

ENVIRONMENTAL RISK MANAGEMENT AUTHORITY

THE BULLETIN

The Bulletin is published eleven times per year. It is a listing of applications being processed and the Authority's decisions as well as other activities under the Hazardous Substances and New Organisms (HSNO) Act. The public register is the official record of all applications received and any controls attached to approvals and may be viewed at our Wellington office. Alternatively, you may view the applications and associated documents on the ERMA New Zealand website: www.ermanz.govt.nz

NEW ORGANISMS

NOTIFIED APPLICATIONS RECEIVED AND OPEN FOR SUBMISSIONS

The applications in the Bulletin are for reference only. Our public notification process includes alerts in four main daily newspapers with full information and submission forms available on our website.

To ensure that you are advised directly about applications open for public submission contact us at info@ermanz.govt.nz to be added to our interested party list. You will need to nominate the types of applications that you are interested in.

There are currently no notified applications open for submission

NON-NOTIFIED APPLICATIONS RECEIVED

Applicant: Wellington Zoo Trust

Application Code: NOC04020

Purpose: Importation of Leopard (*Panthera pardus*) into containment at Wellington Zoo (and potentially other Leopard into other zoos in the future) to contribute to conservation through exhibition, and possible future captive breeding

Date Formally Received: 08 February 2005

- ¹ Bold headings refer to matters to be addressed by containment controls for new organisms excluding genetically modified organisms, specified in the Third Schedule (Part II) of the HSNO Act 1996.
- ² Viable Genetic Material is biological material that can be resuscitated to grow into tissues or organisms. It can be defined to mean biological material capable of growth even though resuscitation procedures may be required, eg when organisms or parts thereof are sublethally damaged by being frozen, dried, heated, or affected by chemical.

Please feel free to photocopy this material. Acknowledgement of ERMA New Zealand would be appreciated.

ERMA NEW ZEALAND

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DECISIONS ON APPLICATIONS

Applicant: Auckland Zoological Park

Application Code: NOC04014

Purpose: Importation of 20 Superb Starlings *Lamprotornis superbus* into containment at Auckland Zoo for demonstration of avian biodiversity and principles of conservation through exhibition to the public

Decision Notified: 04 February 2005

Description of Organisms: *Lamprotornis superbus* Rueppell 1845 (Aves: Sturnidae)

Decision: Approved with Controls

ERMA Approval Code: NOC002380

Controls:

In order to satisfactorily address the matters detailed in the *Third Schedule Part II: Containment controls for new organisms excluding genetically modified organisms*¹ of the Act, and other matters in order to give effect to the purpose of the Act, the approved organisms are subject to the following controls:

- To limit the likelihood of any accidental release of any organism or any viable genetic material²:**
 - 1.1 The approved organisms shall be imported into, and maintained within a containment facility which complies with these controls.

1.2 The construction, operation, and management of the zoo animals containment facility shall be in accordance with the MAF/ERMA New Zealand Standard 154.03.04: *Containment Facilities For Zoo Animals*.

1.3 The person responsible for the operation of the containment facility shall inform all personnel involved in the handling of the organisms of the Authority's controls.

1.4 The containment facility shall be approved by Ministry of Agriculture and Forestry (MAF), in accordance with section 39 of the Biosecurity Act and the MAF/ERMA New Zealand Standard 154.03.04: *Containment Facilities For Zoo Animals*.

2. To exclude unauthorised people from the facility:

2.1 The identification of entrances, numbers of and access to entrances, and the security requirements for the entrances and the facility shall be in compliance with the standards listed in Control 1.2 of this document.

3. To control the effects of any accidental release or escape of an organism:

3.1 Construction and operation of the containment facility shall comply with the requirements of the standards listed in control 1.2 relating to the control of the effects of any accidental release or escape of an organism.

3.2 If for any reason a breach of containment occurs the facility Supervisor³, MAF Biosecurity Authority and ERMA New Zealand shall be notified promptly as soon as is practicable after the event is noticed.

3.3 In the event of any breach of containment of the organism, the contingency plan for the attempted retrieval or destruction of any viable material of the organism that has escaped shall be implemented immediately. The contingency plan shall be included in the containment manual in accordance with the requirements of standards listed in Control 1.2.

3.4 The applicant shall comply with the requirements of the standards listed in control 1.2 listed above relating to the maintenance of records demonstrating compliance with the MAF/ERMA New Zealand Standard 154.03.04: *Containment Facilities For Zoo Animals*, as required by the quality assurance programme, and documented in the containment manual.

4. Inspection and monitoring requirements for containment facilities:

4.1 The inspection and monitoring requirements for

the containment facility shall be in compliance with the standards listed in control 1.2 of this document.

4.2 The Authority, or its authorised agent or properly authorised enforcement officers, may inspect the facilities at any reasonable time.

4.3 The containment manuals shall be updated, as necessary, to address the implementation of the controls imposed by this approval, in accordance with the MAF/ERMA New Zealand Standard 154.03.04: *Containment Facilities For Zoo Animals*.

5. Qualifications required of the persons responsible for implementing these controls:

5.1 The training of personnel working in the facility shall be in compliance with the standards listed in Control 1.2.

6. Additional controls:

6.1 Only those superb starlings that are bred in captivity shall be imported into containment. Evidence to this effect shall be supplied to MAF as part of this process (for example statements from breeders that supply birds).

6.2 While in containment superb starlings shall not be displayed in free flight⁴.

6.3 The operation manual of the Auckland Zoo or any other containment facility where superb starlings are to be contained shall have detailed in their containment manual procedures for managing superb starlings in containment.

6.4 Any user of this approval must notify ERMA New Zealand of their intention to do so.

Applicant: Horticulture and Food Research Institute (HortResearch Auckland)

Application Code: GMD04110

Purpose: Modification of the apple scab fungus (*Venturia inaequalis*) to determine specificity of apple disease resistance and virulence determinants in the fungus. This will assist development of sustainable control strategies for the apple industry

Decision Notified: 18 February 2005

Description of Organisms: *Venturia inaequalis* (Cooke) G. Winter, genetically modified by plasmid vectors containing selectable markers, reporter genes and/or sequences from *V. inaequalis* putative elicitor genes to induce gene silencing or gene disruption (targeted and random).

Decision: Approved with Controls

ERMA Approval Code: GMD003553

Controls:

In order to satisfactorily address the matters detailed in the Third Schedule Part I: Matters to be Addressed by Containment Controls for Development and Field Testing of Genetically Modified Organisms⁵ of the Act, and other matters in order to give effect to the purpose of the Act (section 45(2)), the approved organism is subject to the following controls:

1. To limit the likelihood of any accidental release of any organism or any viable genetic material⁶:

1.1 The approved organisms shall be developed in, and maintained within a containment facility which complies with these controls.

1.2 The containment facility shall be approved by the Ministry of Agriculture and Forestry (MAF), in accordance with section 39 of the Biosecurity Act and the MAF/ERMA New Zealand Standard 154.03.02: *Containment Facilities for Microorganisms*.

1.3 The construction, operation, and management of the microorganism containment facility shall be in accordance with the:

- a) Ministry of Agriculture and Forestry (MAF)/ERMA New Zealand Standard 154.03.02: *Containment Facilities for Microorganisms*.
- b) Australian New Zealand Standard AS/NZS 2243:3 2002 Safety in Laboratories: Part 3: (*Microbiological aspects and containment facilities*), excluding those deviations specified in section 4.2 of Standard 154.03.02.
- c) Physical Containment Level 2 (PC2) requirements of the above Standards.

1.4 The person responsible for a particular research area and/or the person responsible for the operation of the containment facilities ('the facility') shall inform all personnel involved in the handling of the organisms of the Authority's controls.

2. To exclude unauthorised people from the facility:

2.1 The identification of entrances, numbers of and access to entrances, and security requirements for the entrances and the facility shall be in compliance with the requirements of the standards listed in control 1.3.

3. To exclude other organisms from the facility and to control undesirable and unwanted organisms within the facility:

3.1 The exclusion of other organisms from the facility and the control of undesirable and unwanted organisms within the facility shall be in compliance with the standards listed in control 1.3.

4. To prevent unintended release of the organism by experimenters working with the organism:

4.1 The prevention of unintended release of the organisms by experimenters working with the organisms shall be in compliance with the standards listed in control 1.3.

5. To control the effects of any accidental release or escape of an organism:

5.1 Control of the effects of any accidental release or escape of the organisms shall be in compliance with the standards listed in control 1.3.

5.2 In the event of any breach of containment the contingency plan for the attempted retrieval or destruction of any viable material of the organisms that have escaped shall be implemented immediately. The contingency plan shall be included in the containment manual in accordance with the Standards.

5.3 If for any reason a breach of containment occurs the facility Supervisor, MAF and ERMA New Zealand shall be notified immediately (and at least within 24 hours of the breach being detected).

6.0 Inspection and monitoring requirements for containment facilities:

6.1 The inspection and monitoring requirements for containment facilities shall be in compliance with the standards listed in control 1.3.

6.2 The Authority, or its authorised agent or properly authorised enforcement officers, may inspect the facilities at any reasonable time.

7. Qualifications required of the persons responsible for implementing those controls:

7.1 The training of personnel working in the facility shall be in compliance with the standards listed in control 1.3.

8. Additional Control

8.1 All fungal manipulations will be carried out using a class II biological safety cabinet to prevent the release of airborne spores to the environment.

³ An inspector appointed under the Biosecurity Act.

⁴ A free flight aviary is a very large enclosure covered with netting which allows the birds to fly freely as people walk through the enclosure.

⁵ Bold headings refer to matters to be addressed by containment controls for new organisms excluding genetically modified organisms, specified in the Third Schedule (Part II) of the HSNO Act 1996.

⁶ Viable Genetic Material is biological material that can be resuscitated to grow into tissues or organisms. It can be defined to mean biological material capable of growth even though resuscitation procedures may be required, eg when organisms or parts thereof are sublethally damaged by being frozen, dried, heated, or affected by chemical.

Applicant: Environment Canterbury**Application Code: NOR03001**

Purpose: Import for release a South African moth, the boneseed leafroller (*Tortrix s.l.* sp. 'chrysanthemoides'), which is a new organism, for the purpose of biological control of boneseed (*Chrysanthemoides monilifera* subsp. *monilifera*)

Decision Notified: 18 February 2005

Description of Organisms: *Tortrix* Linnaeus, 1758 *s.l.* sp. 'chrysanthemoides'

Decision: Approved

ERMA Approval Code: NOR000009

Applicant: Hahei Plants**Application Code: S2604019**

Purpose: To determine the new organism status of cactus, *Hylocereus trigonus* under section 26 of the Hazardous Substances and New Organisms Act 1996

Decision Notified: 28 February 2005

Description of Organisms:

Genus	Species	Botanical Authority	Year	Synonym of
Hylocereus	<i>trigonus</i>	Haw.) Saff.	1909	<i>Hylocereus trigonus</i>
Cereus	<i>plumieri</i>	Roland-Gosselin	1907	<i>Hylocereus trigonus</i>
Cereus	<i>napoleonis</i>	Graham	1836	<i>Cereus napoleonis</i>
Hylocereus	<i>napoleonis</i>	(Graham) Britton & Rose	1909	<i>Cereus plumieri</i>
Hylocereus	<i>plumieri</i>	Roland-Gosselin	1991	<i>Hylocereus trigonus</i>
Hylocereus	<i>antiguensis</i>	Britton & Rose	1920	<i>Hylocereus trigonus</i>
Mediocactus	<i>pomifer</i>	(Weingart) Backeberg	1959	<i>Hylocereus trigonus</i>
Cereus	<i>trigonus</i>	Haw.	1812	<i>Hylocereus trigonus</i>

DELEGATED AUTHORITY

The Chief Executive of the Environmental Risk Management Authority, acting under delegated power from the Authority, reached a decision on the following applications:

Applicant: Malaghan Institute of Medical Research**Application Code: GMC05001**

Purpose: Importation of Bacteriophage lambda containing cDNA from the nematode *Nippostrongylus brasiliensis* for therapeutic vaccine research

Decision Notified: 8 February 2005

Decision: Approved with Controls

Description of Organisms:

Host Organism	Category of host organism	As modified by	Category of genetic modification	Containment level
Bacteriophage lambda ⁷	1	cDNA insert from <i>Nippostrongylus brasiliensis</i> .	A	PC1

ERMA Approval Code: GMC001254**Controls:**

The Third Schedule of the HSNO Act 1996, Part I, identifies Matters to be Addressed by Containment Controls for Importation, Development and Field Testing of Genetically Modified Organisms.

1. To limit the likelihood of any accidental release of any organism or any viable genetic material⁸:

1.1 The person responsible for a particular research area and/or the person responsible for the operation of the containment facilities ('the facility') shall inform all personnel involved in the handling of the organisms of the Authority's controls.

1.2 The containment facilities shall be approved by the Ministry of Agriculture and Forestry (MAF) to a minimum of conditions for physical containment described as Physical Containment Level 1 (PC1) in the Australia / New Zealand containment standard 2243.3:2002 (*Safety in Laboratories Part 3: Microbiological Aspects and Containment Facilities*) and the modifications referred to in the MAF Biosecurity Authority/ERMA New Zealand Standard 154.03.02: *Containment Facilities for Microorganisms*.

2. To exclude unauthorised people from the facility:

2.1 The identification of entrances, numbers of and access to entrances, and security requirements for the entrances and the facility shall be in compliance with the requirements of the standard listed in control 1.2 of this document.

3. To exclude other organisms from the facility and to control undesirable and unwanted organisms within the facility:

3.1 The exclusion of other organisms from the facility and the control of undesirable and unwanted organisms within the facility shall be in compliance with the standard listed in control 1.2 of this document.

⁷ ICTV approved name is Enterobacteria phage λ

⁸ Viable genetic material is biological material that can be resuscitated to grow into tissues or organisms. It can be defined to mean biological material capable of growth even though resuscitation procedures may be required, eg when organisms or parts thereof are sublethally damaged by being frozen, dried, heated, or affected by chemical.

4. To prevent unintended release of the organism by experimenters working with the organism:

4.1 The prevention of unintended release of the organisms by experimenters working with the organisms shall be in compliance with the standard listed in control 1.2 of this document.

5. To control the effects of any accidental release or escape of an organism:

5.1 Control of the effects of any accidental release or escape of the organisms shall be in compliance with the standard listed in control 1.2 of this document.

5.2 In the event of any breach of containment the contingency plan for the attempted retrieval or destruction of any viable material of the organisms that have escaped shall be implemented immediately. The contingency plan shall be included in the containment manual in accordance with the Standards.

5.3 If for any reason a breach of containment occurs the facility Supervisor, MAF Biosecurity Authority and ERMA New Zealand shall be notified immediately (and at least within 24 hours of the breach being detected).

6. Inspection and monitoring requirements for containment facilities:

6.1 The inspection and monitoring requirements for containment facilities shall be in compliance with the standard listed in control 1.2 of this document.

6.2 The Authority, or its authorised agent or properly authorised enforcement officers, may inspect the facilities at any reasonable time.

7. Qualifications required of the persons responsible for implementing those controls:

7.1 The training of personnel working in the facility shall be in compliance with the standard listed in control 1.2 of this document.

Applicant: Malaghan Institute of Medical Research**Application Code: GMD04132**

Purpose: Cloning and expression of recombinant nematode enzymes in *Escherichia coli*, *Pichia pastoris* and *Saccharomyces cerevisiae* for therapeutic vaccine development

Decision Notified: 8 February 2005

Decision: Approved with Controls

Description of Organisms:

Host Organism	Category of host organism	Genetic Modification	Category of genetic modification	Containment level
<i>Escherichia coli</i> (Migula 1895) Castellani & Chalmers 1919 non-pathogenic laboratory strains	1	Bacteriophage lambda vector systems or standard non-conjugative cloning or expression plasmid vectors containing cDNA derived from <i>Nippostrongylus brasiliensis</i> .	A	PC1
<i>Pichia pastoris</i> Hansen 1904	1	Standard non-conjugative expression plasmid vectors containing cDNA derived from <i>Nippostrongylus brasiliensis</i> .	A	PC1
<i>Saccharomyces cerevisiae</i> Hansen 1883	1		A	PC1

ERMA Approval Code: GMD003545 - 547

Controls:

The Third Schedule of the HSNO Act 1996, Part I, identifies Matters to be Addressed by Containment Controls for Development and Field Testing of Genetically Modified Organisms.

1. **To limit the likelihood of any accidental release of any organism or any viable genetic material⁹:**
 - 1.1 The person responsible for a particular research area and/or the person responsible for the operation of the containment facilities ('the facility') shall inform all personnel involved in the handling of the organisms of the Authority's controls.
 - 1.2 The containment facilities shall be approved by the Ministry of Agriculture and Forestry (MAF) to a minimum of conditions for physical containment described as Physical Containment Level 1 (PC1) in the Australia / New Zealand containment standard 2243.3:2002 (Safety in Laboratories Part 3: *Microbiological Aspects and Containment Facilities*) and the modifications referred to in the MAF Biosecurity Authority/ERMA New Zealand Standard 154.03.02: *Containment Facilities for Microorganisms*.

2. To exclude unauthorised people from the facility:

- 2.1 The identification of entrances, numbers of and access to entrances, and security requirements for the entrances and the facility shall be in compliance with the requirements of the standard listed in control 1.2 of this document.
3. **To exclude other organisms from the facility and to control undesirable and unwanted organisms within the facility:**
 - 3.1 The exclusion of other organisms from the facility and the control of undesirable and unwanted organisms within the facility shall be in compliance with the standard listed in control 1.2 of this document.
4. **To prevent unintended release of the organism by experimenters working with the organism:**
 - 4.1 The prevention of unintended release of the organisms by experimenters working with the organisms shall be in compliance with the standard listed in control 1.2 of this document.
5. **To control the effects of any accidental release or escape of an organism:**
 - 5.1 Control of the effects of any accidental release or escape of the organisms shall be in compliance with the standard listed in control 1.2 of this document.

⁹ Viable genetic material is biological material that can be resuscitated to grow into tissues or organisms. It can be defined to mean biological material capable of growth even though resuscitation procedures may be required, eg when organisms or parts thereof are sublethally damaged by being frozen, dried, heated, or affected by chemical.

- 5.2 In the event of any breach of containment the contingency plan for the attempted retrieval or destruction of any viable material of the organisms that have escaped shall be implemented immediately. The contingency plan shall be included in the containment manual in accordance with the Standards.
- 5.3 If for any reason a breach of containment occurs the facility Supervisor, MAF Biosecurity Authority and ERMA New Zealand shall be notified immediately (and at least within 24 hours of the breach being detected).
6. **Inspection and monitoring requirements for containment facilities:**
 - 6.1 The inspection and monitoring requirements for containment facilities shall be in compliance with the standard listed in control 1.2 of this document.
 - 6.2 The Authority, or its authorised agent or properly authorised enforcement officers, may inspect the facilities at any reasonable time.
7. **Qualifications required of the persons responsible for implementing those controls:**
 - 7.1 The training of personnel working in the facility shall be in compliance with the standard listed in control 1.2 of this document.

The following applications were decided by institutions acting under delegated powers from the Authority.

Applicant: AgResearch Limited

Institute Code: GMO05/ARW029

Application Code: GMD05025

Purpose: To improve sheep and cattle health by cloning cDNAs encoding proteins of sheep, cow, mouse, rabbit and alpaca, and also peptides identified by phage display that may play important roles in sheep and cattle immunity to nematode infection

Decision Notified: 15 February 2005

Description of Organism: M13 phage

M13 phage modified with synthetic DNA encoding peptides or DNA or cDNAs sourced from sheep, cow, mouse, rabbit or alpaca species, and specifically excluding DNA from humans and native fauna and flora

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003576

Applicant: Massey University

Institute Code: GMO04/MU026

Application Code: GMC05004

Purpose: To import fission yeast, *Schizosaccharomyces pombe*, for studies of cell division

Decision Notified: 28 January 2005

Description of Organism: *Schizosaccharomyces pombe*

Schizosaccharomyces pombe modified with integrative and non-integrative vectors containing eukaryotic DNA encoding proteins involved in regulation of the cell cycle and cell division except DNA from humans or human cell lines, New Zealand native macroflora and macrofauna (including fungi), species endemic to New Zealand, organisms capable of causing disease in humans, animals, plants or fungi. Sequences coding for any known pathogenicity traits, including vertebrate toxins, will not be used

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMC001255

Applicant: Massey University

Institute Code: GMO04/MU021

Application Code: GMD05015

Purpose: To characterise the control and mechanisms of mitosis and cytokinesis in the fission yeast, *Schizosaccharomyces pombe*

Decision Notified: 28 January 2005

Description of Organism: *Escherichia coli* (Migula 1895) Castellani & Chalmers 1919

Escherichia coli (non-pathogenic strains) modified with plasmid vectors containing genes from eukaryotes that regulate mitosis and cytokinesis and/or reporter genes/selectable marker genes except DNA from: humans or human cell lines, New Zealand native macroflora and macrofauna (including fungi), species endemic to New Zealand, organisms capable of causing disease in humans, animals, plants or fungi. Sequences coding for any known pathogenicity traits, including vertebrate toxins, will not be used

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003548

Description of Organism:

Schizosaccharomyces pombe

Schizosaccharomyces pombe modified with plasmid vectors containing genes from eukaryotes that regulate mitosis and cytokinesis and/or reporter genes/selectable marker genes except DNA from: humans or human cell lines, New Zealand native macroflora and macrofauna (including fungi), species endemic to New Zealand, organisms capable of causing disease in humans, animals, plants or fungi. Sequences coding for any known pathogenicity traits, including vertebrate toxins, will not be used

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003549

Applicant: Massey University

Institute Code: GMO04/MU022

Application Code: GMD05016

Purpose: To identify genes that are either receptors for one of the environmental signals that trigger dimorphism or are involved in metabolism of the signal molecule. Update of GMO02/MU015

Decision Notified: 28 January 2005

Description of Organism: *Candida albicans*

Candida albicans modified with integrative vectors or nucleic acids containing *Candida albicans* and *Saccharomyces cerevisiae* genes and DNA

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003550

Description of Organism: *Escherichia coli* (Migula 1895) Castellani & Chalmers 1919

Escherichia coli (non-pathogenic strains) modified with non-conjugative vectors that may contain *Candida albicans* genes encoding nutrient sensors, transporters, sugar signal transduction pathways and

enzymes involved in sugar metabolism

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003551

Description of Organism: *Saccharomyces cerevisiae* Hansen 1883

Saccharomyces cerevisiae modified with integrative and non-integrative yeast cloning, swap and expression vectors that may contain *Candida albicans* genes encoding nutrient sensors, transporters, sugar signal transduction pathways and enzymes involved in sugar metabolism

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003552

Applicant: Massey University

Institute Code: GMO04/MU024

Application Code: GMD05019

Purpose: Molecular characterisation of *Lactococcal* bacteriophage replication. Update of GMO99/MU014

Decision Notified: 18 December 2004

Description of Organism: *Escherichia coli* (Migula 1895) Castellani & Chalmers 1919

Escherichia coli (K12 and B derivatives) modified with non-conjugative vectors containing the *Lactococcal* bacteriophage DNA and *Lactococcus lactis* DNA

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003554

Description of Organism: *Lactococcus lactis* *Lactococcus lactis* modified with non-conjugative vectors containing the *Lactococcal* bacteriophage DNA and *Lactococcus lactis* DNA

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003555

Applicant: Massey University

Institute Code: GMO04/MU025

Application Code: GMD05020

Purpose: Molecular cloning and purification of Streptococcal and *Lactococcal* surface proteins in *Escherichia coli*. Update of GMO99/MU060

Decision Notified: 16 December 2004

Description of Organism: *Escherichia coli* (Migula 1895) Castellani & Chalmers 1919

Escherichia coli (K12 and B derivatives) modified with non-conjugative vectors containing *Lactococcus lactis*, *Streptococcus pyogenes*, *Streptococcus mutans* and Ff bacteriophage DNA

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003556

Applicant: New Zealand Institute for Crop & Food Research Limited

Institute Code: GMO04/CFP004

Application Code: GMD05021

Purpose: Transgenic plants will be generated and used as systems for the study of structural and storage carbohydrate synthesis and modification

Decision Notified: 21 January 2005

The following approved organisms are modified with:

Modification: non-conjugative cloning and expression plasmid vectors containing DNA from plants, bacteria or fungi, encoding structural or regulatory genes for carbohydrate biosynthesis and modification.

Inserted constructs may include:

1. promoter and terminator sequences
2. reporter genes
3. selectable marker genes
4. origins of replication
5. multiple cloning sites
6. polyadenylation signals
7. transcription activators, enhancers, responsive elements, receptor elements

8. intron sequences

Excluding:

- any human-derived genetic material.
- genetic material from New Zealand native faun and/or flora.
- sequences known to produce particles infectious to humans, animals or plants.
- uncharacterised nucleic acid sequences from pathogenic micro-organisms.
- genetic material from species covered under the relevant CITES agreements.
- genes coding for proteins known to present a vertebrate disease or toxin risk.

Genomic DNA or cDNA libraries in *Escherichia coli*, phage or yeast may be created from sequences obtained from plants, fungi or bacteria.

Description of Organism: *Solanum tuberosum* L. (tissue cultures) modified

Containment: PC1

Category: A

Solanum tuberosum L. (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003636

Description of Organism: *Petunia hybrida* ('Mitchell' tissue cultures) modified

Containment: PC1

Category: A

Petunia hybrida ('Mitchell' whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003632

Description of Organism: *Agrobacterium tumefaciens* (Smith & Townsend 1907) Conn 1942 (disarmed strains) modified

Containment: PC1

Category: A

Agrobacterium tumefaciens (Smith & Townsend 1907) Conn 1942 (armed

strains) modified
Containment: PC2
Category: B
Decision: Approved with Controls
ERMA Approval Code: GMD003558

Description of Organism: *Allium cepa* L (tissue cultures) modified
Containment: PC1
Category: A
Allium cepa L. (whole plants) modified
Containment: PC2
Category: B
Decision: Approved with Controls
ERMA Approval Code: GMD003559

Description of Organism: *Arabidopsis thaliana* (L.) Heynh (Conn 1842)(tissue cultures) modified
Containment: PC1
Category: A
Arabidopsis thaliana (L.) Heynh (Conn 1842) (whole plants) modified
Containment: PC2
Category: B
Decision: Approved with Controls
ERMA Approval Code: GMD003560

Description of Organism: *Asparagus officinalis* L (tissue cultures) modified
Containment: PC1
Category: A
Asparagus officinalis L. (whole plants) modified
Containment: PC2
Category: B
Decision: Approved with Controls
ERMA Approval Code: GMD003561

Description of Organism: *Brassica oleracea* var. italica (tissue cultures) modified
Containment: PC1
Category: A
Brassica oleracea var.italica (whole plants) modified
Containment: PC2

Category: B
Decision: Approved with Controls
ERMA Approval Code: GMD003562

Description of Organism: *Lycopersicon esculentum* (tissue cultures) modified
Containment: PC1
Category: A
Lycopersicon esculentum (whole plants) modified
Containment: PC2
Category: B
Decision: Approved with Controls
ERMA Approval Code: GMD003564

Description of Organism: *Nicotiana benthamiana* (tissue cultures) modified
Containment: PC1
Category: A
Nicotiana benthamiana (whole plants) modified
Containment: PC2
Category: B
Decision: Approved with Controls
ERMA Approval Code: GMD003565

Description of Organism: *Nicotiana tabacum* (tissue cultures) modified
Containment: PC1
Category: A
Nicotiana tabacum (whole plants) modified
Containment: PC2
Category: B
Decision: Approved with Controls
ERMA Approval Code: GMD003566

Description of Organism: *Saccharomyces cerevisiae* Hansen 1883 modified
Containment: PC1
Category: A
Decision: Approved with Controls
ERMA Approval Code: GMD003635

Description of Organism: *Pichia pastoris* modified
Containment: PC1
Category: A
Decision: Approved with Controls
ERMA Approval Code: GMD003633

Description of Organism: *Rhizobium rhizogenes* modified
Containment: PC2
Category: B
Decision: Approved with Controls
ERMA Approval Code: GMD003634

Description of Organism: *Escherichia coli* (Migula 1895) Castenellani & Chalmers 1919 (K12 or B derivatives containing non-conjugative plasmids) modified
Containment: PC1
Category: A
Decision: Approved with Controls
ERMA Approval Code: GMD003563

Applicant: New Zealand Institute for Crop & Food Research Limited

Institute Code: GMO04/CFP003

Application Code: GMD05022

Purpose: To develop plants with modified pigment pathways to be used in research on understanding plant pigment biosynthesis and accumulation and potentially to generate new varieties of crop plants with modified colour, health or nutritional properties

Decision Notified: 21 January 2005

The following approved organisms are modified with:

Modification: modified with non-conjugative cloning and expression plasmid vectors containing DNA from plants, and pigment producing bacteria or fungi, encoding structural or regulatory genes for pigment biosynthesis or accumulation.

Inserted constructs may include:

1. promoter and terminator sequences
2. reporter genes
3. selectable marker genes
4. origins of replication

5. multiple cloning sites
6. polyadenylation signals
7. transcription activators, enhancers, responsive elements, receptor elements
8. intron sequences

Excluding:

- any human-derived genetic material.
- genetic material from New Zealand native fauna and/or flora.
- sequences known to produce particles infectious to humans, animals or plants.
- uncharacterised nucleic acid sequences from pathogenic micro-organisms.
- genetic material from species covered under the relevant CITES agreements.
- genes coding for proteins known to present a vertebrate disease or toxin risk.

Genomic DNA or cDNA libraries in *Escherichia coli*, phage or yeast may be created from sequences obtained from plants, fungi or bacteria

Description of Organism: *Agrobacterium rhizogenes* (Riker et al. 1930) Conn 1942 modified
Containment: PC2
Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003585

Description of Organism: *Agrobacterium tumefaciens* (Smith & Townsend 1907) Conn 1942 (disarmed non-pathogenic strains) modified
Containment: PC1
Category: A
Agrobacterium tumefaciens (armed strains) modified
Containment: PC2
Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003586

Description of Organism: *Anthurium andraeanum* (tissue cultures) modified

Containment: PC1

Category: A

Anthurium andraeanum (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003587

Description of Organism: *Antirrhinum* spp (tissue cultures) modified

Containment: PC1

Category: A

Antirrhinum spp (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003588

Description of Organism: *Arabidopsis thaliana* (L.) Heynh (1842) (tissue cultures) modified

Containment: PC1

Category: A

Arabidopsis thaliana (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003589

Description of Organism: *Bambusa* spp. modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003590

Description of Organism: *Bougainvillea* spp.(and hybrids) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003591

Description of Organism: *Chrysanthemum* spp (tissue cultures) modified

Containment: PC1

Category: A

Chrysanthemum spp (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003592

Description of Organism: *Cyclamen persicum* (tissue cultures) modified

Containment: PC1

Category: A

Cyclamen persicum (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003593

Description of Organism: *Cymbidium* spp (hybrids and tissue cultures) modified

Containment: PC1

Category: A

Cymbidium spp (hybrids and whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003594

Description of Organism: *Daucus carota* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003595

Description of Organism: *Dendrobium* spp (hybrids and tissue cultures) modified

Containment: PC1

Category: A

Dendrobium spp (hybrids and whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003596

Description of Organism: *Dendrocalamus* spp. modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003597

Description of Organism: *Dianthus carophyllus* (hybrids and tissue cultures) modified

Containment: PC1

Category: A

Dianthus carophyllus (hybrids and whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003598

Description of Organism: *Escherichia coli* (Migula 1895) Castellani & Chalmers 1919 (K12 or B derivatives) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003599

Description of Organism: *Euphorbia pulcherrima* (tissue cultures) modified

Containment: PC1

Category: A

Euphorbia pulcherrima (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003600

Description of Organism: *Eustoma grandiflorum* (tissue cultures) modified

Containment: PC1

Category: A

Eustoma grandiflorum (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003601

Description of Organism: *Fragaria Xananassa* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003602

Description of Organism: *Lycopersicon esculentum* (tissue cultures) modified

Containment: PC1

Category: A

Lycopersicon esculentum (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003603

Description of Organism: *Nicotiana benthamiana* (tissue cultures) modified

Containment: PC1

Category: A

Nicotiana benthamiana (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003604

Description of Organism: *Nicotiana tabacum* (tissue cultures) modified

Containment: PC1

Category: A

Nicotiana tabacum (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003605

Description of Organism: *Oryza sativa* modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003606

Description of Organism: *Pelargonium* spp (hybrids and tissue cultures) modified

Containment: PC1

Category: A

Pelargonium spp (hybrids and whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003607

Description of Organism: *Petunia hybrida* ('Mitchell' and tissue cultures) modified

Containment: PC1

Category: A

Petunia hybrida ('Mitchell' and whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003608

Description of Organism: *Pichia pastoris* modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003609

Description of Organism: *Portulaca grandiflora* modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003610

Description of Organism:

Prunus avium (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003611

Description of Organism: *Prunus cerasus* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003612

Description of Organism: *Prunus domestica* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003613

Description of Organism: *Ribes nigrum* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003614

Description of Organism: *Ribes rubrum* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003615

Description of Organism: *Rubus idaeus* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003616

Description of Organism: *Rubus ulmifolius* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003617

Description of Organism: *Saccharomyces cerevisiae* Hansen 1883 modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003618

Description of Organism: *Sandersonia aurantiaca* (tissue cultures) modified

Containment: PC1

Category: A

Sandersonia aurantiaca (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003619

Description of Organism: *Sinningia cardinalis* modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003620

Description of Organism: *Solanum tuberosum* L. (tissue cultures) modified

Containment: PC1

Category: A

Solanum tuberosum L. (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003621

Description of Organism: *Vaccinium ashei* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003622

Description of Organism: *Vaccinium australe* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003623

Description of Organism: *Vaccinium myrtillus* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003624

Description of Organism: *Vaccinium pahalae* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003625

Description of Organism: *Viburnum opulus* (tissue cultures) modified

Containment: PC1

Category: A

Viburnum opulus (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003626

Description of Organism: *Viburnum plicatum* (tissue cultures) modified

Containment: PC1

Category: A

Viburnum plicatum (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003627

Description of Organism: *Viola Xwittrockiana* (tissue cultures) modified

Containment: PC1

Category: A

Viola Xwittrockiana (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003628

Description of Organism: *Vitis vinifera* (cell cultures) modified

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003629

Description of Organism: *Zantedeschia* spp (tissue cultures) modified

Containment: PC1

Category: A

Zantedeschia spp (whole plants) modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003630

Description of Organism: *Zea mays* modified

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003631

Applicant: New Zealand Institute for Crop & Food Research Limited

Institute Code: GMO04/CFR001

Application Code: GMD05023

Purpose: To include use of *Arabidopsis*-derived lipid biosynthetic genes. Introduce these genes into *Arabidopsis thaliana*, *Nicotiana tabacum*, *Brassica oleracea*, *Brassica napus* and *Brassica rapa* to alter lipid composition. Update of GMO00/CFR002

Decision Notified: 25 November 2004

Description of Organism: *Agrobacterium rhizogenes*

(Riker et al. 1930) Conn 1942

Agrobacterium rhizogenes (non-pathogenic strains) modified with lipid biosynthetic genes from *Arabidopsis thaliana*, *Brassica* spp. and white clover

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003577

Description of Organism: *Agrobacterium tumefaciens* (Smith & Townsend 1907) Conn 1942

Agrobacterium tumefaciens (non-pathogenic strains) modified with lipid biosynthetic genes from *Arabidopsis thaliana*, *Brassica* spp. and white clover

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003578

Description of Organism: *Arabidopsis thaliana* (L.) Heynh (1842)

Arabidopsis thaliana modified with lipid biosynthetic genes from *Arabidopsis thaliana*, *Brassica* spp. and white clover

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003579

Description of Organism: *Brassica napus* L.

Brassica napus modified with lipid biosynthetic genes from *Arabidopsis thaliana*, *Brassica* spp. and white clover

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003580

Description of Organism: *Brassica oleracea* L.

Brassica oleracea modified with lipid biosynthetic genes from *Arabidopsis thaliana*, *Brassica* spp. and white clover

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003581

Description of Organism: *Brassica rapa* L.

Brassica rapa modified with lipid biosynthetic genes from *Arabidopsis thaliana*, *Brassica* spp. and white clover

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003582

Description of Organism: *Escherichia coli* (Migula 1895) Castellani & Chalmers 1919

Escherichia coli (non-pathogenic strains) modified with lipid biosynthetic genes from *Arabidopsis thaliana*, *Brassica* spp. and white clover

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003583

Description of Organism: *Nicotiana tabacum*

Nicotiana tabacum modified with lipid biosynthetic genes from *Arabidopsis thaliana*, *Brassica* spp. and white clover

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003584

Applicant: University of Auckland

Institute Code: GMO04/UA018

Application Code: GMD05026

Purpose: Protein production for crystallographic studies: 4. Update of GMO00/UA050

Decision Notified: 14 February 2005

Description of Organism: *Chlorocebus aethiops*

Chlorocebus aethiops (cell lines) modified with non self-transmissible vectors with genes encoding:

Human lactoferrin receptor

Cytoplasmic polyhedrosis viral polyhedral protein from *Bombyx mori*

Nuclear polyhedrosis viral polyhedral protein from *Autographica californica*

Entomopoxvirus Spindle protein Fusolin

Escherichia coli protein FkpA

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003568

Description of Organism: *Cricetulus griseus*

Cricetulus griseus (cell lines) modified with non self-transmissible vectors with genes encoding:

Human lactoferrin receptor

Cytoplasmic polyhedrosis viral polyhedral protein from *Bombyx mori*

Nuclear polyhedrosis viral polyhedral protein from *Autographica californica*
Entomopoxvirus Spindle protein Fusolin

Escherichia coli protein FkpA

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003569

Description of Organism: *Cricetus cricetus*

Cricetus cricetus (cell lines) modified with non self-transmissible vectors with genes encoding:

Human lactoferrin receptor

Cytoplasmic polyhedrosis viral polyhedral protein from *Bombyx mori*

Nuclear polyhedrosis viral polyhedral protein from *Autographica californica*

Entomopoxvirus Spindle protein Fusolin

Escherichia coli protein FkpA

Containment: PC1

Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003570

Description of Organism: *Escherichia coli* (Migula 1895) Castellani & Chalmers 1919

Escherichia coli (non-pathogenic strains) modified with non self-transmissible vectors with genes encoding:

Human lactoferrin receptor

Cytoplasmic polyhedrosis viral polyhedral protein from *Bombyx mori*

Nuclear polyhedrosis viral polyhedral protein from *Autographica californica*

Entomopoxvirus Spindle protein Fusolin
Escherichia coli protein FkpA
 Containment: PC1
 Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003571

Description of Organism: *Pichia pastoris*

Pichia pastoris modified with non self-transmissible vectors with genes encoding:
 Human lactoferrin receptor
 Cytoplasmic polyhedrosis viral polyhedral protein from *Bombyx mori*
 Nuclear polyhedrosis viral polyhedral protein from *Autographica californica*
 Entomopoxvirus Spindle protein Fusolin
Escherichia coli protein FkpA
 Containment: PC1
 Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003572

Description of Organism: *Saccharomyces cerevisiae* Hansen 1883

Saccharomyces cerevisiae modified with non self-transmissible vectors with genes encoding:
 Human lactoferrin receptor
 Cytoplasmic polyhedrosis viral polyhedral protein from *Bombyx mori*
 Nuclear polyhedrosis viral polyhedral protein from *Autographica californica*
 Entomopoxvirus Spindle protein Fusolin
Escherichia coli protein FkpA
 Containment: PC1
 Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003573

Description of Organism: *Spodoptera frugiperda*

Spodoptera frugiperda (cell lines) modified with non self-transmissible vectors with genes encoding:
 Human lactoferrin receptor
 Cytoplasmic polyhedrosis viral polyhedral protein from *Bombyx mori*

Nuclear polyhedrosis viral polyhedral protein from *Autographica californica*
 Entomopoxvirus Spindle protein Fusolin
Escherichia coli protein FkpA
 Containment: PC1
 Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003574

Description of Organism: *Trichoplusia ni* (Huebner)

Trichoplusia ni (cell lines) modified with non self-transmissible vectors with genes encoding:
 Human lactoferrin receptor
 Cytoplasmic polyhedrosis viral polyhedral protein from *Bombyx mori*
 Nuclear polyhedrosis viral polyhedral protein from *Autographica californica*
 Entomopoxvirus Spindle protein Fusolin
Escherichia coli protein FkpA
 Containment: PC1
 Category: A

Decision: Approved with Controls

ERMA Approval Code: GMD003575

Applicant: University of Otago

Institute Code: GMO04/UO028

Application Code: GMD05017

Purpose: To investigate the evolution of developmental pathways by comparing the function and regulation of Honeybee (*Apis mellifera*) developmental genes with their corresponding *Drosophila melanogaster* genes

Decision Notified: 1 February 2005

Description of Organism: *Drosophila melanogaster* (Meigen, 1830)

Drosophila melanogaster (laboratory strains) modified with non-conjugative plasmids; genomic or cDNA from *Apis mellifera* or *Drosophila melanogaster* encoding developmental genes or regulating developmental genes

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003557

Applicant: University of Otago

Institute Code: GMO04/UO038

Application Code: GMD05024

Purpose: The mice developed will be used to identify risk factors for degenerative diseases that affect the motor portion of the brain. This will aid the development of potential treatments for these diseases. Update of GMO01/UO025

Decision Notified: 25 February 2005

Description of Organism: *Mus musculus* Linnaeus, 1758

Mus musculus (NE-TbetaR) organism developed by cross-breeding *Mus musculus* 1758, eno2tTA (GMC001197) and EGFP-pBi-TbetaR (containing dominant negative version of the type II transforming growth factor-beta receptor, GMC000116)

Containment: PC2

Category: B

Decision: Approved with Controls

ERMA Approval Code: GMD003567

AMENDMENTS TO APPROVALS

Under section 67A of the HSNO Act the Environmental Risk Management Authority may amend any approval given under Part V of the HSNO Act if it considers that the alteration is minor in effect or corrects a minor or technical error.

Applicant: AgResearch Limited

Application Code: GMD03105

Purpose: To ascertain in containment, the functions of genes associated with hair and muscle growth, by transduction of experimental transgenes into animals cells and tissues with replication-deficient viral vectors

Decision Amendment Date: 1 February 2005

Amendment: To correct a technical error in the controls by adding the 'MAF Biosecurity Authority/ERMA New Zealand Standard 154.03.03: *Containment Facilities for Vertebrate Laboratory Animals*' and by altering subsequent references to containment standards in the controls so that both standards that are relevant to this approval apply.

Applicant: Forest Research Institute Limited

Application Code: GMD04076

Purpose: Project to investigate genes associated with enhancing wood quality traits; assess gene expression patterns; evaluate transgenic approaches to improve forest tree value and; enhance capabilities of functional gene testing in target plant species.

Decision Amendment Date: 01 February 2005

Amendment: To correct technical errors in the controls by adding the species 'Saccharomyces cerevisiae' to control 1.4 and by changing the MAF/ERMA New Zealand standard for containment facilities in control 1.5 to 'MAF/ERMA New Zealand Standard 155.04.09: Containment Facilities for New Organisms (including Genetically Modified Organisms) of Plant Species'

HAZARDOUS SUBSTANCES

NOTIFIED APPLICATIONS AND PUBLIC SUBMISSIONS

The applications in the Bulletin are for reference only. Our public notification process includes alerts in four main daily newspapers with the full information and submission forms available on our website.

To ensure that you are advised directly about applications open for public submission contact us at info@erманz.govt.nz to be added to our interested party list. You will need to nominate the types of applications that you are interested in.

Applicant: Taranaki Nuchem Limited
Application Code: HSR04066

Purpose: To import and manufacture DFF an agricultural herbicide for the control of annual grasses and broad leaf weeds in cereal

Date Publicly Notified: 19 January 2005

Date Submissions Close: 2 March 2005

Applicant: 3M New Zealand Limited
Application Code: HSR04034

Purpose: To import or manufacture 3M Dose 'n Fill All-Purpose Cleaner and Degreaser (Concentrate) (Dose 'n Fill Cleaning System). Its intended use is as a ready-to-use spray bottle cleaner for bench tops, desks, to remove oil and grease

Date Publicly Notified: 21 January 2005

Date Submissions Close: 4 March 2005

Applicant: DuPont (New Zealand) Limited
Application Code: HSR04071

Purpose: To import Claridox Technical for use as an active ingredient in the manufacture of an insecticide bait

Date Publicly Notified: 25 January 2005

Date Submissions Close: 8 March 2005

Applicant: Ancare New Zealand Limited
Application Code: HSR05007

Purpose: To import, manufacture and release for use an anthelmintic for use in ruminants

Date Publicly Notified: 27 January 2005

Date Submissions Close: 10 March 2005

Applicant: Orica New Zealand Limited
Application Code: HSR04063

Purpose: To import an organic peroxide mixture, Curox Catalyst 2000, for use in the manufacture of unsaturated polyester gelcoats

Date Publicly Notified: 4 February 2005

Date Submissions Close: 18 March 2005

Applicant: Bayer New Zealand Limited
Application Code: HSR04059

Purpose: To import Proline, a fungicide intended for the control of fungal diseases in wheat, barley, oats and ryegrass seed crops

Date Publicly Notified: 4 February 2005

Date Submissions Close: 18 March 2005

Applicant: Nufarm New Zealand Limited
Application Code: HSR05018

Purpose: To import Lusta TM 750 a selective herbicide for the control of many broadleaf weeds in wheat, barley and oats

Date Publicly Notified: 17 February 2005

Date Submissions Close: 4 April 2005

Applicant: S C Johnson and Son Pty Limited

Application Code: HSR04061

Purpose: To import and manufacture ready to use bait insecticides containing Abamectin

Date Publicly Notified: 18 February 2005

Date Submissions Close: 5 April 2005

Applicant: SC Johnson & Son
Application Code: HSR04070

Purpose: To manufacture a ready to use, solid,

water resistant bait insecticide, supplied in sealed, child resistant bait stations

Date Publicly Notified: 18 February 2005

Date Submissions Close: 5 April 2005

NON-NOTIFIED APPLICATIONS RECEIVED

Applicant: BASF New Zealand
Application Code: HSC05001

Purpose: To field test the substance BNZ0105 to assess the efficacy and phytotoxicity

Date Formally Received: 27 January 2005

Applicant: BASF New Zealand
Application Code: HSC05002

Purpose: To field test the substance BNZ0205 to assess the efficacy and phytotoxicity

Date Formally Received: 11 February 2005

Applicant: BASF New Zealand
Application Code: HSC05003

Purpose: To field test the substance BNZ0305 to assess the efficacy and phytotoxicity

Date Formally Received: 14 February 2005

Applicant: Johnson Hi-Tech (Australia) Pty Limited

Application Code: HSR05011

Purpose: To import ECONOTRIM Buttbuster and EZICHARGE explosives for use in blasting in underground mines

Date Formally Received: 9 February 2005

DECISIONS ON APPLICATIONS

Applicant: P&O Nedlloyd
Application Code: TNS05001

Purpose: To tranship through Auckland, explosive items destined for Sydney on the vessel PONL Yarra Valley

Decision Notified: 31 January 2005

Decision: Approved with Controls

Identifier for Substance: PONU0691973, containing; Smokeless Powder, UN 0161 Cartridges for Small Arms, UN 0012

Classification: 1.3C, 1.4S

ERMA Approval Code: TNS000073 - 074

Controls:

- 1.1 The consignment(s) shall comply with the provisions of the IMDG Code for explosives of these types, including provisions relating to packaging.
- 1.2 Handling and storage of the consignment is to be in accordance with 'The handling of Explosives at the Port of Auckland and Onehunga Guidelines'.
- 1.3 The explosives container shall be removed from the ship on arrival (first cargo movement), stored in the Port of Auckland transit area for Class 1.1C containers at the northern end of Ferguson Wharf, beyond the concrete block wall, and reloaded on the ship immediately before departure (last cargo movement).
- 1.4 No other work shall be conducted in the vessel until such time as the explosives are removed from it.
- 1.5 The container shall be conveyed from the berth to storage by a Ports of Auckland diesel tractor and trailer unit. The unit shall be equipped with at least two fire extinguishers, one of which must be a 9 litre foam type extinguisher. The front and rear of the tractor/trailer unit shall carry a notice bearing the words 'Explosives' in letters not less than 150mm in height.
- 1.6 Whilst the explosives container is being conveyed between the lifting crane and the transit holding area, no other wharf activities shall be carried out.
- 1.7 Whilst the tractor/trailer unit is parked in the transit holding area, straddle carrier activity shall cease on the opposite side of the concrete block wall.
- 1.8 The container shall be sealed and not opened whilst in transit unless necessary in response to an emergency.
- 1.9 Confirmation of the shipment shall be arranged with the Harbour Master to ensure that the transit area for Class 1.1C containers is available to receive that shipment; that is, to check that the area will not be already occupied by another Class 1.1C consignment. If the area is, or will be, occupied then the second shipment will be unable to be received concurrently, or alternative arrangements, for the explosives container to go to the barge and be held at anchorage, will be

- necessary. ERMA New Zealand shall be advised of any alternative arrangements made.
- 1.10 In the event of any emergency occurring the ship's master shall act in accordance with the Harbour Master's instructions.
- 1.11 A contingency plan to deal with any such emergency shall be in place, and a copy provided to ERMA New Zealand prior to the ship transiting the port.
- 1.12 Any incident shall be reported to ERMA New Zealand, Auckland Regional Council (The Harbour Master), Maritime Safety Authority and to OSH.

DELEGATED AUTHORITY

The Chief Executive of the Environmental Risk Management Authority, acting under delegated power from the Authority, reached a decision on the following applications:

Applicant: Bayer New Zealand Limited

Application Code: HSC04038

Purpose: To field test the substance BCS014-04 to assess the efficacy and phytotoxicity

Decision Notified: 7 February 2005

Decision: Approved with Controls

Identifier for Substance: BCS014-04

ERMA Approval Code: HSC000144

Controls:

- The trials shall be undertaken in accordance with the Project Plan and Management Plan, which accompanied the application. Modifications of the Project Plan or Management Plan may be approved in writing by ERMA New Zealand providing that they comply with the following controls.
- Notwithstanding the requirements of control 1 above, the trials shall also comply with the following controls:
- The trials may be carried out at a location that is not defined until an infestation of the target pest has been found, provided the applicant; has permission from the owner of the land to carry out the trial; and notifies ERMA New Zealand of the locations as per control 22.
- The trial sites shall be chosen so as to prevent the substance entering any surface water or groundwater system.

- The trial sites shall be located to prevent any building where people live or work being exposed to the substance.
- Access to the trial sites shall be by permission of the Trial Director¹⁰ or owner of the property on which it is located. The trial site boundaries shall be clearly marked and distinctly visible from outside the trial site throughout the life of the trials. The primary access points shall be signed indicating that unauthorized access is not allowed, that the site is subject to a trial, and that the crops should not be removed or disturbed.
- The trial sites shall be secured by stock proof fencing to exclude grazing animals for the duration of the trial.
- The substance shall be stored in accordance with good practice. This would generally be achieved through compliance with the Code of Practice for the Management of Agrichemicals NZS8409:2004.
- The substance shall be mixed, diluted and prepared in any other way prior to application in accordance with good practice. This would generally be achieved through compliance with the Code of Practice for the Management of Agrichemicals NZS8409:2004.
- The substance shall be securely packed in suitable containers that comply with the Hazardous Substances (Packaging) Regulations 2001, and shall be labelled in accordance with the Hazardous Substances (Identification) Regulations 2001. A MSDS shall accompany each shipment.
- The substance shall be transported in accordance with good practice. This may require compliance with the Land Transport Rule: Dangerous Goods 1999.
- The substance shall be applied by way of hand-held/operator-worn equipment, using hydraulic pressure or compressed CO₂ or air on plots specifically designated and marked for each treatment, in accordance with good practice. This would generally be achieved through compliance with the Code of Practice for the Management of Agrichemicals NZS8409:2004. Special attention shall be paid to the minimisation of spray drift, and in particular to the avoidance of drift beyond boundaries agreed with the owner of the trial site.

- The personnel applying the substance to the crops shall be able to demonstrate that they have the qualifications necessary to carry out the trial. Ways of demonstrating this would include the holding of an appropriate Growsafe certification or an Approved Handler qualification.
- No sprayed produce shall be consumed by people or animals or offered for sale.
- Sprayed produce shall be disposed of by ploughing in, by mulching or by burial at an approved landfill (not to be diverted to any composting operation).
- The amount of spray prepared shall be adequate for the trial site, but if there is any surplus spray mix it shall be disposed of within the trial site by being further diluted and sprayed over a marked and designated non-crop and non-grazed area at the site.
- Any equipment used shall be rinsed after use with the appropriate detergent or decontaminant, and rinsate disposed of within the trial site by being sprayed over a marked and designated non-crop and non-grazed area at the site.
- Surplus substance remaining at the end of the trials shall be returned to Bayer New Zealand Limited for secure storage in an exempt laboratory, exported or degraded to a non-hazardous substance (note that once the trials are complete the substance does not have approval to be present in New Zealand except in an exempt laboratory).
- Any accidental spillage of the unmixed substance or spray mix shall be contained, prevented from entering waterways, and absorbed with an appropriate absorbent material. This material shall be placed into sealed containers and disposed of at an appropriate waste disposal facility (which may include a landfill), subject to the facility's waste acceptance policy.
- A record shall be kept of all use of the substance. This record shall cover all matters referred to in Regulation 6 of the Hazardous Substances (Class 6, 8 and 9 Controls) Regulations.
- Information on appropriate safety precautions necessary to provide safeguards against the substance's toxic and ecotoxic properties shall accompany the substance at all stages of its lifecycle. Safety glasses, gloves and protective clothing shall be worn when handling the substance throughout the lifecycle.
- Occupational Safety and Health, Head

Office [Attn. HSNO Project Manager (OSH) or equivalent position] and ERMA New Zealand shall be informed in writing (by letter, fax or email) of the location, start, and completion of the trials. Notifications shall include the following details:

Substance name	BCS014-04
ERMA Application number	HSC04038
ERMA Approval number	HSC000144
ERMA Applications Advisor	Amanda McKenzie

- If for any reason a breach of containment occurs, the Trial Director shall notify OSH and ERMA New Zealand within 24 hours of the breach being detected. It is suggested that if a breach in containment results in contamination of a waterway, the relevant iwi authorities be advised.
- The Authority or its authorised agent or properly authorised enforcement officers, may inspect the facilities and trial sites at any reasonable time.
- This approval remains in place for the term of any concurrent approval required under the Agricultural Compounds and Veterinary Medicines Act 1997, to a maximum of five years.
- The maximum total quantity of BCS014-04 that shall be imported under this approval is 1.5L.

Applicant: GE Betz Australia Pty Limited

Application Code: HSC04037

Purpose: To import into containment Fuelsolv FMG2960, a fireside deposit and corrosion control agent, to assess the efficacy of the product

Decision Notified: 22 February 2005

Decision: Approved with Controls

Identifier for Substance: Fuelsolv FMG2960

ERMA Approval Code: HSC000145

Controls:

- The trial shall be conducted only for the purpose stated and shall be undertaken in accordance with the details supplied to ERMA New Zealand in the application form and the supporting material. Modifications to the proposed trial may be approved in writing by ERMA New Zealand providing that they comply with

¹⁰ The Trial Director is the individual appointed by the applicant to be responsible for the overall conduct of the trial in accordance with the Management Plan and approval controls.

- the following controls.
2. Notwithstanding the requirements of control 1 above, the trials shall also comply with the following controls:
 3. The trial may only be conducted at the Fonterra Waitoa site, identified in the application as the site of the trial.
 4. Access to the trial site shall be restricted to entry by approved personnel only.
 5. The trial site shall be a secure site. Inspection and monitoring of the trial site will be carried out by operators on the site and in accordance with the site's own standard operating procedure.
 6. The substance shall be securely packed in suitable containers that comply with the Hazardous Substances (Packaging) Regulations 2001, and shall be labelled in accordance with the Hazardous Substances (Identification) Regulations 2001. A MSDS shall accompany each shipment.
 7. The substance shall be transported in compliance with any relevant requirements of the Land Transport Rule: Dangerous Goods 1999.
 8. The substance shall be stored only at the trial site identified in the application. The substance shall be stored in a double skinned vessel (secondary containment) in a bunded area.
 9. The dosing system used shall be hard piped resulting in the substance only being delivered to the intended location, preventing unintentional release of the substance.
 10. The personnel involved in the trial shall be able to demonstrate that they have the qualifications necessary to carry out the trial work. Ways of demonstrating this would include being able to provide upon request, evidence of training in the use of equipment to be used in the trial or the holding of an Approved Handler qualification.
 11. Any accidental spillage of the substance shall be contained and prevented from entering waterways. The material will be recovered and used in the trial.
 12. Any work to be carried out on the dosing system during the trial shall be done in accordance with the trial site's Permit to work system. Minimum Personal Protective Equipment (PPE), including long trousers, long sleeve shirt, steel cap boots, safety goggles and chemical resistant gloves, will be required.
 13. The flyash residue from the burnt coal shall be disposed of by returning it to the mine site and digging it back into the ground.
 14. Surplus substance remaining at the end of the trials and the semi-bulk storage container shall be shipped back to Australia.
 15. Fuelsolv FMG2960 shall not be offered for sale.
 16. Information on appropriate safety precautions necessary to provide safeguards against the substance's potential ecotoxic properties shall accompany the substance at all stages of its lifecycle.
 17. Information on appropriate safety precautions necessary to provide safeguards against the substance's toxic properties shall accompany the substance at all stages of its lifecycle. Minimum Personal Protective Equipment (PPE), including long trousers, long sleeve shirt, steel cap boots, safety goggles and chemical resistant gloves, shall be worn when handling the substance throughout the lifecycle.
 18. Occupational Safety and Health, Head Office [Attn. HSNO Project Manager (OSH) or equivalent position] and ERMA New Zealand shall be informed in writing (by letter, fax or email) of the start and completion of the trials. Notifications shall include the following details:

Substance name	Fuelsolv FMG2960
ERMA Application number	HSC04037
ERMA Approval number	HSC000145
ERMA Applications Advisor	Nicola Reeves
 19. If for any reason a breach of containment occurs, GE Betz Australia Pty shall notify OSH and ERMA New Zealand within 24 hours of the breach being detected. It is suggested that if a breach in containment results in contamination of a waterway, the relevant iwi authorities be advised.
 20. The Authority or its authorised agent or properly authorised enforcement officers, may inspect the facilities and trial sites at any reasonable time.

21. This approval remains in place for 1 year.
22. The maximum total quantity of Fuelsolv FMG2960 that shall be imported under this approval is 1500L (2500kg).

Applicant: HaS Expertise Limited

Application Code: HSR04077

Purpose: To import and/or manufacture J57.10B, a timber preservative formulation

Decision Notified: 2 February 2005

Decision: Approved with Controls

Identifier for Substance: J57.10B

Classification: 3.1C Flammable liquid, 6.1E (oral -aspiration hazard - and inhalation) Acute toxicity, 6.3B Skin irritation, 6.5A Respiratory sensitisation, 6.5B Contact (dermal) sensitisation, 6.9B Target organ/systemic toxicant, 9.1A Aquatic ecotoxicant, 9.4B Terrestrial invertebrate ecotoxicant

ERMA Approval Code: HSR000955

Controls:

Control Code ¹¹	Regulation ¹²	Explanation ¹³
Hazardous Substances (Classes 1 to 5 Controls Regulations) Regulations 2001 - Flammable Property		
F1	7	General test certification requirements for all class 1 to 5 substances
F3	55	General limits on flammable substances
F5	58–59	Requirements regarding hazardous atmosphere zones for flammable liquids (3.1)
F6	60–70	Requirements to prevent unintended ignition of liquids (3.1)
F11	76	Segregation of incompatible substances
F12	77–78	General requirement for hazardous substance locations for flammable substances
F14	81	Test certification requirements for facilities where class 3.1 substances are present
F16	83	Controls on transit depots where flammable substances are present
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 – Toxic Property Controls		
T2	29, 30	Controlling exposure in places of work
T4, E6	7	Requirements for equipment used to handle hazardous substances
T5	8	Requirements for protective clothing and equipment

¹¹ 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 and is also contained in the ERMA New Zealand *User Guide to the Controls Regulations*.

¹² These Regulations form the controls applicable to this substance. Refer to the cited Regulations for the formal specification, and for definitions and exemptions. The accompanying explanation is intended for guidance only.

¹³ These explanations are for guidance only. Refer to the cited Regulations for the formal specification, and for definitions and exemptions.

T7, F2	10 Classes 6, 8 & 9 Controls Regulations 8 Classes 1 to 5 Controls Regulations	Restrictions on the carriage of hazardous substances on passenger service vehicles
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 - Ecotoxic Property Controls		
E1	32-45	Limiting exposure to ecotoxic substances
E3	49	Controls relating to protection of terrestrial invertebrates e.g. beneficial insects
E5	5(2), 6	Requirements for keeping records of use
E7	9 (3) (4)	Approved handler requirements
Hazardous Substances (Identification) Regulations 2001		
I1	6, 7, 32-35, 36 (1)-(7)	General identification requirements
I3	9	Priority identifiers for ecotoxic substances
I5	11	Priority identifiers for flammable substances
I8	14	Priority identifiers for certain 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
I17	26	Use of Generic Names
I18	27	Use of Concentration Ranges
I19	29-31	Alternative information in certain cases
I21	37-39, 47-50	Documentation required in places of work
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 toxic substances
Hazardous Substances (Packaging) Regulations 2001		
P1	5, 6, 7 (1), 8	General packaging requirements
P3	9	Packaging requirements for substances packed in limited quantities
P5, P13, P15	11,	

PG3	19 and 21 Schedule 3	Packaging requirements for J57.10B This schedule describes the (minimum) packaging requirements that must be complied with for this substance. The tests in Schedule 3 correlate to the packaging requirements of UN Packing Group III (UN PGIII).
Hazardous Substances (Disposal) Regulations 2001		
D2	6	Disposal requirements for flammable substances
D4	8	Disposal requirements for toxic and corrosive substances
D5	9	Disposal requirements for ecotoxic substances
D6	10	Disposal requirements for packages
D7	11, 12	Disposal information requirements
D8	13, 14	Disposal documentation requirements
Hazardous Substances (Emergency Management) Regulations 2001		
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	Specific documentation requirements for flammable and oxidising substances and organic peroxides
EM10	21-24	Fire extinguishers
EM11	25-34	Level 3 emergency management requirements – emergency response plans
EM12	35-41	Level 3 emergency management requirements – secondary containment
EM13	42	Level 3 emergency management requirements – signage
Hazardous Substances (Personnel Qualification) Regulations 2001		
AH1	4-6	Approved Handler requirements (including test certificate and qualification requirements)
Hazardous Substances (Tracking) Regulations 2001		
TR1	4(1), 5, 6	General tracking requirements
Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004		
	Regulations 4 to 43 where applicable	These regulations specify requirements for various types of tanks, tank wagons and transportable containers that carry hazardous substances and should be complied with as relevant.
Additional Controls Under 77A		
<p>The controls relating to stationary container systems as set out in Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice (New Zealand Gazette Issue No 35, 26 March 2004), shall apply to this substance, notwithstanding clause 1 (1) of that schedule.</p> <p>The controls relating to secondary containment as set out in Schedule 9 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice (New Zealand Gazette Issue No 35,</p>		

26 March 2004), shall apply to this substance, notwithstanding clause 1 (1) of that schedule.

The controls relating to adverse effects of unintended ignition of class 2 and class 3.1 hazardous substances as set out in Schedule 10 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice (New Zealand Gazette Issue No 35, 26 March 2004) shall apply to this substance, notwithstanding clause 1 of that schedule.

Applicant: Bayer New Zealand Limited

Application Code: HSR05006

Purpose: To import Nema-cur 400EC, an insecticide for use on tobacco, potatoes, kiwifruit, kumaras, carrots, lucerne and roses

Decision Notified: 10 February 2005

Decision: Approved with Controls

Identifier for Substance: Nema-cur 400EC

Classification: 3.1D Flammable liquid, 6.1B (oral) 6.1C (dermal / inhalation) Acute toxicity, 6.3A Skin irritant, 6.4A Eye irritant, 6.9A Target organ/systemic toxicant, 9.1A Aquatic ecotoxicant, 9.2B Toxic to the soil environment, 9.3A Terrestrial vertebrate ecotoxicant, 9.4A Terrestrial invertebrate ecotoxicant

ERMA Approval Code: HSR000956

Controls:

Control Code ¹⁴	Regulation ¹⁵	Explanation ¹⁶
Hazardous Substances (Classes 1 to 5 Control Regulations) Regulations 2001 - Flammable Property Controls		
F2	8	General public transportation restrictions and requirements for all class 1 to 5 substances
F6	60–70	Requirements to reduce the likelihood of unintended ignition of class 2.1.1, class 2.1.2 and class 3.1 substances
F11	76	Segregation of incompatible substances
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 - Toxic Property Controls		
T1	11–27	Limiting exposure to toxic substances
T2	29, 30	Controlling exposure in places of work
T3	5(1), 6	Requirements for keeping records of use
T4	7	Requirements for equipment used to handle hazardous substances
T5	8	Requirements for protective clothing and equipment
T6	9	Approved handler requirements
T7	10	Restrictions on the carriage of hazardous substances on passenger service vehicles

¹⁴ 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 and is also contained in the ERMA New Zealand *User Guide to the HSNO Control Regulations*.

¹⁵ These Regulations form the controls applicable to this substance. Refer to the cited Regulations for the formal specification, and for definitions and exemptions. The accompanying explanation is intended for guidance only.

¹⁶ These explanations are for guidance only. Refer to the cited Regulations for the formal specification, and for definitions and exemptions.

Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 - Ecotoxic Property Controls		
E1	32–45	Limiting exposure to ecotoxic substances
E2	46–48	Restrictions on use within application area
E3	49	Controls relating to protection of terrestrial invertebrates eg. beneficial insects
E5	5(2), 6	Requirements for keeping records of use
E6	7	Requirements for equipment used to handle hazardous substances
Hazardous Substances (Identification) Regulations 2001		
I1	6, 7, 32–35, 36 (1)–(7)	General identification requirements
I3	9	Priority identifiers for ecotoxic substances
I5	11	Priority identifiers for flammable substances
I8	14	Priority identifiers for certain 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
I17	26	Use of Generic Names
I18	27	Use of Concentration Ranges
I19	29–31	Alternative information in certain cases
I20	36(8)	Durability of information for class 6.1 substances
I21	37–39, 47–50	Documentation required in places of work
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 toxic substances
Hazardous Substances (Packaging) Regulations 2001		
P1	5, 6, 7 (1), 8	General packaging requirements
P3	9	Packaging requirements for substances packed in limited quantities
P5	11	Packaging requirements for flammable liquids (subclass 3.1)
P13	19	Packaging requirements for toxic substances
P15	21	Packaging requirements for ecotoxic substances
PG2	Schedule 2	This schedule describes the (minimum) packaging requirements that must be complied

with for this substance. The tests in Schedule 2 correlate to the packaging requirements of UN Packing Group II (UN PGII).

Hazardous Substances (Disposal) Regulations 2001		
D2	6	Disposal requirements for flammable substances
D4	8	Disposal requirements for toxic substances
D5	9	Disposal requirements for ecotoxic substances
D6	10	Disposal requirements for packages
D7	11, 12	Disposal information requirements
D8	13, 14	Disposal documentation requirements
Hazardous Substances (Emergency Management) Regulations 2001		
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 information requirements
EM9	17	Specific documentation requirements for flammable substances
EM10	21–24	Fire extinguishers
EM11	25–34	Level 3 emergency management requirements – emergency response plans
EM12	35–41	Level 3 emergency management requirements – secondary containment
EM13	42	Level 3 emergency management requirements – signage
Hazardous Substances (Personnel Qualification) Regulations 2001		
AH1	4-6	Approved Handler requirements Licences for Approved Handlers
Hazardous Substances (Tracking) Regulations 2001		
TR1	4(1), 5, 6	General tracking requirements
Hazardous Substances (Tank Wagon and Transportable Containers) Regulations 2004		
	Regulations 4 to 43 where applicable	These regulations specify requirements for various types of tanks, tank wagons and transportable containers that carry hazardous substances and should be complied with as relevant.

Additional Controls Under s77A

The controls relating to stationary container systems as set out in Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice (New Zealand Gazette Issue No 35, 26 March 2004, shall apply to this substance, notwithstanding clause 1 (1) of that schedule.

The controls relating to secondary containment as set out in Schedule 9 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice (New Zealand Gazette Issue No 35, 26 March 2004, shall apply to this substance, notwithstanding clause 1 (1) of that schedule.

The controls relating to adverse effects of unintended ignition of class 2 and class 3.1 hazardous substances as set out in Schedule 10 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic

Substances) Transfer Notice (New Zealand Gazette Issue No 35, 26 March 2004, as amended by Issue No. 128, 1 October 2004) shall apply to this substance, notwithstanding clause 1 of that schedule.

Applicant: Innovative Pest Control Products

Application Code: HSR05004

Purpose: To import or manufacture a boron-containing liquid, GOURMET ANT BAIT

Decision Notified: 10 February 2005

Decision: Approved with Controls

Identifier for Substance: Gourmet Ant Bait

Classification: 6.8B Reproductive/developmental toxicant, 9.1D Biocide

ERMA Approval Code: HSR000957

Controls:

The controls imposed on Gourmet Ant Bait are as follows. The regulations cited should be referred to for definitions and exemptions. The ERMA New Zealand publication *User Guide to HSNO Control Regulations* provides useful guidance on the controls.

Control Code ¹⁷	Regulation ¹⁸	Explanation ¹⁹
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 -Toxic Property Controls		
T2	29, 30	Controlling exposure in places of work
T4, E6	7	Requirements for equipment used to handle hazardous substances
T5	8	Requirements for protective clothing and equipment
Hazardous Substances (Identification) Regulations 2001		
I1	6, 7, 32–35, 36 (1)–(7)	General identification requirements
I9	18	Secondary identifiers for all hazardous substances
I11	20	Secondary identifiers for ecotoxic substances
I16	25	Secondary identifiers for toxic substances
I17	26	Use of Generic Names
I18	27	Use of Concentration Ranges
I19	29-31	Alternative information in certain cases
I21	37–39, 47–50	Documentation required in places of work
I28	46	Specific documentation requirements for toxic substances
I29	51-52	Duties of persons in charge of places with respect to signage
Hazardous Substances (Packaging) Regulations 2001		
P1	5, 6, 7 (1), 8	General packaging requirements

¹⁷ 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 and is also contained in the ERMA New Zealand *User Guide to the HSNO Control Regulations*.

¹⁸ These Regulations form the controls applicable to this substance. Refer to the cited Regulations for the formal specification, and for definitions and exemptions. The accompanying explanation is intended for guidance only.

¹⁹ These explanations are for guidance only. Refer to the cited Regulations for the formal specification, and for definitions and exemptions.

P3	9	Packaging requirements for substances packed in limited quantities
PS4	Schedule 4	This schedule describes the (minimum) packaging requirements that must be complied with for this substance.
Hazardous Substances (Disposal) Regulations 2001		
D4, D5	8, 9	Disposal requirements for Gourmet Ant Bait
D6	10	Disposal requirements for packages
D7	11, 12	Disposal information requirements
D8	13, 14	Disposal documentation requirements
Hazardous Substances (Emergency Management) Regulations 2001		
EM1	6, 7, 9–11	Level 1 emergency management information: General requirements
EM7	8(f)	Information requirements for ecotoxic substances
EM8	12–16, 18–20	Level 2 emergency management information requirements
EM11	25–34	Level 3 emergency management requirements – emergency response plans
EM12	35–41	Level 3 emergency management requirements – secondary containment
EM13	42	Level 3 emergency management requirements – signage
Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004		
	Regulations 4 to 43 where applicable	These regulations specify requirements for various types of tanks, tank wagons and transportable containers that carry hazardous substances and should be complied with as relevant.
Additional Controls Under 77A		
Use Restriction Control - Gourmet Ant Bait shall only be used as bait for ants.		
Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004.		
Schedule 8	1	The controls relating to stationary container systems (as set out in Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 (Gazette, No 35) as amended by Gazette No 128 shall apply to this substance, notwithstanding clause 1(1) of the schedule.

Applicant: Innovative Pest Control Products**Application Code: HSR05005****Purpose:** To import or manufacture a boron-containing gel, GOURMET ANT BAIT GEL**Decision Notified:** 10 February 2005**Decision:** Approved with Controls**Identifier for Substance:** Gourmet Ant Bait Gel**Classification:** 6.8B Reproductive/developmental toxicant, 9.1D Biocide**ERMA Approval Code: HSR000958****Controls:**

Control Code ²⁰	Regulation ²¹	Explanation ²²
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 -Toxic Property Controls		
T2	29, 30	Controlling exposure in places of work
T4, E6	7	Requirements for equipment used to handle hazardous substances
T5	8	Requirements for protective clothing and equipment
Hazardous Substances (Identification) Regulations 2001		
I1	6, 7, 32–35, 36 (1)–(7)	General identification requirements
I9	18	Secondary identifiers for all hazardous substances
I11	20	Secondary identifiers for ecotoxic substances
I16	25	Secondary identifiers for toxic substances
I17	26	Use of Generic Names
I18	27	Use of Concentration Ranges
I19	29–31	Alternative information in certain cases
I21	37–39, 47–50	Documentation required in places of work
I28	46	Specific documentation requirements for toxic substances
I29	51-52	Duties of persons in charge of places with respect to signage
Hazardous Substances (Packaging) Regulations 2001		
P1	5, 6, 7 (1), 8	General packaging requirements
P3	9	Packaging requirements for substances packed in limited quantities
PS4	Schedule 4	This schedule describes the (minimum) packaging requirements that must be complied with for this substance.
Hazardous Substances (Disposal) Regulations 2001		
D4, D5	8, 9	Disposal requirements for Gourmet Ant Bait Gel
D6	10	Disposal requirements for packages
D7	11, 12	Disposal information requirements
D8	13, 14	Disposal documentation requirements
Hazardous Substances (Emergency Management) Regulations 2001		
EM1	6, 7, 9–11	Level 1 emergency management information: General requirements
EM7	8(f)	Information requirements for ecotoxic substances
EM8	12–16, 18–20	Level 2 emergency management information requirements

²⁰ 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 and is also contained in the ERMA New Zealand *User Guide to the HSNO Control Regulations*.

²¹ These Regulations form the controls applicable to this substance. Refer to the cited Regulations for the formal specification, and for definitions and exemptions. The accompanying explanation is intended for guidance only.

²² These explanations are for guidance only. Refer to the cited Regulations for the formal specification, and for definitions and exemptions.

EM11	25–34	Level 3 emergency management requirements – emergency response plans
EM12	35–41	Level 3 emergency management requirements – secondary containment
EM13	42	Level 3 emergency management requirements – signage
Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004		
	Regulations 4 to 43 where applicable	These regulations specify requirements for various types of tanks, tank wagons and transportable containers that carry hazardous substances and should be complied with as relevant.
Additional Controls Under 77A		
Use Restriction Control - Gourmet Ant Bait Gel shall only be used as bait for ants.		
Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004.		
Schedule 8	1	The controls relating to stationary container systems (as set out in Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 (Gazette, No 35) as amended by Gazette No 128 shall apply to this substance, notwithstanding clause 1(1) of the schedule.

Applicant: Orion Crop Protection Limited

Application Code: HSR05008

Purpose: To import or manufacture Viper 90 DF, a herbicide to control a range of broadleaf grasses and weeds

Decision Notified: 11 February 2005

Decision: Approved with Controls

Identifier for Substance: Viper 90 DF

Classification: 6.1D (oral) 6.1D (inhalation) Acute toxicity, 6.3B Skin irritant, 6.4A Eye irritant, 6.9B Target organ/systemic toxicant, 9.1A Aquatic ecotoxicant, 9.2A Toxic to the soil environment, 9.3C Terrestrial vertebrate ecotoxicant

ERMA Approval Code: HSR000959

Controls:

Control Code ²³	Regulation ²⁴	Explanation ²⁵
T1	11–27	Limiting exposure to toxic substances
T2	29, 30	Controlling exposure in places of work
T4	7	Requirements for equipment used to handle hazardous substances
T5	8	Requirements for protective clothing and equipment
T7	10	Restrictions on the carriage of hazardous substances on passenger service vehicles

²³ 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 and is also contained in the ERMA New Zealand *User Guide to the HSNO Control Regulations*.

²⁴ These Regulations form the controls applicable to this substance. Refer to the cited Regulations for the formal specification, and for definitions and exemptions. The accompanying explanation is intended for guidance only.

²⁵ These explanations are for guidance only. Refer to the cited Regulations for the formal specification, and for definitions and exemptions.

Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 - Ecotoxic Property Controls		
E1	32–45	Limiting exposure to ecotoxic substances
E2	46–48	Restrictions on use within application area
E5	5(2), 6	Requirements for keeping records of use
E6	7	Requirements for equipment used to handle hazardous substances
E7	9	Approved handler requirements
Hazardous Substances (Identification) Regulations 2001		
I1	6, 7, 32–35, 36 (1)–(7)	General identification requirements
I3	9	Priority identifiers for ecotoxic substances
I8	14	Priority identifiers for certain toxic substances
I9	18	Secondary identifiers for all hazardous substances
I11	20	Secondary identifiers for ecotoxic substances
I16	25	Secondary identifiers for toxic substances
I17	26	Use of Generic Names
I18	27	Use of Concentration Ranges
I19	29–31	Alternative information in certain cases
I20	36(8)	Durability of information for class 6.1 substances
I21	37–39, 47–50	Documentation required in places of work
I23	41	Specific documentation requirements for ecotoxic 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 toxic substances
Hazardous Substances (Packaging) Regulations 2001		
P1	5, 6, 7 (1), 8	General packaging requirements
P3	9	Packaging requirements for substances packed in limited quantities
P13, P15	19, 21	Packaging requirements for Viper 90 DF
PG3	Schedule 3	This schedule describes the (minimum) packaging requirements that must be complied with for this substance. The tests in Schedule 3 correlate to the packaging requirements of UN Packing Group III (UN PGIII).
Hazardous Substances (Disposal) Regulations 2001		
D4	8	Disposal requirements for toxic substances
D5	9	Disposal requirements for ecotoxic substances
D6	10	Disposal requirements for packages

D7	11, 12	Disposal information requirements
D8	13, 14	Disposal documentation requirements
Hazardous Substances (Emergency Management) Regulations 2001		
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 information requirements
EM11	25–34	Level 3 emergency management requirements – emergency response plans
EM13	42	Level 3 emergency management requirements – signage
Hazardous Substances (Personnel Qualification) Regulations 2001		
AH1	4-6	Approved Handler requirements

Applicant: Rainbow and Brown Limited

Application Code: HSR05012

Purpose: To import or manufacture CropMate, for the control of broadleaf weeds in cereal crops

Decision Notified: 14 February 2005

Decision: Approved with Controls

Identifier for Substance: CropMate

Classification: 6.3B Skin irritant, 9.1A Aquatic toxicant, 9.2A Soil toxicant

ERMA Approval Code: HSR000960

Controls:

Control Code ²⁶	Regulation ²⁷	Explanation ²⁸
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 -Toxic Property Controls		
T1	11–27	Limiting exposure to toxic substances
T2	29, 30	Controlling exposure in places of work
T4, E6	7	Requirements for equipment used to handle hazardous substances
T7	10	Restrictions on the carriage of hazardous substances on passenger service vehicles
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 - Ecotoxic Property Controls		
E1	32–45	Limiting exposure to ecotoxic substances
E2	46–48	Restrictions on use within application area
E5	5(2), 6	Requirements for keeping records of use
E7	9	Approved handler requirements

²⁶ 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 and is also contained in the ERMA New Zealand *User Guide to the HSNO Control Regulations*.

²⁷ These Regulations form the controls applicable to this substance. Refer to the cited Regulations for the formal specification, and for definitions and exemptions. The accompanying explanation is intended for guidance only.

²⁸ These explanations are for guidance only. Refer to the cited Regulations for the formal specification, and for definitions and exemptions.

Hazardous Substances (Identification) Regulations 2001		
I1	6, 7, 32–35, 36 (1)–(7)	General identification requirements
I3	9	Priority identifiers for ecotoxic substances
I9	18	Secondary identifiers for all hazardous substances
I11	20	Secondary identifiers for ecotoxic substances
I16	25	Secondary identifiers for toxic substances
I19	29–31	Alternative information in certain cases
I21	37–39, 47–50	Documentation required in places of work
I23	41	Specific documentation requirements for ecotoxic substances
I28	46	Specific documentation requirements for toxic substances
I29	51–52	Duties of persons in charge of places with respect to signage
Hazardous Substances (Packaging) Regulations 2001		
P1	5, 6, 7 (1), 8	General packaging requirements
P3, P13, P15	9, 19, 21	Packaging requirements for CropMate
PG3	Schedule 3	This schedule describes the (minimum) packaging requirements that must be complied with for this substance. 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 for this substance.
Hazardous Substances (Disposal) Regulations 2001		
D4, D5	8, 9	Disposal requirements for CropMate
D6	10	Disposal requirements for packages
D7	11, 12	Disposal information requirements
D8	13, 14	Disposal documentation requirements
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 information requirements
EM13	42	Level 3 emergency management requirements – signage
Hazardous Substances (Personnel Qualification) Regulations 2001		
AH1	4–6	Approved Handler requirements

Applicant: The New Zealand Refining Company Limited

Application Code: HSR05010

Purpose: To import the explosive Current Limiting Protector, a self-contained device, for use in the electrical engineering industry

Decision Notified: 15 February 2005

Decision: Approved with Controls

Identifier for Substance: Current Limiting Protector

Classification: 1.4B (UN 0257) Explosiveness

ERMA Approval Code: HSR000961

Controls: The controls that apply to the Current Limiting Protector, are listed in;
Regulation 6(3) of the Hazardous Substances (Fireworks, Safety Ammunition, and Other Explosives Transfer) Regulations 2003.

Applicant: Dow AgroSciences

Application Code: HSR04073

Purpose: To import or manufacture GF-1320 for the control of weeds in crops

Decision Notified: 15 February 2005

Decision: Approved with Controls

Identifier for Substance: GF-1320

Classification: 6.1D [Acute oral toxicant] Acute toxicity, 6.3B Skin Irritation, 6.5B Contact sensitisation, 6.9A Target organ systemic toxicant, 9.1A Aquatic ecotoxicant, 9.2A Soil ecotoxicant, 9.3C Terrestrial vertebrate toxicant

ERMA Approval Code: HSR000962

Controls:

Control Code ²⁹	Regulation ³⁰	Explanation ³¹
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 -Toxic Property Controls		
T2	29, 30	Controlling exposure in places of work
T3, E5	5, 6	Requirements for keeping records of use
T4, E6	7	Requirements for equipment used to handle hazardous substances
T5	8	Requirements for protective clothing and equipment
T7	10	Restrictions on the carriage of hazardous substances on passenger service vehicles
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 - Ecotoxic Property Controls		
E2	46-48	Restrictions on use within application area
E7	9	Approved handler requirements

²⁹ 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 and is also contained in the ERMA New Zealand *User Guide to the HSNO Control Regulations*.

³⁰ These Regulations form the controls applicable to this substance. Refer to the cited Regulations for the formal specification, and for definitions and exemptions. The accompanying explanation is intended for guidance only.

³¹ These explanations are for guidance only. Refer to the cited Regulations for the formal specification, and for definitions and exemptions.

Hazardous Substances (Identification) Regulations 2001		
I1	6, 7, 32-35, 36 (1)-(7)	General identification requirements
I3	9	Priority identifiers for ecotoxic substances
I8	14	Priority identifiers for certain toxic substances
I9	18	Secondary identifiers for all hazardous substances
I11	20	Secondary identifiers for ecotoxic substances
I16	25	Secondary identifiers for toxic substances
I17	26	Use of Generic Names
I18	27	Use of Concentration Ranges
I19	29-31	Alternative information in certain cases
I20	36(8)	Durability of information for class 6.1 substances
I21	37-39, 47-50	Documentation required in places of work
I23	41	Specific documentation requirements for ecotoxic 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 toxic substances
Hazardous Substances (Packaging) Regulations 2001		
P1	5, 6, 7 (1), 8	General packaging requirements
P3	9	Packaging requirements for substances packed in limited quantities
P13, P15	19, 21	Packaging requirements for GF-1320
PG3	Schedule 3	This schedule describes the (minimum) packaging requirements that must be complied with for this substance. The tests in Schedule 3 correlate to the packaging requirements of UN Packing Group III (UN PGIII).
Hazardous Substances (Disposal) Regulations 2001		
D4, D5	8, 9	Disposal requirements for GF-1320
D6	10	Disposal requirements for packages
D7	11, 12	Disposal information requirements
D8	13, 14	Disposal documentation requirements
Hazardous Substances (Emergency Management) Regulations 2001		
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 information requirements

EM11	25–34	Level 3 emergency management requirements – emergency response plans
EM12	35–41	Level 3 emergency management requirements – secondary containment
EM13	42	Level 3 emergency management requirements – signage
Hazardous Substances (Personnel Qualification) Regulations 2001		
AH1	4–6	Approved Handler requirements
Hazardous Substances (Tank Wagon and Transportable Containers) Regulations 2004		
	Regulations 4 to 43 where applicable	These regulations specify requirements for various types of tanks, tank wagons and transportable containers that carry hazardous substances and should be complied with as relevant.
<p>The controls relating to stationary container systems as set out in Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice (New Zealand Gazette Issue No 35, 26 March 2004, shall apply to this substance, notwithstanding clause 1 (1) of that schedule.</p> <p>The controls relating to secondary containment as set out in Schedule 9 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice (New Zealand Gazette Issue No 35, 26 March 2004, shall apply to this substance, notwithstanding clause 1 (1) of that schedule.</p>		

Applicant: Bayer New Zealand Limited

Application Code: HSR04075

Purpose: To import Larvin, a systemic insecticide seed treatment, for the control of springtails in forage brassicas and Argentine stem weevil and adult black beetle in grasses

Decision Notified: 21 February 2005

Decision: Approved with Controls

Identifier for Substance: Larvin SC

Classification: 6.1C Acute Oral Toxicant, 6.1D Acute Inhalation Toxicant, 6.5B Contact Sensitiser, 6.9B Target Organ Systemic Toxicant, 9.1A Aquatic Ecotoxicant, 9.3B Terrestrial Vertebrate Ecotoxicant

ERMA Approval Code: HSR000963

Controls:

Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 -Toxic Property Controls		
T1	11–27	Limiting exposure to toxic substances
T2	29, 30	Controlling exposure in places of work
T3 and E5	5(1), 5(2) and 6	Requirements for keeping records of use
T4, E6	7	Requirements for equipment used to handle Larvin SC
T5	8	Requirements for protective clothing and equipment
T6 and E7	9	Approved handler requirements
T7	10	Restrictions on the carriage of hazardous substances on passenger service vehicles
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 - Ecotoxic Property Controls		
E1	32–45	Limiting exposure to ecotoxic substances

E2	46–48	Restrictions on use within application area
E4	50-51	Controls relating to protection of terrestrial vertebrates
Hazardous Substances (Identification) Regulations 2001		
I1	6, 7, 32–35, 36 (1)–(7)	General identification requirements
I3	9	Priority identifiers for ecotoxic substances
I8	14	Priority identifiers for certain toxic substances
I9	18	Secondary identifiers for all hazardous substances
I11	20	Secondary identifiers for ecotoxic substances
I16	25	Secondary identifiers for toxic substances
I17	26	Use of Generic Names
I18	27	Use of Concentration Ranges
I19	29–31	Alternative information in certain cases
I20	36(8)	Durability of information for class 6.1 substances
I21	37–39, 47–50	Documentation required in places of work
I23	41	Specific documentation requirements for ecotoxic 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
Hazardous Substances (Packaging) Regulations 2001		
P1	5, 6, 7 (1), 8	General packaging requirements
P3	9	Packaging requirements for substances packed in limited quantities
P13 and 15	19 and 21	Packaging requirements for toxic substances
PG3	Schedule 3	This schedule describes the (minimum) packaging requirements that must be complied with for this substance. 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 for this substance
Hazardous Substances (Disposal) Regulations 2001		
D4 and D5	8 and 9	Disposal requirements for toxic and ecotoxic substances
D6	10	Disposal requirements for packages
D7	11, 12	Disposal information requirements
D8	13, 14	Disposal documentation requirements
Hazardous Substances (Emergency Management) Regulations 2001		
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 information requirements
EM11	25–34	Level 3 emergency management requirements – emergency response plans
EM13	42	Level 3 emergency management requirements – signage
AH1	4–6	Approved Handler requirements

Applicant: Taranaki Nuchem Limited

Application Code: HSR05009

Purpose: To import or manufacture Bruno, a suspension concentrate containing 500g/L of cyanazine for use as a herbicide to control selected broadleaf weeds in crops

Decision Notified: 22 February 2005

Decision: Approved with Controls

Identifier for Substance: Bruno™

Classification: 6.1D Acute Oral Toxicity, 6.1E Acute Dermal Toxicity, 6.8B Reproductive/Developmental Toxicity, 6.9A Target Organ Systemic Toxicity, 9.1A Aquatic Ecotoxicity, 9.3B Terrestrial Vertebrate Ecotoxicity

ERMA Approval Code: HSR000964

Controls:

Control Code ³²	Regulation ³³	Explanation ³⁴
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 -Toxic Property Controls		
T1	11–27	Limiting exposure to toxic substances
T2	29, 30	Controlling exposure in places of work
T3 and E5	5(1), 5(2), 6	Requirements for keeping records of use
T4 and E6	7	Requirements for equipment used to handle Bruno™
T5	8	Requirements for protective clothing and equipment
T7	10	Restrictions on the carriage of hazardous substances on passenger service vehicles
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 - Ecotoxic Property Controls		
E1	32–45	Limiting exposure to ecotoxic substances
E2	46–48	Restrictions on use within application area
E7	9	Approved handler requirements

³² 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 and is also contained in the ERMA New Zealand *User Guide to the HSNO Control Regulations*.

³³ These Regulations form the controls applicable to this substance. Refer to the cited Regulations for the formal specification, and for definitions and exemptions. The accompanying explanation is intended for guidance only.

³⁴ These explanations are for guidance only. Refer to the cited Regulations for the formal specification, and for definitions and exemptions.

Hazardous Substances (Identification) Regulations 2001		
I1	6, 7, 32–35, 36 (1)–(7)	General identification requirements
I3	9	Priority identifiers for ecotoxic substances
I8	14	Priority identifiers for certain toxic substances
I9	18	Secondary identifiers for all hazardous substances
I11	20	Secondary identifiers for ecotoxic substances
I16	25	Secondary identifiers for toxic substances
I17	26	Use of Generic Names
I18	27	Use of Concentration Ranges
I19	29–31	Alternative information in certain cases
I20	36(8)	Durability of information for class 6.1 substances
I21	37–39, 47–50	Documentation required in places of work
I23	41	Specific documentation requirements for ecotoxic 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
Hazardous Substances (Packaging) Regulations 2001		
P1	5, 6, 7 (1), 8	General packaging requirements
P3	9	Packaging requirements for substances packed in limited quantities
P13 and 15	19 and 21	Packaging requirements for Bruno™
PG3	Schedule 3	This schedule describes the (minimum) packaging requirements that must be complied with for this substance. 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 for this substance
Hazardous Substances (Disposal) Regulations 2001		
D4 and D5	8 and 9	Disposal requirements for Bruno™
D6	10	Disposal requirements for packages
D7	11, 12	Disposal information requirements
D8	13, 14	Disposal documentation requirements
Hazardous Substances (Emergency Management) Regulations 2001		
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 information requirements
EM11	25–34	Level 3 emergency management requirements – emergency response plans
EM12	35–41	Level 3 emergency management requirements – secondary containment
EM13	42	Level 3 emergency management requirements – signage
AH1		
	4–6	Approved Handler requirements
Regulations 4 to 43 where applicable		
The controls relating to stationary container systems, set out in Schedule 8 of the New Zealand Gazette Notice of Thursday, 25 March 2004, Issue Number 35, shall apply, notwithstanding clause (1)(1) of the schedule.		

Applicant: BASF New Zealand

Application Code: HSR05015

Purpose: To approve the import or manufacture of PERFEKTHION S/1, an organophosphorus insecticide intended for use on cereal, fodder, fruit, lucerne, pasture and vegetable crops. The application is necessitated by a formulation change to the reference substance

Decision Notified: 22 February 2005

Decision: Approved with Controls

Identifier for Substance: Perfekthion S-1

Classification: 3.1C Flammability, 6.1C Acute Oral Toxicity, 6.1D Acute Dermal Toxicity, 6.4A Eye Irritation, 6.8B Reproductive/Developmental Toxicity, 6.9A Target Organ Systemic Toxicity, 9.1A Aquatic Ecotoxicity, 9.2B Soil Ecotoxicity, 9.3A Terrestrial Vertebrate Ecotoxicity, 9.4A Terrestrial Invertebrate Ecotoxicity

ERMA Approval Code: HSR000965

Controls:

Control Code ³⁵	Regulation ³⁶	Explanation ³⁷
Hazardous Substances (Classes 1 to 5 Control Regulations) Regulations 2001 - Flammable Property Controls		
F1	7	General test certification requirements for all class 1 to 5 substances
F2	8	General public transportation restrictions and requirements for all class 1 to 5 substances
F3	55	General limits on flammable substances
F5	58-59	Requirements for hazardous atmosphere zones for Perfekthion S-1
F6	60-70	Requirements to reduce the likelihood of unintended ignition of Perfekthion S-1

³⁵ 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 and is also contained in the ERMA New Zealand *User Guide to the HSNO Control Regulations*.

³⁶ These Regulations form the controls applicable to this substance. Refer to the cited Regulations for the formal specification, and for definitions and exemptions. The accompanying explanation is intended for guidance only.

³⁷ These explanations are for guidance only. Refer to the cited Regulations for the formal specification, and for definitions and exemptions.

F11	76	Segregation of incompatible substances
F12	77	Requirement to establish a hazardous substance location if flammable substances are present
F14	81	Test certification requirements for facilities where Perfekthion S-1 is present
F16	83	Controls on transit depots where flammable substances are present
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 - Toxic Property Controls		
T1	11–27	Limiting exposure to toxic substances
T2	29, 30	Controlling exposure in places of work
T3 and E5	5(1), 5(2), 6	Requirements for keeping records of use
T4 and E6	7	Requirements for equipment used to handle hazardous substances
T5	8	Requirements for protective clothing and equipment
T6	9	Approved handler requirements
T7	10	Restrictions on the carriage of hazardous substances on passenger service vehicles
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 - Ecotoxic Property Controls		
E1	32–45	Limiting exposure to ecotoxic substances
E2	46–48	Restrictions on use within application area
E3	49	Controls relating to protection of terrestrial invertebrates e.g. beneficial insects
E7	9	Approved handler requirements
Hazardous Substances (Identification) Regulations 2001		
I1	6, 7, 32–35, 36 (1)–(7)	General identification requirements
I3	9	Priority identifiers for ecotoxic substances
I5	11	Priority identifiers for flammable substances
I8	14	Priority identifiers for certain 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
I17	26	Use of Generic Names
I18	27	Use of Concentration Ranges
I19	29–31	Alternative information in certain cases
I20	36(8)	Durability of information for class 6.1 substances
I21	37–39, 47–50	Documentation required in places of work

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
Hazardous Substances (Packaging) Regulations 2001		
P1	5, 6, 7 (1), 8	General packaging requirements
P3	9	Packaging requirements for substances packed in limited quantities
P5 and P13 and P15	11 & 19 & 21	Packaging requirements for Perfekthion S-1
PG3	Schedule 3	This schedule describes the (minimum) packaging requirements that must be complied with for this substance. 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 for this substance
Hazardous Substances (Disposal) Regulations 2001		
D2 & D4 & D5	6, 8 & 9	Disposal requirements Perfekthion
D6	10	Disposal requirements for packages
D7	11, 12	Disposal information requirements
D8	13, 14	Disposal documentation requirements
Hazardous Substances (Emergency Management) Regulations 2001		
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 information requirements
EM9	17	Specific documentation requirements for flammable and oxidising substances and organic peroxides
EM10	21–24	Fire extinguishers
EM11	25–34	Level 3 emergency management requirements – emergency response plans
EM12	35–41	Level 3 emergency management requirements – secondary containment
EM13	42	Level 3 emergency management requirements – signage
Hazardous Substances (Personnel Qualification) Regulations 2001		
AH1	4–6	Approved Handler requirements
Hazardous Substances (Tracking) Regulations 2001		
TR1	4(1), 5, 6	General tracking requirements

Hazardous Substances (Tank Wagon and Transportable Containers) Regulations 2004
Regulations 4 to 43 apply where applicable.
Section 77A Controls
The controls relating to stationary container systems, set out in Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004, of Thursday, 25 March 2004, Issue Number 35, shall apply, notwithstanding clause (1)(1) of the schedule.
The controls relating to adverse effects of unintended ignition of class 2 and class 3.1 hazardous substances, set out in Schedule 10 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004, of Thursday, 25 March 2004, shall apply, notwithstanding clause (1) of the schedule.

TEST CERTIFIERS

The Chief Executive of the Environmental Risk Management Authority, acting under delegated power from the Authority, reached decisions on the following applications. The full requirements and limitations for the following Test Certifiers is available on our public register or website.

Applicant: Willem Alderink

Region: Auckland

Decision: Approved with Limitations

Date of Approval: 16 February 2005

ERMA Approval Code: TST000113

Applicant: James McCafferty

Region: Taranaki

Decision: Approved with Limitations

Date of Approval: 16 February 2005

ERMA Approval Code: TST000114

Applicant: James Williamson

Region: Auckland

Decision: Approved with Limitations

Date of Approval: 23 February 2005

ERMA Approval Code: TST000116

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