>Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001</b>			
F2	8	General public transportation restrictions and requirements for all class 1 to 5 substances	Controls F2 and T7 are combined.
F6	60-70	Requirements to prevent unintended ignition of class 2.1.1, 2.1.2 and 3.1 substances	
F11	76	Segregation of incompatible substances	
<b>Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations 2001</b>			
T1	11-27	Limiting exposure to toxic substances	No TEL values are set at this time.
T2	29, 30	Controlling exposure in places of work	No WES values are set at this time.
T4, E6	7	Requirements for equipment used to handle hazardous substances	Controls T4 and E6 are combined.
T5	8	Requirements for protective clothing and equipment	
T7	10	Restrictions on the carriage of toxic or corrosive substance on passenger service vehicles	Controls F2 and T7 are combined.
E1	32-45	Limiting exposure to ecotoxic substances	No EEL values are set at this time and the default EELs are deleted.
E2	46-48	Restrictions on use within application area	As no EELs are set, no application rate is set at this time.
E3	49	Controls relating to protection of terrestrial invertebrates e.g. beneficial insects	
E5	6	Requirements for keeping records of use	
E7	9	Approved handler/security	This substance must be under the

<sup>4</sup> Note: The numbering system used in this column relates to the coding system used in the ERMA New Zealand Controls Matrix. This links the hazard classification categories to the regulatory controls triggered by each category. It is available from the ERMA New Zealand website [www.ermanz.govt.nz/resources](http://www.ermanz.govt.nz/resources) and is also contained in the ERMA New Zealand User Guide to the HSNO Control Regulations.

<sup>5</sup> These Regulations form the controls applicable to this substance. Refer to the cited Regulations for the formal specification, and for definitions and exemptions.

Control Code <sup>4</sup>	Regulation <sup>5</sup>	Topic	Variations
		requirements for certain toxic substances	personal control of an approved handler when the substance is: <ul style="list-style-type: none"> <li>a. Applied in a wide dispersive manner; or</li> <li>b. Used by a commercial contractor.</li> </ul>
<b>Hazardous Substances (Identification) Regulations 2001</b>			
I1	6, 7, 32-35, 36 (1)-(7)	General identification requirements  Regulation 6 – Identification duties of suppliers  Regulation 7 – Identification duties of persons in charge  Regulations 32 and 33 – Accessibility of information  Regulations 34, 35, 36(1)-(7) – Comprehensibility, Clarity and Durability of information	
I3	9	Priority identifiers for ecotoxic substances	
I5	11	Priority identifiers for flammable substances	
I8	14	Priority identifiers for toxic substances	
I9	18	Secondary identifiers for all hazardous substances	
I11	20	Secondary identifiers for ecotoxic substances	
I13	22	Secondary identifiers for flammable substances	
I16	25	Secondary identifiers for toxic substances	The following statement is to be inserted after paragraph (f): (g) a warning of the effects of paresthesia and how to avoid it.
I17	26	Use of Generic Names	
I18	27	Use of Concentration Ranges	
I19	29-31	Alternative information in certain cases  Regulation 29 – Substances in fixed bulk containers or bulk transport containers  Regulation 30 – Substances in multiple packaging  Regulation 31 – Alternative	

Control Code <sup>4</sup>	Regulation <sup>5</sup>	Topic	Variations
		information when substances are imported	
I20	36(8)	Durability of information for class 6.1 substances	
I21	37-39, 47-50	Documentation required in places of work  Regulation 37 – Documentation duties of suppliers  Regulation 38 – Documentation duties of persons in charge of places of work  Regulation 39 – General content requirements for documentation  Regulation 47 – Information not included in approval  Regulation 48 – Location and presentation requirements for documentation  Regulation 49 – Documentation requirements for vehicles  Regulation 50 – Documentation to be supplied on request	
I23	41	Specific documentation requirements for ecotoxic substances	
I25	43	Specific documentation requirements for flammable substances	
I28	46	Specific documentation requirements for toxic substances	
I29	51-52	Duties of persons in charge of places with respect to signage	
I30	53	Advertising corrosive and toxic substances	
<b>Hazardous Substances (Packaging) Regulations 2001</b>			
P1	5, 6, 7 (1), 8	General packaging requirements  Regulation 5 – Ability to retain contents  Regulation 6 – Packaging markings  Regulation 7(1) – Requirements when packing hazardous substance	

Control Code <sup>4</sup>	Regulation <sup>5</sup>	Topic	Variations
		Regulation 8 – Compatibility Regulation 9A and 9B – Large Packaging	
P3	9	Packaging requirements for substances packed in limited quantities	
P13, P15	19, 21	Packaging requirements for toxic and ecotoxic substances	Controls P13 and P15 are combined.
PG3	Schedule 3	The tests in Schedule 3 correlate to the packaging requirements of UN Packing Group III (UN PGIII).	
PS4	Schedule 4	This schedule describes the minimum packaging requirements that must be complied with when a substance is packaged in limited quantities	
<b>Hazardous Substances (Disposal) Regulations 2001</b>			
D2, D4, D5	6, 8, 9	Disposal requirements for flammable, toxic, corrosive and ecotoxic substances	Controls D2, D4 and D5 are combined.
D6	10	Disposal requirements for packages	
D7	11, 12	Disposal information requirements	
D8	13, 14	Disposal documentation requirements	
<b>Hazardous Substances (Emergency Management) Regulations 2001</b>			
EM1	6, 7, 9-11	Level 1 emergency management information: General requirements	
EM6	8(e)	Information requirements for toxic substances	
EM7	8(f)	Information requirements for ecotoxic substances	
EM8	12-16, 18-20	Level 2 emergency management documentation requirements	
EM9	17	Additional information requirements for flammable and oxidising substances and organic peroxides	
EM10	21-24	Fire extinguisher requirements	
EM11	25-34	Level 3 emergency management requirements – emergency response plans	
EM12	35-41	Level 3 emergency management requirements: secondary containment	The following subclauses shall be added after subclause (3) of regulation 36:  (4) For the purposes of this regulation, and regulations 37 to 40, where this substance is contained in pipework that is installed and operated so as to manage any

Control Code <sup>4</sup>	Regulation <sup>5</sup>	Topic	Variations
			<p>loss of containment in the pipework it—</p> <p>(a) is not to be taken into account in determining whether a place is required to have a secondary containment system; and</p> <p>(b) is not required to be located in a secondary containment system.</p> <p>(5) In this clause, pipework—</p> <p>(a) means piping that—</p> <p>(i) is connected to a stationary container; and</p> <p>(ii) is used to transfer a hazardous substance into or out of the stationary container; and</p> <p>(b) includes a process pipeline or a transfer line.</p>
EM13	42	Level 3 emergency management requirements – signage	
<b>Hazardous Substances (Personnel Qualifications) Regulations 2001</b>			
AH1	4-6	Approved handler requirements (including test certificate and qualification requirements)	Refer to control E7
<b>Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004</b>			
Regulations 4 to 43 where applicable		The Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004 prescribe a number of controls relating to tank wagons and transportable containers and must be complied with as relevant.	
<b>Section 77 and 77A Additional Controls</b>			
The controls relating to stationary container systems, secondary containment and unintended ignition of flammable substances, as set out in Schedules 8, 9 and 10 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 (Supplement to the <i>New Zealand Gazette</i> , 26 March 2004, No. 35, page 767), as amended, shall apply to this substance, notwithstanding clause 1(1) of Schedules 8 and 9 and clause 1 of Schedule 10.			
Addition of subclauses after subclause (3) of Regulation 36 of the Hazardous Substances (Emergency Management) Regulations 2001, refer control EM12.			
This substance may not be applied onto or into water.			

# **APPENDIX 4: GOVERNMENT DEPARTMENTS, CROWN ENTITIES AND INTERESTED PARTIES NOTIFIED**

Aakland Chemicals (1997) Limited  
AgBio Research Limited  
Agcarm Incorporated  
AgResearch Limited  
Agronica New Zealand Limited  
AR and JA Drysdale Limited  
ARPPA  
BALDWINS  
BASF New Zealand Limited  
Bayer New Zealand Limited  
BOC Limited  
Chancery Green  
Chemagro New Zealand Limited  
Chemsafety Limited  
Crown Public Health  
DuPont (New Zealand) Limited  
Far North District Council  
Federated Farmers of New Zealand (Incorporated)  
Fish and Game Eastern Region  
Fruitfed Supplies Limited (PGG Wrightson Ltd)  
Grayson Wagner Company Ltd  
Greater Wellington - The Regional Council  
Green Party of Aotearoa New Zealand  
Hawkes Bay Regional Council  
Hawkes Bay Regional Council  
IMCD New Zealand Limited  
IPM Research Ltd  
Kaipara District Council  
Kawerau District Council  
Landcorp Farming Limited  
Lowndes Associates  
MAF Biosecurity New Zealand (MAFBNZ)  
Ministry of Research Science and Technology (MoRST)  
Napier Health Centre - Public Health Unit  
National Beekeepers Association  
New Zealand Bee Industry Group - Federated Farmers  
New Zealand Chemical Industry Council Inc  
New Zealand Customs Service  
New Zealand Meatworkers Union  
New Zealand Press Association  
New Zealand Society of Gunsmiths Inc  
Ngati Kahungunu Iwi Incorporated  
Northland District Health Board  
Northland Regional Council  
Nufarm New Zealand Limited  
Nufarm New Zealand Limited  
Pacific Building Steel Group  
Pacific Growers Supplies Limited  
Pesticide Action Network Aotearoa New Zealand  
PharmVet Solutions

Physicians and Scientists for Global Responsibility (PSGR)  
Rangitikei District Council  
Reckitt Benckiser  
Selleys Pty Ltd (ORICA)  
Sigma Aldrich  
South Taranaki District Council  
Sustainability Council of New Zealand  
Syngenta Crop Protection Limited  
Taranaki Regional Council  
Tasman District Council  
Taupo District Council  
Technical Strategy Group Limited  
Television New Zealand  
The National Beekeepers Association of New Zealand  
The New Zealand Institute for Plant and Food Research Limited (Auckland)  
The New Zealand Institute for Plant and Food Research Limited (Motueka)  
TMP Consultancy  
Zelam Limited  
7 individuals

# **APPENDIX 5: CONFIDENTIAL INFORMATION**