

## ENVIRONMENTAL RISK MANAGEMENT AUTHORITY

## THE BULLETIN

The Bulletin is published approximately eleven times per year. It is an official record of applications being processed, the Authority's decisions, and other activities under the Hazardous Substances and New Organisms (HSNO) Act 1996. The Bulletin – and further information on the application process are available on the ERMA New Zealand website: [www.ermanz.govt.nz](http://www.ermanz.govt.nz). The Bulletin can also be ordered by electronic subscription through [bulletin@ermanz.govt.nz](mailto:bulletin@ermanz.govt.nz)

## NEW ORGANISMS

## NOTIFIED APPLICATIONS RECEIVED AND OPEN FOR SUBMISSIONS

There are no new organism applications currently open for submissions.

## NON-NOTIFIED APPLICATIONS RECEIVED

**Application Code:** S2603001

**Applicant:** H.L.Rosevear & Co Limited

**Purpose:** To have *Bromus carinatus* declared already present in New Zealand and included on MAFRA Standard 155.02.05 Importation of Seed for Sowing – main purpose is commercial multiplication and re-export

**Date Application Received:** 7 April 2003

**Application Code:** S2603003

**Applicant:** New Zealand Cactus and Succulent Society

**Purpose:** To have a range of cacti (genera *Conophytum* and *Ophthalmophyllum*) declared to be already present in New Zealand under synonymous names

**Date Application Received:** 30 April 2003

## DECISIONS ON APPLICATIONS

The Environmental Risk Management Authority reached a decision on the following application on 2 April 2003

**Application code:** GMD02078

**Applicant:** Genesis Research and Development Corporation Limited

**Purpose:** To develop in containment Tobacco mosaic virus, Narcissus mosaic virus, Rye grass mosaic virus, Watermelon mosaic virus, Tamarillo mosaic virus, Zucchini yellow mosaic virus and Tobacco rattle virus vectors to aid assignment of plant gene function

**Description of Organisms:**

(Note this is a summary of the organism description. The full description is available on the website (as Annex A to the decision) or a hard copy can be sent by request.)

*Nicotiana benthamiana*; *Nicotiana tabacum* (tobacco); *Nicotiana sylvestris*; *Arabidopsis thaliana*; *Lycopersicon esculentum* (tomato); *Cucurbita maxima* (pumpkin); *Cucurbita moschata* (butternut pumpkin); *Cucumis sativus* (cucumber); *Cucumis melo* (melon); *Sicyos angulatus*; *Populus alba* (poplar); *Zinnia elegans*; *Lolium perenne* (rye grass); *Oryza sativa* (rice); *Salix alba* (willow); *Eucalyptus grandis* and *Pinus radiata* (pine) plants infected (using *Agrobacterium*-mediated inoculation) with and *Escherichia coli* (strains DN5 $\phi$ , DH10B, JM101 and

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JM109) and *Agrobacterium tumefaciens* Conn strain LBA4404 modified with non-conjugative vectors that contain all or part of one of the following viral genomes under the control of the 35S cauliflower mosaic virus promoter, or in vitro transcribed using the SP6 bacteriophage promoter, or the T7 bacteriophage promoter: Tobacco rattle virus (TRV), Narcissus mosaic virus (NMV), Tobacco mosaic virus (TMV), Zucchini yellow mosaic virus (ZYMV), Watermelon mosaic virus (WMV), or Tamarillo mosaic virus (TaMV).

The viral genomes may include a duplicated coat protein promoter, cloning sites, the GUS or GFP gene, and genetic material from *Nicotiana benthamiana*; *Nicotiana tabacum* (tobacco); *Nicotiana sylvestris*; *Arabidopsis thaliana*; *Lycopersicon esculentum* (tomato); *Cucurbita maxima* (pumpkin); *Cucurbita moschata* (butternut pumpkin); *Cucumis sativus* (cucumber); *Cucumis melo* (melon); *Sicyos angulatus*; *Populus alba* (poplar); *Zinnia elegans*; *Lolium perenne* (rye grass); *Oryza sativa* (rice); *Salix alba* (willow); *Eucalyptus grandis* and *Pinus radiata* (pine).

**Decision:** Approved with Controls except that the use of Rye grass mosaic virus as a vector was declined for all plant combinations

**ERMA Approval Codes: GMD002585 — 2608**

### Controls:

In order to satisfactorily address the matters detailed in the Third Schedule Part I Containment Controls for Development or Field Testing of Genetically Modified Organisms<sup>1</sup> of the Act, the Authority's approval of this application is subject to the following controls:

#### 1. Description of organisms

1.1 Organisms only to be used for purpose of application which is the maintenance of a new genetically modified organism in containment facilities for experimental purposes as specified in section 39(1) (g) of the Act. The purpose of the experimental work outlined in this application is to use viral vectors to aid assignment of gene function by silencing and by overexpression of specific nuclear encoded genes. This research involves the development of Tobacco mosaic virus, Narcissus mosaic virus, Watermelon mosaic virus, Tamarillo mosaic virus, Zucchini yellow mosaic virus and Tobacco rattle virus viral vectors that incorporate donor DNA of plant origin to

assign gene function. Each of these viral vectors will be cloned and maintained using *Escherichia coli* and *Agrobacterium tumefaciens*.

#### 2. To limit the likelihood of any accidental release of any organism or any viable genetic material<sup>2</sup>.

2.1 The containment facilities shall be approved by Ministry of Agriculture and Forestry (MAF) in accordance with the MAF Biosecurity Authority/ERMA New Zealand Standards 154.03.02 for micro organisms and/or 155.04.09 for plants, and the controls of the Authority.

#### DNA manipulations and cloning using *Escherichia coli* and *Agrobacterium tumefaciens*.

2.2 The construction and operation of the containment facility shall be in accordance with the:

- a) MAF Biosecurity Authority/ERMA New Zealand Standard 154.03.02: Containment Facilities for Micro organisms
- b) Australian New Zealand standard AS/NZS 2243.3:2002 Safety in Laboratories: Part 3: Microbiological Aspects and Containment Facilities at Laboratory

2.3 The organisms identified in Annex A of this decision as approved organisms for category A/B experiments shall be maintained in Laboratory PC1 containment. The organisms identified in Annex A of this decision as approved organisms for category C experiments shall be maintained in Laboratory PC2 containment.

2.4 Genes that provide resistance to antibiotics vancomycin and penicillin shall not be used.

2.5 All plants, media, and experimental materials shall be autoclaved before being disposed of.

#### Additional controls for PC2 laboratory work.

2.6 All DNA that is inserted into the virus vectors shall be characterised by sequence prior to insertion.

2.7 There is to be no use of sequences which have homology to known or suspected retrotransposons.

#### Movement of materials between laboratory and plant house

2.8 DNA/RNA and any genetically modified organisms shall be transported in secure containers in accordance with the packaging requirements: Packaging Instructions No. 650 of the IATA

<sup>1</sup> Bold headings refer to Matters to be Addressed by Containment Controls for Development and Field Testing of Genetically Modified Organisms, specified in the Third Schedule of the HSNO Act 1996.

<sup>2</sup> 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.

Dangerous Goods Regulations as referred to in AS/NZS 2243.3:2002 Safety in Laboratories: Part 3: (Microbiology). Each transfer shall be recorded in the containment facility register. The applicant shall ensure that no escape of material occurs during this transfer. Prior to the transfer from the containment facility the applicant shall request approval in writing from the Supervisor in accordance with the requirements of the MAF/ERMA New Zealand Standard 155.04.09: Containment Facilities for New Organisms (including genetically modified organisms) of Plant Species.

#### **Maintenance of whole plants in plant house.**

2.9 The construction and operation of the containment facilities where genetically modified plants are used shall be in accordance with the:

- a) MAF Biosecurity Authority/ERMA New Zealand Standard 155.04.09: Containment Facilities for New Organisms (including genetically modified organisms) of Plant Species.
- b) Australian New Zealand standard AS/NZS 2243.3:2002 Safety in Laboratories: Part 3: Microbiological Aspects and Containment Facilities at Laboratory, Plant House Level (PC2).

#### **Additional controls for PC2 plant house<sup>3</sup> work for all virus types.**

- 2.10 The genetically modified plants that are the subject of this application shall not be in the same plant house as other plants.
- 2.11 Only proven virus free and arthropod free seed is to be used for host plants.
- 2.12 No other experiments with plant viruses shall be carried out in the plant house used for this experiment.
- 2.13 Plants shall not be infected with more than one viral vector.
- 2.14 Plants containing different viral vectors shall be kept in different plant houses.
- 2.15 The plant house shall be made insect free by fumigation prior to introduction of the plants, and by sealing any gaps in the plant house.
- 2.16 Any openings in the walls, ceiling or roof, such as windows, vents and air conditioning or ventilation inlets and outlets, shall be screened with screens that have apertures no larger than 10µm.

2.17 Plants shall be grown in sterilised soil-less media.

2.18 A washbasin shall be located within the anteroom or within the plant house close to the entry.

2.19 Personnel shall decontaminate their hands by washing with soap and warm water in the wash-basin provided on entering and leaving the plant house. For insect-transmitted viruses, when entering the plant growth chamber personnel shall put on overshoes, covering clothes (eg lab coat) and a hat in the anteroom. These garments shall be removed on leaving the plant growth chamber and kept in the anteroom between uses and shall only be used in this specific plant growth chamber. Garments shall be laundered at least every two weeks, with overshoes and disposable hats autoclaved and disposed of after use. Clothing shall be stored and laundered in a manner that prevents contact with clothing used in other plant houses.

2.20 Contact of general plant house equipment, such as hoses, with plants containing viruses shall be avoided to prevent transmission of viruses to other plants. Equipment that comes into contact with plants that contain the viruses shall be sterilised or disinfected before being used in other plant houses or on other plants.

2.21 The plants shall be monitored at least weekly to check for the development of any flowers.

2.22 All pollen and seeds from reproductive plants shall be collected by the use of bags over the plants or flowers, secured in a manner to ensure the collection of any pollen or seeds into the bottom of the bag so as to prevent release of pollen or spillage of seed. Bags shall remain on until after all pollen and seeds from the plant are shed.

#### **Additional controls for arthropod transmitted viruses.**

2.23 There shall be an anteroom enclosing the entrance to the plant growth chamber which shall have provision for the use of a sticky pest strip and an insecticide/miticide aerosol spray and the spray shall be used while personnel are in the anteroom. Personnel shall stay in the anteroom for sufficient time for the insecticide/miticide to have knockdown effect before entering the containment facility. Similar measures shall be taken when personnel leave the plant growth chamber.

2.24 The plant growth chamber shall be sprayed with a systemic insecticide to prevent arthropods establishing inside the facility.

2.25 There shall be a suitable arthropod control program to prevent the establishment and development of an arthropod population.

<sup>3</sup> For the purpose of these additional controls to the PC2 planthouse, the term plant house may refer to an entire planthouse facility, and may also refer to separate rooms within such a facility, providing that these rooms are each fully enclosed so as to effectively contain the organisms, that laboratory coats and any other protective equipment stays in that room (except when securely removed for washing), and that personnel wash their hands after each period of work in any room.

### **3. To exclude unauthorised people from the facility**

- 3.1 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 controls 1.2 and 3.1.
- 3.2 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 controls 2.2, 2.3 and 2.9, and the additional controls 2.1 to 2.25.

### **4. To exclude other organisms from the facility and to control undesirable and unwanted organisms within the facility**

#### **Additional control:**

- 4.1 No insects shall be used as biological control agents for plant house insect pests in the plant house facility.

### **5. To prevent unintended release of the organism by experimenters working with the organism**

- 5.1 The unintended release of the organism shall be prevented in accordance with the standards listed in controls 2.2, 2.3 and 2.9, and the additional controls 2.1 to 2.25.

### **6. To control the effects of any accidental release or escape of an organism**

- 6.1 Control of the effects of any accidental release or escape of an organism shall be in compliance with the standards listed in controls 2.2 and 2.25.
- 6.2 If for any reason a breach of containment occurs the facility Supervisor<sup>4</sup>, MAF Biosecurity Authority and ERMA New Zealand shall be notified immediately the event is noticed (and at least within 24 hours of the breach being detected).
- 6.3 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 MAF Biosecurity Authority/ERMA New Zealand Standards 154.03.02 and 155.04.09
- 6.4 Prior to any experiments commencing all plants of the species involved in the experiments shall be removed from the vicinity (at least 5 metres) outside of the plant house(s) in which the experiments are being carried out, and kept clear of these species during the experiments to create

an exclusion zone. The monitoring of this zone for such plants shall be carried out at least once every 2 weeks.

### **7. Inspection and monitoring requirements for containment facilities**

- 7.1 The inspection and monitoring requirements for containment facilities shall be in compliance with the standards listed in controls 2.2, 2.3 and 2.9.
- 7.2 The Authority, or its authorised agent or properly authorised enforcement officers, may inspect the facilities at any reasonable time.
- 7.3 The containment manuals shall be updated, as necessary, to address the implementation of the controls imposed by this approval, in accordance with MAF Biosecurity Authority/ERMA New Zealand Standard 154.03.02: Containment Facilities for Micro organisms.

#### **Additional controls:**

- 7.4 An experienced plant virologist shall at all times maintain oversight of the experiments and assess the plants for viral symptoms. Any symptoms that differ from those expected for the various vectors and the viruses from which they were derived shall be reported to MAF and ERMA New Zealand, at least annually, as shall the fate of all plants involved in the experiments.
- 7.5 The applicant shall carry out DNA hybridisation experiments or other appropriate assessments to determine if novel viruses are generated. Such assessments shall be based on a statistically valid testing regime. The testing regime and results of such tests shall be notified to MAF and ERMA New Zealand annually. Where novel viruses are detected MAF and ERMA New Zealand shall be notified immediately.
- 7.6 All plant virus vectors and virus material shall be imported directly from either recognised collections or from recognised experts in the field.

### **8. Qualifications required of the persons responsible for implementing those controls**

- 8.1 The training of personnel working in the facility shall be in compliance with the standards listed in controls 2.2, 2.3 and 2.25.

#### **Additional controls:**

- 8.2 The identity of the experienced virologist overseeing the research (and any subsequent changes) shall be recorded in the containment manual and notified to ERMA New Zealand and MAF.

<sup>4</sup> An inspector appointed under the Biosecurity Act.

- 8.3 An experienced virologist shall train all staff working with the organisms to ensure they are familiar with the principles of containment for plant viruses and the containment procedures of the facility.
- 8.4 The person(s) responsible for the particular research area and/or the person(s) responsible for the operation of the containment facilities shall ensure that all personnel who work with the Category C organisms to sign-off that they have received training from the experienced virologist on the principles of containment of viruses and of the containment procedures required by these controls.
- 8.5 Approval is for length of time of four years.

The Environmental Risk Management Authority reached a decision on the following application on 8 April 2003

**Application Code: GMC02011**

**Applicant: University of Otago**

**Purpose:** To import into containment genetically modified *Lactobacilli reuteri* strain 100-23 derived by insertion of a replication –defective plasmid to study the properties essential for colonisation of the murine gut, in order to better understand the microbial ecology of the gastrointestinal tract

**Description of Organisms:** *Lactobacillus reuteri* strain 100-23 insertional mutants derived by the integration of the replication-defective vector pOR128

**Decision: Approved with Controls**

**ERMA Approval Code: GMC001196**

**Controls:**

In order to satisfactorily address the matters detailed in the Third Schedule Part I: Containment controls for importing, developing or field testing of genetically modified organisms<sup>5</sup> of the HSNO Act, and other matters in order to give effect to the purpose of the HSNO Act (section 45(2)), the Authority's approval of this application is subject to the following controls:

**1. To limit the likelihood of any accidental release of any organism or any viable genetic material<sup>6</sup>.**

- 1.1 The person responsible for a particular research area and/or 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.

- 1.2 The containment facility in which the genetically modified *Lactobacillus reuteri* are maintained shall be registered by the Ministry of Agriculture and Forestry (MAF) Biosecurity Authority in accordance with:

- MAF/ERMA New Zealand Standard 154.03.02: Containment Facilities for Micro organisms, at Physical Containment Level 2 (PC2) as defined in AS/NZS 2243.3.2002. Safety in Laboratories. Part 3: Microbiological aspects and containment facilities.

- 1.3 The containment facility in which mice, used to investigate the colonisation ability of the genetically modified *Lactobacillus reuteri*, are maintained shall be registered by the Ministry of Agriculture and Forestry in accordance with:

- MAF/ERMA New Zealand standard 154.03.02: Containment Facilities for Micro organisms.
- MAF/ERMA New Zealand standard 154.03.03: Containment Facilities for Vertebrate Laboratory Animals.

At Physical Containment Level 2 (PC2) as defined in AS/NZS 2243.3.2002. Safety in Laboratories. Part 3: Microbiological aspects and containment facilities.

- 1.4 The construction and operation of the containment facilities ('the facility') in which the organisms are maintained, shall be in accordance with the relevant standards listed in 1.2 and 1.3 above.
- 1.5 Waste material generated within the vertebrate facility (including bedding) shall be bagged within gnotobiotic isolators, and sterilised by autoclaving. The carcasses of mice used in the experiments shall be carried in a double-bag to a biological safety cabinet within the PC2 laboratory. Following the removal of organs, carcasses shall be returned to the bag and disposed of by incineration. Remains of organs no longer required shall also be disposed of by incineration. The interior of the isolator shall be sprayed with an appropriate sterilising solution prior to it being opened for cleaning.
- 1.6 The *Lactobacillus reuteri* 100-23 insertional mutants must be imported from a recognised laboratory that is involved in research on Lactobacilli. Individual mutants must be derived from pure cultures that contain no inseparables.

<sup>5</sup> Bold headings refer to Matters to be Addressed by Containment Controls for Development and Field Testing of Genetically Modified Organisms, specified in the Third Schedule of the HSNO Act 1996.

<sup>6</sup> 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.

1.7 The applicant shall report to ERMA New Zealand on the identity of each mutant as it is imported. Details of the genetic material of each construct (including recognised laboratory source, DNA sequence, site of insertion and potential gene products and function) shall be provided to ERMA New Zealand.

1.8 Any imported strains of *Lactobacillus reuteri*, which are subject to this approval, that exhibit pathogenicity shall be reported to ERMA New Zealand immediately.

## **2. To exclude unauthorised people from the facility:**

2.1 Construction and operation of the containment facility shall comply with the requirements of the standards listed in controls 1.2 and 1.3 relating to the identification of entrances, numbers of and access to entrances and security requirements for the entrances and the facility.

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

3.1 Construction and operation of the containment facility shall comply with the requirements of the standards listed in controls 1.2 and 1.3 relating to the exclusion of other organisms from the facility and the control of undesirable and unwanted organisms within the facility.

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

4.1 Construction and operation of the containment facility shall comply with the requirements of the standards listed in controls 1.2 and 1.3 relating to the prevention of unintended release of the organisms by experimenters working with the organisms.

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

5.1 Construction and operation of the containment facility shall comply with the requirements of the standards listed in controls 1.2 and 1.3 relating to controlling the effects of any accidental release or escape of an organism.

5.2 If for any reason a breach of containment occurs, the facility Supervisor<sup>7</sup>, MAF Biosecurity Authority and ERMA New Zealand shall be notified immediately the event is noticed (and at least within 24 hours of the breach being detected).

5.3 In the event of any breach of containment of the organisms, 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 controls 1.2 and 1.3.

## **6. Inspection and monitoring requirements for containment facilities:**

6.1 The operation of the containment facilities shall comply with the requirements contained in the standards listed in controls 1.2 and 1.3 relating to the inspection and monitoring requirements for containment facilities.

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

6.3 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 154.03.02: Containment Facilities for Micro organisms.

## **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 controls 1.2 and 1.3.

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The Environmental Risk Management Authority reached a decision on the following application on 16 April 2003

**Application Code:** TNS02003

**Applicant:** Raytheon Polar Services New Zealand Limited

**Purpose:** To tranship samples from the US National Science Foundation programme in the Antarctic via Christchurch to destinations outside New Zealand. Samples to be housed in a MAF approved Transitional facility

**Description of Organisms:** Samples en route from the Antarctic to the USA

**Decision:** Approved with Controls

**ERMA Approval Code:** TNS000010 — 0018

### **Controls:**

6.1 All samples to be transhipped shall be packaged using the IATA Dangerous Goods Regulations with packaging equivalent to 602 and 650 and in accordance with Section 13.4(d) and (e) of the Australian New Zealand Standard AS/NZS 2243.3:2002 Safety in laboratories (Part 3

<sup>7</sup> An inspector appointed under the Biosecurity Act.

Microbiological aspects of Containment). Samples that are known to contain unusual or virulent organisms sourced from humans must be packaged according to IATA Dangerous good regulations packaging standard 650.

- 6.2 All samples shall be covered by the applicable plant or animal transshipment permits and be held in a MAF approved transitional facility.
- 6.3 All samples to be transhipped must do so within 20 working days of arrival in the country.
- 6.4 While samples are in the country during transshipment they are the responsibility of Raytheon Polar Services Ltd. During this time the samples are to be adequately tracked to ensure that all packages arriving and leaving the country can be verified and reconciled. Tracking records to ensure that all packages can be accounted for must be maintained and made available for auditing by MAF.
- 6.5 Samples transferred to a freight forwarder (contracted to Raytheon) that do not leave the country within 6 hours must be held within a registered transitional facility.
- 6.6 A contingency plan to deal with any breakages or damage that may occur allowing the escape of new organisms must be in place.
- 6.7 Any significant damage that results in the package contents being spilt must be reported to ERMA New Zealand and to MAF.

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The Environmental Risk Management Authority reached a decision on the following application on 22 April 2003

**Application Code: NOC02004**

**Applicant: Landcare Research**

**Purpose:** This root and stem boring weevil may be considered for eventual release as a biocontrol agent for the problem pastoral and environmental weed Californian thistle (*Cirsium arvense*) found throughout New Zealand

**Description of Organisms:** *Apion onopordi*  
Kirby 1808

**Decision:** Approved with Controls

**ERMA Approval Code: NOC002279**

## **Controls:**

In order to satisfactorily address the matters detailed in the Third Schedule Part II: Containment controls for new organisms excluding genetically modified organisms<sup>8</sup> of the Act, and other matters in order to give effect to the purpose of the Act (section 45(2)), the Committee's approval of this application is subject to the following controls:

### **1. To limit the likelihood of any accidental release of any organism or any viable genetic material<sup>9</sup>:**

- 1.1 The construction, operation, and management of the containment facility shall be in accordance with the:
  - a) Ministry of Agriculture and Forestry (MAF)/ERMA New Zealand Standard 154.02.08. Transitional and Containment Facility for Invertebrates;
  - b) Australian New Zealand Standard AS/NZS 2243:3 2002 Safety in Laboratories: Part 3: (Microbiological aspects and containment facilities), Invertebrate Containment Level 2 (PC2); and the controls of the Authority.

### **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 1.1.

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

- 3.1 Control of the effects of any accidental release or escape of an organism shall be in compliance with the standards listed in Control 1.1.
- 3.2 If for any reason a breach of containment occurs the facility Supervisor<sup>10</sup>, MAF Biosecurity Authority and ERMA New Zealand shall be notified immediately the event is noticed (and at least within 24 hours of the breach being detected).
- 3.3 In the event of any breach of containment of the organisms, 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 1.1.

<sup>8</sup> Bold headings refer to Matters to be Addressed by Containment Controls for Development and Field Testing of Genetically Modified Organisms, specified in the Third Schedule of the HSNO Act 1996.

<sup>9</sup> 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.

<sup>10</sup> An inspector appointed under the Biosecurity Act.

#### 4. Inspection and monitoring requirements for containment facilities:

- 4.1 The inspection and monitoring requirements for containment facilities shall be in compliance with the standards listed in Control 1.1.
- 4.2 The Authority or its authorised agent or properly authorised enforcement officers, may inspect the facility at any reasonable time.
- 4.3 The containment manual shall be updated, as necessary, to address the implementation of the controls imposed by this approval, in accordance with Ministry of Agriculture and Forestry (MAF)/ERMA New Zealand Standard 154.02.08. Transitional and Containment Facility for Invertebrates.

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

- 5.1 The training of personnel working in the facility shall be in compliance with the standards listed in Control 1.1.

#### 6. Additional controls:

- 6.1 The insects shall be free of ectoparasites before moving from quarantine into containment.
- 6.2 The insects are to be held in containment, and the host specificity tests carried out, only within Landcare Research's Transitional and Containment Facility for Invertebrates at the Canterbury Agriculture and Science Centre, 40 Gerald Street, Lincoln.
- 6.3 That the native puha and introduced puha are included in the first round of host plant testing.
- 6.4 Screen mesh shall be cleaned weekly with an alcohol and janola spray to kill any *Puccinia punctiformis* spores present.
- 6.5 All plant parts, soil, packaging and associated material that has been in contact with *Apion onopordi* must be sealed into autoclave bags and autoclaved to destroy the immobile stages and any possible pathogens prior to leaving containment.

### DELEGATED AUTHORITY

There have been no delegated decisions decided by the ERMA New Zealand Chief Executive in this period.

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

**Applicant:** AgResearch, Wallaceville Animal Research

**ERMA Approval Code:** GMD002615 — 2617

**Institution Code:** GMO03/ARW027

**Purpose:** Transgenic possum parasites (*Parastrongyloides trichosuri*) are being investigated for their use in sustainable biological control of possums. This work will test the function and heritability of reported genes in transgenic parasites in the possum host.

**Description of Organism:** *Escherichia coli* (K12 and B strains), *Caenorhabditis elegans* and *Parastrongyloides trichosuri* modified with non-conjugative vectors; and *Caenorhabditis elegans* and *Parastrongyloides trichosuri* gene promoters.

**Decision:** Approved with controls / PC2

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**Applicant:** Massey University

**ERMA Approval Code:** GMD002618

**Institution Code:** GMO03/MU005

**Purpose:** To produce reasonable quantities of soluble dystrophin, utrophin, nesprin, emerlin and lamin A in *Escherichia coli* for structural and functional analysis

**Description of Organism:** *Escherichia coli* (K12 or B derivatives) modified with non-conjugative vectors containing *Mus musculus* or *Rattus norvegicus* or *Homo sapiens* or *Caenorhabditis elegans* cDNA genes for dystrophin, utrophin, nesprin, emerlin and lamin A

**Decision:** Approved with controls / PC1 and PC2

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**Applicant:** Massey University

**ERMA Approval Code:** GMD002619 — 2620

**Institution Code:** GMO03/MU006

**Purpose:** To identify mechanism of Ff filamentous bacteriophage assembly and secretion and apply knowledge for display of proteins on surface of bacteriophage in order to study protein-protein interactions

**Description of Organism:** *Escherichia coli* (K12 or B derivatives) modified with non-conjugative vectors containing Ff bacteriophage, *Arabidopsis thaliana*, *Malus domestica* or *Mus musculus* DNA; Ff bacteriophage modified with deletion of Ff bacteriophage DNA or insertion of *Arabidopsis thaliana*, *Malus domestica* or *Mus musculus* DNA

**Decision:** Approved with controls / PC1 and PC2

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**Applicant:** Massey University

**ERMA Approval Code:** GMD002621 — 2622

**Institution Code:** GMO03/MU007

**Purpose:** To determine whether fungal toxins are involved in grapevine trunk disease.

**Description of Organism:** *Eutypa lata* modified with non-conjugative vectors containing characterised *Eutypa lata* DNA and bacterial selectable marker genes *hph* and *ble*; and *Phaeoconiella chlamydospora* modified with non-conjugative vectors containing characterised *Phaeoconiella chlamydospora* DNA and bacterial selectable marker genes *hph* and *ble*.

**Decision:** Approved with controls / PC2

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**Applicant:** Massey University

**ERMA Approval Code:** GMD002623

**Institution Code:** GMO03/MU008

**Purpose:** To compare DNA sequences of secondary metabolite and housekeeping genes from a broad range of fungi

**Description of Organism:** *Escherichia coli* (K12 or B derivatives) modified with non-conjugative cloning vectors containing DNA from ascomycete and deuteromycete fungi.

**Decision:** Approved with controls / PC1

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**Applicant:** Massey University

**ERMA Approval Code:** GMD002624

**Institution Code:** GMO03/MU009

**Purpose:** To study biosynthesis of dothistromin and role of dothistromin toxin in Dothistroma needle blight by cloning *Dothistroma pini* DNA in *Escherichia coli* for sequence analysis and preparing gene replacement constructs.  
Update of GMO99/MU009

**Description of Organism:** *Escherichia coli* (K12 or B derivatives) modified with non-conjugative pUC-based vectors containing DNA from *Dothistroma pini*, *Aequorea victoria*, *Aspergillus nidulans*, *Streptoalloteichus hindustandus* and *Escherichia coli*.

**Decision:** Approved with controls / PC2

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**Applicant:** Massey University

**ERMA Approval Code:** GMD002625

**Institution Code:** GMO03/MU010

**Purpose:** To study the role of dothistromin toxin in Dothistroma needle blight by making gene replacement mutants that are deficient in toxin production, and track infection of pine needles with pathogen and toxin-deficient mutants using GFP.  
Update of GMO99/MU010

**Description of Organism:** *Dothistroma pini* modified with non-conjugative pUC-based vectors containing DNA from *Dothistroma pini*, *Aequorea victoria*, *Aspergillus nidulans*, *Streptoalloteichus hindustandus* and *Escherichia coli*.

**Decision:** Approved with controls / PC2

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**Applicant:** Massey University

**ERMA Approval Code:** GMD002626 — 2628

**Institution Code:** GMO03/MU011

**Purpose:** Analysis of promoter function during infection structure development.  
Update of GMO00/MU068

**Description of Organism:** *Escherichia coli* (K12 or B derivatives) modified with non-conjugative vectors containing DNA from *Glomerella cingulata*, *Aspergillus nidulans*, *Aequorea victoria*, *Renilla reniformis*, *Agrobacterium tumefaciens*, *Fusarium oxysporum* and *Pseudomonas aeruginosa*; *Agrobacterium tumefaciens* (strain LBA4404) modified with vectors containing DNA from *Glomerella cingulata*, *Aspergillus nidulans*, *Aequorea victoria*, *Renilla reniformis*, *Escherichia coli*, *Agrobacterium tumefaciens*, *Fusarium oxysporum* and *Pseudomonas aeruginosa*; *Glomerella cingulata* modified with integrative vectors or nucleic acids containing DNA from *Glomerella cingulata*, *Aspergillus nidulans*, *Aequorea victoria*, *Renilla reniformis*, *Escherichia coli*, *Agrobacterium tumefaciens*, *Fusarium oxysporum* and *Pseudomonas aeruginosa*

**Decision:** Approved with controls / PC1 and PC2

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**Applicant:** Massey University

**ERMA Approval Code:** GMD002629

**Institution Code:** GMO03/MU013

**Purpose:** To study the role of dothistromin toxin in Dothistroma needle blight by making gene replacement mutants that are deficient in toxin production.  
Update of GMO99/MU010

**Description of Organism:** *Dothistroma pini* modified with non-conjugative pUC-based vectors containing DNA from *Dothistroma pini*, *Aequorea victoria*, *Aspergillus nidulans*, *Streptoalloteichus hindustanus* and *Escherichia coli*.

**Decision:** Approved with controls / PC2

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**Applicant:** University of Auckland

**ERMA Approval Code:** GMD002609 — 2612

**Institution Code:** GMO03/UA002

**Purpose:** To investigate the neurohumoral regulation of sensory systems, particularly the control of transduction and neurotransmission in the cochlea.  
Update of GMO00/UA015 and GMO01/UA042

**Description of Organism:** *Escherichia coli*, *Xenopus laevis* oocytes, CHO cell line (*Cricetulus griseus*) and HEK (*Homo sapiens*) cell line as modified by:

1. Non conjugative vectors.
2. cDNA extracted from auditory tissue from rat (*Rattus rattus*, *Rattus norvegicus*), Mouse (*Mus musculus*), gerbil (*Meriones unguiculatus*), guinea pig (*Cavia porcellus*) and human (*Homo sapiens*).
3. Control cDNA from rat (*Rattus rattus*, *Rattus norvegicus*), Mouse (*Mus musculus*), gerbil (*Meriones unguiculatus*), guinea pig (*Cavia porcellus*) and human (*Homo sapiens*).

**Decision:** Approved with controls / PC1

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**Applicant:** University of Auckland

**ERMA Approval Code:** GMD002613 — 2614

**Institution Code:** GMO03/UA004

**Purpose:** To develop human tumour cell lines with inducible expression of human DNA topoisomerase function, to carry out preclinical studies on a series of new topoisomerase-directed anticancer drugs.

**Description of Organism:** *Escherichia coli* K12 and B strains and *Homo sapiens* tumour cell lines as modified by human (*Homo sapiens*) Topoisomerase I and Topoisomerase II genes.

**Decision:** Approved with controls / PC1

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**Applicant:** University of Waikato

**ERMA Approval Code:** GMD002630

**Institution Code:** GMO03/UW001

**Purpose:** To verify whether culture methods represent the total diversity of thermophilic bacteria in a pool.

**Description of Organism:** *Escherichia coli* (JM109 or equivalent) modified with P Bluescript containing 16S insert from thermophilic bacteria or equivalent vector.

**Decision:** Approved with controls / PC1

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## AMENDMENTS TO APPROVALS

There have been no minor or technical amendments under Section 67A of the HSNO Act during this period.

## HAZARDOUS SUBSTANCES

### NOTIFIED APPLICATIONS RECEIVED AND OPEN FOR SUBMISSIONS

**Application Code:** HSR02042

**Applicant:** Bayer New Zealand Limited

**Purpose:** To import for release Advantage Multi, a veterinary medicine for topical application to cats and dogs for control of fleas and gastrointestinal parasites

**Date Application Received:** 20 March 2003

**Date Publicly Notified:** 2 April 2003

**Date Submissions Close:** 16 May 2003

**Application Code:** HSR03012

**Applicant:** Juken Nissho Limited

**Purpose:** To import the hazardous substance Nissan Clean CI as a wood preservative to be used in a state-of-the-art closed, automated vacuum/pressure treatment plant

**Date Application Received:** 1 April 2003

**Date Publicly Notified:** 7 April 2003

**Date Submissions Close:** 21 May 2003

**Application Code:** HSR03016

**Applicant:** Jurox New Zealand Limited

**Purpose:** To import JQD Drench for use as an anthelmintic in ruminants

**Date Application Received:** 8 April 2003

**Date Publicly Notified:** 10 April 2003

**Date Submissions Close:** 26 May 2003

**Application Code:** HSR02065

**Applicant:** Bayer New Zealand Limited

**Purpose:** To import HUSSAR, a sulfonyl urea herbicide intended for the control of a range of weeds in cereal crops (principally wheat and barley)

**Date Application Received:** 7 April 2003

**Date Publicly Notified:** 11 April 2003

**Date Submissions Close:** 27 May 2003

**Application Code:** HSR02049

**Applicant:** Tomen New Zealand Limited

**Purpose:** To seek approval for import of C-6241 and Select 37 in order to manufacture Arvesta Motsa herbicide solely for export

**Date Application Received:** 28 April 2003

**Date Publicly Notified:** 1 May 2003

**Date Submissions Close:** 12 June 2003

**Application Code:** HSR03013

**Applicant:** PPG Industries NZ Limited

**Purpose:** To seek approval for the import and release of an automotive refinish primer supplied in 350ml aerosol cans

**Date Application Received:** 30 April 2003

**Date Publicly Notified:** 1 May 2003

**Date Submissions Close:** 12 June 2003

### NON-NOTIFIED APPLICATIONS RECEIVED

**Application Code:** HAZ03001

**Applicant:** Plastics New Zealand (Inc)

**Purpose:** To determine whether certain fluoropolymers are hazardous

**Date Application Received:** 2 April 2003

**Application Code:** HAZ03002

**Applicant:** Plastics New Zealand (Inc)

**Purpose:** To determine whether certain polyethers are hazardous

**Date Application Received:** 2 April 2003

**Application Code:** HAZ03003

**Applicant:** Plastics New Zealand (Inc)

**Purpose:** To determine whether certain polyamides are hazardous

**Date Application Received:** 2 April 2003

**Application Code:** HAZ03004

**Applicant:** Plastics New Zealand (Inc)

**Purpose:** To determine whether certain polyesters are hazardous

**Date Application Received:** 2 April 2003

**Application Code: HAZ03005**

**Applicant: Plastics New Zealand (Inc)**

**Purpose:** To determine whether certain polyolefins are hazardous

**Date Application Received:** 2 April 2003

**Application Code: HAZ03006**

**Applicant: Plastics New Zealand (Inc)**

**Purpose:** To determine whether certain vinyl polymers are hazardous

**Date Application Received:** 2 April 2003

**Application Code: HAZ03007**

**Applicant: Plastics New Zealand (Inc)**

**Purpose:** To determine whether polycarbonates are hazardous

**Date Application Received:** 2 April 2003

**Application Code: HSC03001**

**Applicant: J&G Enterprises Limited**

**Purpose:** To manufacture Fertex as an animal remedy to prevent and cure facial eczema and to counter the adverse effects of pasture mycotoxins on grazing sheep and cattle

**Date Application Received:** 2 April 2003

## DECISIONS ON APPLICATIONS

The Environmental Risk Management Authority reached a decision on the following application on 8 April 2003

**Application code: HSR02051**

**Applicant: Yates New Zealand Limited**

**Purpose:** To import PyGanic for use as an insecticide on New Zealand crops

**Identifier for Substance:** PyGanic

**Classifications:** 6.5A, 6.5B, 6.9B, 9.1A, 9.4A

**Decision:** Approved with Controls

**ERMA Approval Code: HSR000051**

**Controls:**

Control Code <sup>8</sup>	Regulation <sup>9</sup>	Explanation <sup>10</sup>
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 – Toxic Property Controls		
T2	Regulations 29, 30	Controlling exposure in places of work
T4, E6	Regulation 7	Requirements for equipment used to handle PyGanic
T5	Regulation 8	Requirements for protective clothing and equipment
T7, E8	Regulation 10	Restrictions on the carriage of PyGanic on passenger service vehicles
Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 – Ecotoxic Property Controls		
E1	Regulations 32 — 45	Limiting exposure to ecotoxic substances
E2	Regulations 46 — 48	Restrictions on use within application area
E3	Regulation 49	Controls relating to protection of terrestrial invertebrates eg beneficial insects
E5	Regulations 5(2), 6	Requirements for keeping records of use

<sup>8</sup> Note: The numbering system used in this column relates to the coding system used in the ERMA New Zealand Controls Matrix. This links the hazard classification categories to the regulatory controls triggered by each category. It is available from ERMA New Zealand (website: [www.ermanz.govt.nz/publications/](http://www.ermanz.govt.nz/publications/)) and is also contained in the ERMA New Zealand *User Guide to the Controls Regulations*.

<sup>9</sup> 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.

<sup>10</sup> These explanations are for guidance only. Refer to the cited regulations for the formal specification, and for definitions and exemptions.

<b>Hazardous Substances (Identification) Regulations 2001</b>		
		<b>The Identification Regulations prescribe requirements with regard to identification of PyGanic in terms of information that must be “immediately available” with the substance (priority and secondary identifiers). This information is generally provided by way of the product label documentation that must be available in the workplace, generally provide by way of MSDS signage at a place where there is a large quantity of the substance.</b>
I1	Regulations 6, 7, 32 — 35, 36(1) — (7)	<b>General identification requirements Regulation 6 – Identification duties of suppliers Regulation 7 – Identification duties of persons in charge Regulations 32 and 33 – Accessibility of information Regulations 34, 35, 36(1) — (7) – Comprehensibility, Clarity and Durability of information</b>
I3	Regulation 9	<b>Priority identifiers for PyGanic</b>
I9, I11, I16	Regulations 18, 20, 25	<b>Secondary identifiers for PyGanic</b>
I17	Regulation 26	<b>Use of Generic Names</b>
I18	Regulation 27	<b>Use of Concentration Ranges</b>
I19	Regulations 29 — 31	<b>Alternative information in certain cases Regulation 29 – PyGanic in fixed bulk containers or bulk transport containers Regulation 30 – Substances in multiple packaging Regulation 31 – Alternative information PyGanic is imported</b>
I21	Regulations 37 — 39, 47 — 50	<b>Documentation required in places of work Regulation 37 – Documentation duties of suppliers Regulation 38 – Documentation duties of persons in charge of places of work Regulation 39 – General content requirements for documentation Regulation 47 – Information not included in approval Regulation 48 – Location and presentation requirements for documentation Regulation 49 – Documentation requirements for vehicles Regulation 50 – Documentation to be supplied on request</b>
I23, I28	Regulations 41, 46	<b>Specific documentation requirements for PyGanic</b>
I29, EM13	Regulations 51 — 52 Regulation 42 (Emergency Management Regulations)	<b>Duties of persons in charge of places with respect to signage</b>
<b>Hazardous Substances (Packaging) Regulations 2001</b>		
P1	Regulations 5, 6, 7(1), 8	<b>General packaging requirements Regulation 5 – Ability to retain contents Regulation 6 – Packaging markings Regulation 7(1) – Requirements when packing PyGanic Regulation 8 – Compatibility</b>
P3, P13, P15, PG3	Regulations 9, 19, 21; Schedule 3	<b>Packaging requirements for substances packed in limited quantities</b>
<b>Hazardous Substances (Disposal) Regulations 2001</b>		
D4, D5	Regulations 8, 9	<b>Disposal requirements for PyGanic</b>
D6	Regulation 10	<b>Disposal requirements for packages</b>
D7	Regulations 11, 12	<b>Disposal information requirements</b>
D8	Regulations 13, 14	<b>Disposal documentation requirements</b>

Hazardous Substances (Emergency Management) Regulations 2001		
EM1, EM6, EM7	Regulations 6, 7, 8(e), 8(f), 9 — 11	Level 1 emergency management information: Recommended requirements
EM8	Regulations 12 — 16, 18 — 20	Level 2 emergency management information requirements
EM11	Regulations 25 — 34	Level 3 emergency management requirements – emergency response plans
EM12	Regulations 35 — 41	Level 3 emergency management requirements – secondary containment

The Environmental Risk Management Authority reached a decision on the following application on 9 April 2003

**Application code:** HSR02062

**Applicant:** Adria New Zealand Limited

**Purpose:** To import Pyrus 400 SC as a fungicide for disease control in apples and grapes

**Identifier for Substances:** Pyrus 400SC

**Classifications:** 6.3B, 6.8B, 9.1B

**Decision:** Approved with Controls

**ERMA Approval Code:** HSR000052

**Controls:**

Control Code <sup>11</sup>	Regulation <sup>12</sup>	Explanation <sup>13</sup>
<b>Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 – Toxic and Ecotoxic Property Controls</b>		
T1	Regulations 11 — 27	Limiting exposure to toxic substances
T4, E6	Regulation 7	Requirements for equipment used to handle substances
T7	Regulation 10	Restrictions on the carriage of hazardous substances on passenger service vehicles
E1	Regulations 32 — 45	Limiting exposure to ecotoxic substances
E2	Regulations 46 — 48	Restrictions on use of substances in application areas
<b>Hazardous Substances (Identification) Regulations 2001</b>		
I1	Regulations 6, 7, 32 — 35, 36(1) — (7)	General identification requirements Regulation 6 – Identification duties of suppliers Regulation 7 – Identification duties of persons in charge Regulations 32 and 33 – Accessibility of information Regulations 34, 35, 36(1) — (7) – Comprehensibility, Clarity and Durability of information
I3	Regulation 9	Priority identifiers for ecotoxic substances
I9, I11, I16	Regulations 18, 20, 25	Secondary identifiers for Pyrus 400SC
I17	Regulation 26	Use of Generic Names
I18	Regulation 27	Requirements for using concentration ranges

11 Note: The numbering system used in this column relates to the coding system used in the ERMA New Zealand Controls Matrix. This links the hazard classification categories to the regulatory controls triggered by each category. It is available from ERMA New Zealand (website: [www.ermanz.govt.nz/publications/](http://www.ermanz.govt.nz/publications/)) 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.

I19	Regulations 29 — 31	<b>Alternative information in certain cases</b> Regulation 29 – Pyrus 400SC in fixed bulk containers or bulk transport containers Regulation 30 – Pyrus 400SC in multiple packaging Regulation 31 – Alternative information when Pyrus 400SC is imported
I21	Regulations 37 — 39, 47 — 50	<b>Documentation required in places of work</b> Regulation 37 – Documentation duties of suppliers Regulation 38 – Documentation duties of persons in charge of places of work Regulation 39 – General content requirements for documentation Regulation 47 – Information not included in approval Regulation 48 – Location and presentation requirements for documentation Regulation 49 – Documentation requirements for vehicles Regulation 50 – Documentation to be supplied on request
I23, I28	Regulations 41, 46	<b>Specific documentation requirements for Pyrus 400SC</b>
I29, EM13	Regulations 51, 52	<b>Duties of persons in charge of places with respect to signage</b>
<b>Hazardous Substances (Packaging) Regulations 2001</b>		
P1	Regulations 5, 6, 7 (1), 8	<b>General packaging requirements</b>
P3	Regulation 9	<b>Packaging requirements for substances packed in limited quantities</b>
P13, P15	Regulations 19, 21	<b>Packaging requirements for toxic substances</b>
PG3	Schedule 3	<b>This schedule describes the test methods for packaging required to be tested in accordance with this requirement. The tests in Schedule 3 correlate to the packaging requirements of UN Packaging Group III.</b>
<b>Hazardous Substances (Disposal) Regulations 2001</b>		
D4, D5	Regulations 8, 9	<b>Disposal requirements for Pyrus 400SC</b>
D6	Regulation 10	<b>Disposal requirements for packages</b>
D7	Regulations 11, 12	<b>Information requirements</b>
D8	Regulations 13, 14	<b>Documentation requirements</b>
<b>Hazardous Substances (Emergency Management) Regulations 2001</b>		
EM1	Regulations 6, 7, 9 — 11	<b>Level 1 emergency management information: General requirements</b>
EM6	Regulation 8(e)	<b>Information requirements for toxic substances</b>
EM7	Regulation 8(f)	<b>Information requirements for ecotoxic substances</b>
EM8	Regulations 12 — 16, 18 — 20	<b>Level 2 emergency management information requirements</b>
EM11	Regulations 25 — 34	<b>Level 3 emergency management requirements – emergency response plans</b>
EM12	Regulations 35 — 41	<b>Level 3 emergency management requirements – secondary containment</b>
EM13	Regulation 42	<b>Level 3 emergency management requirements – signage</b>

The Environmental Risk Management Authority reached a decision on the following application on 11 April 2003

**Application code:** HSR02059

**Applicant:** Department of Conservation

**Purpose:** To import Cube Root Powder (containing 6–9% rotenone) for use as a piscicide for the eradication of invasive fish and invasive aquatic invertebrates in freshwater and as a sampling tool for cryptic fish in the marine environment

**Identifier for Substances:** Cube Root Powder (containing 6–9% rotenone)

**Classifications:** 6.1C, 6.3A, 6.4A, 6.9B, 9.1A, 9.3B, 9.4A

**Decision:** Approved with Controls

**ERMA Approval Code:** HSR000053

**Controls:**

Control Code <sup>17</sup>	Regulation <sup>18</sup>	Explanation <sup>19</sup>
<b>Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 – Toxic and Ecotoxic Property Controls</b>		
T1	Regulations 11 — 27	Limiting exposure to Cube Root Powder
T2	Regulations 29, 30	Controlling exposure in places of work
T3, E5	Regulations 5(1), 5(2), 6	Requirements for keeping records of use
T4, E6	Regulation 7	Requirements for equipment used to handle Cube Root Powder
T5	Regulation 8	Requirements for protective clothing and equipment
T6, E7	Regulation 9	Approved handler requirements
AH1	Regulations 4 — 6, Personnel Qualifications Regulations	
T7, E8	Regulation 10	Restrictions on the carriage of hazardous substances on passenger service vehicles
E1	Regulations 32 — 45	Limiting exposure to Cube Root Powder
E2	Regulations 46 — 48	Restrictions on use within application area
<b>Hazardous Substances (Identification) Regulations 2001</b>		
		<b>The Identification Regulations prescribe requirements with regard to identification of hazardous substances in terms of</b>
		- information that must be “immediately available” with the substance (priority and secondary identifiers). This information is generally provided by way of the product label
		- documentation that must be available in the workplace, generally provided by way of MSDS
		- signage at a place where there is a large quantity of the substance.
I1	Regulations 6, 7, 32 — 35, 36(1) — (7)	<b>General identification requirements</b> <b>Regulation 6 – Identification duties of suppliers</b> <b>Regulation 7 – Identification duties of persons in charge</b> <b>Regulations 32 and 33 – Accessibility of information</b> <b>Regulations 34, 35, 36(1) — (7) – Comprehensibility, Clarity and Durability of information</b>

<sup>17</sup> Note: The numbering system used in this column relates to the coding system used in the ERMA New Zealand Controls Matrix. This links the hazard classification categories to the regulatory controls triggered by each category. It is available from ERMA New Zealand (website: [www.ermanz.govt.nz/publications/](http://www.ermanz.govt.nz/publications/)) and is also contained in the ERMA New Zealand *User Guide to the Controls Regulations*.

<sup>18</sup> 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.

<sup>19</sup> These explanations are for guidance only. Refer to the cited regulations for the formal specification, and for definitions and exemptions.

13, 18	Regulations 9, 14	<b>Priority identifiers for Cube Root Powder</b>
19, 111, 116	Regulations 18, 20, 25	<b>Secondary identifiers</b>
117	Regulation 26	<b>Use of Generic Names</b>
118	Regulation 27	<b>Use of Concentration Ranges</b>
119	Regulations 29 — 31	<b>Alternative information in certain cases</b> Regulation 29 – Substances in fixed bulk containers or bulk transport containers Regulation 30 – Substances in multiple packaging Regulation 31 – Alternative information when substances are imported
120	Regulation 36(8)	<b>Durability of information for Cube Root Powder</b>
121	Regulations 37 — 39, 47 — 50	<b>Documentation required in places of work</b> Regulation 37 – Documentation duties of suppliers Regulation 38 – Documentation duties of persons in charge of places of work Regulation 39 – General content requirements for documentation Regulation 47 – Information not included in approval Regulation 48 – Location and presentation requirements for documentation Regulation 49 – Documentation requirements for vehicles Regulation 50 – Documentation to be supplied on request
123, 128	Regulations 41, 46	<b>Specific documentation requirements</b>
129	Regulations 51 — 52	<b>Duties of persons in charge of places with respect to signage</b>
130	Regulation 53	<b>Advertising toxic substances</b>
<b>Hazardous Substances (Packaging) Regulations 2001</b>		
P1	Regulations 5, 6, 47 — 50	<b>General packaging requirements</b> Regulation 5 – Ability to retain contents Regulation 6 – Packaging markings Regulation 7(1) – Requirements when packing hazardous substance Regulation 8 – Compatibility
P3, P13, P15, PG3	Regulations 9, 19, 21 Schedule 3	<b>Packaging requirements</b>
<b>Hazardous Substances (Disposal) Regulations 2001</b>		
D4, D5	Regulations 8, 9	<b>Disposal requirements for Cube Root Powder</b>
D6	Regulation 10	<b>Disposal requirements for packages</b>
D7	Regulations 11, 12	<b>Disposal information requirements</b>
D8	Regulations 13, 14	<b>Disposal documentation requirements</b>
<b>Hazardous Substances (Emergency Management) Regulations 2001</b>		
EM1, EM6, EM7	Regulations 6, 7, 9 — 11 8(e), 8(f)	<b>Level 1 emergency management information: General requirements</b>
EM8	Regulations 12 — 16, 18 — 20	<b>Level 2 emergency management information requirements</b>

EM11	Regulations 25 — 34	Level 3 emergency management requirements – emergency response plans
EM13	Regulation 42	Level 3 emergency management requirements – signage
Hazardous Substances (Tracking) Regulations 2001		
TR1	Regulations 4(1), 5, 6	General tracking requirements

The Environmental Risk Management Authority reached a decision on the following application on 18 April 2003

**Application code:** TNS03005

**Applicant:** McKay Shipping Limited

**Purpose:** To tranship on the vessel Thor Swan explosive items destined for the Australian Defence Forces

**Identifier for Substances:** Explosives

**Decision:** Approved with Controls

**ERMA Approval Code:** TNS000019

**Controls:**

- 6.1 The explosives will remain on board the vessel Thor Swan at all times during its stay in New Zealand waters.
- 6.2 The vessel will be worked in accordance with best practice and the Auckland Harbour Master's instructions.
- 6.3 The vessel will only transit New Zealand waters during the hours of daylight.
- 6.4 In the event of any emergency occurring the ship's master will act in accordance with the Harbour Master's instructions

6.5 A contingency plan to deal with any such must be in place.

6.6 Any significant incident must be reported to ERMA New Zealand, Auckland Regional Authority (The Harbour Master) and to OSH.

## DELEGATED AUTHORITY

The Environmental Risk Management Authority reached a decision on the following application on 8 April 2003

**Application code:** HSR02055

**Applicant:** Certis Australia Pty Limited

**Purpose:** To import Thuricide 48LV Biological Insecticide, a highly selective biological insecticide for control of pest caterpillars in a broad range of situations

**Description of Substances:** Thuricide 48LV  
Biological Insecticide

**Classifications:** 6.5B, 6.8B, 9.4C

**Decision:** Not approved under section 28A of the Hazardous Substances and New Organisms Act 1996 (the HSNO Act)

The Environmental Risk Management Authority reached a decision on the following application on 29 April 2003

**Application code:** HSR03003

**Applicant:** Veg-Gro Supplies Limited

**Purpose:** To import Eco Oil ®, a botanical oil based insecticide for the control of two-spotted mite, aphid and whitefly, required to be approved because of its biocidal nature

**Identifier for Substance:** Eco Oil ®

**Classifications:** 9.1D

**Decision:** Approved with Controls

**ERMA Approval Code:** HSR000054

**Controls:**

Control Code <sup>20</sup>	Regulation <sup>21</sup>	Explanation <sup>22</sup>
<b>Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001 – Ecotoxic Property Controls</b>		
E6	Regulation 7	Requirements for equipment used to handle substances
<b>Hazardous Substances (Identification) Regulations 2001</b>		
I1	Regulations 6, 7, 32 – 35, 36(1) – (7)	<b>General identification requirements</b> Regulation 6 – Identification duties of suppliers Regulation 7 – Identification duties of persons in charge Regulations 32 and 33 – Accessibility of information Regulations 34, 35, 36(1) – (7) – Comprehensibility, Clarity and Durability of information
I9	Regulation 18	Secondary identifiers for all hazardous substances
I19	Regulations 29 – 31	<b>Alternative information in certain cases</b> Regulation 29 – Substances in fixed bulk containers or bulk transport containers Regulation 30 – Substances in multiple packaging Regulation 31 – Alternative information when substances are imported
I21	Regulations 37 – 39, 47 – 50	Documentation required in places of work
I29	Regulations 51 – 52	Duties of persons in charge of places with respect to signage
<b>Hazardous Substances (Packaging) Regulations 2001</b>		
P1	Regulations 5, 6, 7(1), 8	General packaging requirements
P3	Regulation 9	Packaging requirements for substances packed in limited quantities
<b>Hazardous Substances (Disposal) Regulations 2001</b>		
D5	Regulations 8, 9	Disposal requirements for ecotoxic substances
D6	Regulation 10	Disposal requirements for packages
D7	Regulations 11, 12	Information requirements
D8	Regulations 13, 14	Documentation requirements

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

Hazardous Substances (Emergency Management) Regulations 2001		
EM1	Regulations 6, 7, 9 — 11	Level 1 emergency management information: General requirements
EM7	Regulation 8(f)	Information requirements for ecotoxic substances
EM8	Regulations 12 — 16, 18 — 20	Level 2 emergency management information requirements
EM11	Regulations 25 — 34	Level 3 emergency management requirements – emergency response plans
EM12	Regulations 35 — 41	Level 3 emergency management requirements – secondary containment

## AMENDMENTS TO APPROVALS

There have been no minor or technical amendments under Section 67A of the HSNO Act during this period.

## TEST CERTIFIERS

There have been no test certifier decisions decided in this period.

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