

## 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](http://www.ermanz.govt.nz)

## READER SURVEY RESULTS

Reader surveys were sent out with issue 69 of *The Bulletin* to get your response to removing the lists of controls reported in both the hazardous substance and new organism sections. The majority of responses were in favour of this idea so you will notice that this issue is shorter than previous ones. We have also added a new section at the back of each issue on how to find out more about the controls on applications through our register of applications and decisions on the website [www.ermanz.govt.nz](http://www.ermanz.govt.nz).

If you do not have access to the internet and there is a decision that you are particularly interested in you can call us and ask for a hardcopy on 0800 376 234.

## 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 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@ermanz.govt.nz](mailto: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.

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

ERMA NEW ZEALAND

PO Box 131 Wellington

Phone: +64 4 916 2426 Fax: +64 4 914 0433

Email: [info@ermanz.govt.nz](mailto:info@ermanz.govt.nz)

Website: [www.ermanz.govt.nz](http://www.ermanz.govt.nz)

## NON-NOTIFIED APPLICATIONS RECEIVED

**Applicant:** University of Otago

**Application Code:** GMD05066

**Purpose:** Genetically modified fungi and *Escherichia coli* will be generated in order to study how antifungal drugs interact with their targets and how fungal cells become resistant to these drugs

**Date Formally Received:** 10 October 2005

**Applicant:** Institute of Geological and Nuclear Sciences

**Application Code:** NOC05006

**Purpose:** To import for research purposes including taxonomy, ecology, biodiversity and biotechnology studies, cultures of non-pathogenic extremophilic microorganisms

**Date Formally Received:** 26 September 2005

## DECISIONS ON APPLICATIONS

**Applicant:** ERMA New Zealand

**Application Code:** S2605001

**Purpose:** To determine the new organism status of seven human medicines that contain live organisms under section 26 of the Hazardous Substances and New Organisms Act 1996

**Date Formally Received:** 06 October 2005

**Description of Organisms:** Varicella-zoster virus (human herpesvirus 3); Rubella virus (RUBV); Measles virus (MeV); Mumps virus (MuV); *Mycobacterium bovis* (Karlson and Lessel 1970); *Salmonella typhi* (Schroeter 1886) Warren and Scott 1930, Yellow fever virus (YFV)

**Decision:** Determined to be not new organisms

---

**Applicant:** Don Munro

**Application Code:** NOR04001

**Purpose:** To import and release three palm species of the genus *Dictyocaryum* into New Zealand by rapid assessment to add balance to a wildlife sanctuary and to eventually establish an alternative seed supply for the species

**Decision Notified:** 06 October 2005

**Description of Organisms:** *Dictyocaryum fuscum* (H.Wendl.1863), *Dictyocaryum lamarckianum* (Mart.) H. Wendl 1863 and *Dictyocaryum ptarianum* (Steyerm.1967)

**Decision:** Approved

**ERMA Approval Code:** NOR000011-130

---

## 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:** Scion

**Application Code:** GMD05083

**Purpose:** Genetic modification of *Escherichia coli* (K12 or B derivatives) to contain key metabolic genes involved in nutrient cycling derived from natural microbial communities for sequencing and functional characterisation

**Decision Notified:** 10 October 2005

**Decision:** Approved with Controls

**Description of Organisms:**

Host organism	Category of host organism	Modified by:	Category of Modification/containment level
<i>Escherichia coli</i> (Migula 1895) Castellani & Chalmers 1919 non-pathogenic laboratory strains	1	Standard non-conjugative <i>Escherichia coli</i> cloning and expression plasmid vectors containing genomic DNA, cDNA or PCR products derived from natural microbial populations sourced from bioreactor and waste treatment facilities and associated with primary production.  Genetic material expressed will encode a range of genes involved in nutrient cycling pathways, including carbon compound degradation and biopolymer formation and turnover.	A/PC1

Host organism	Category of host organism	Modified by:	Category of modification/containment level
		<p>Vectors may also contain standard and commercially available selectable markers and reporter genes.</p> <p>There shall be no expression of genes encoding known vertebrate toxins.</p> <p>There shall be no expression of uncharacterised sequences from known pathogenic microorganisms.</p>	

**ERMA Approval Code: GMD003980**

**BCH Number: 10623**

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

**Applicant: Horticulture and Food Research Institute (HortResearch Auckland)**

**Institute Code: GMO05/HRA095**

**Application Code: GMD05100**

**Purpose:** To develop and utilise antibody based technology to study plant protein-protein interactions and identify proteins that associate with each other *in planta*

**Decision Notified:** 25 October 2005

The following approved organisms are modified with:

**Modification:** Plants in enclosed tubs with no reproductive structures modified with protein expression plasmid vectors or plant plasmid transformation vectors containing *Arabidopsis*, *Malus*, *Actinidia*, *Petunia* or *Nicotiana* species proteins involved in plant defence, development, or flavour, and short antibody tag sequences. Vectors may also contain standard and commercially available selectable markers, protein purification tags and reporter genes.

And

Whole plants modified with protein expression plasmid vectors or plant plasmid transformation vectors containing *Arabidopsis*, *Malus*, *Actinidia*, *Petunia* or *Nicotiana* species proteins involved in plant defence, development, or flavour, and short antibody tag sequences. Vectors may also contain standard and commercially available selectable markers, protein purification tags and reporter genes.

**Description of Organism:** *Actinidia chinensis* (plants in enclosed tubs with no reproductive structures) modified

Containment: PC1

Category: A

And

*Actinidia chinensis* (whole plants) modified

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code: GMD003990**

**BCH Number: 10686**

**Description of Organism:** *Actinidia deliciosa* (plants in enclosed tubs with no reproductive structures) modified

Containment: PC1

Category: A

And

*Actinidia deliciosa* (whole plants) modified

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code: GMD003991**

**BCH Number: 10687**

**Description of Organism:** *Arabidopsis thaliana* (L.) Heynh (1842) (plants in enclosed tubs with no reproductive structures) modified

Containment: PC1

Category: A

And

*Arabidopsis thaliana* (whole plants) modified

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003993

**BCH Number:** 10682

**Description of Organism:** *Malus domestica* (plants in enclosed tubs with no reproductive structures) modified

Containment: PC1

Category: A

And

*Malus domestica* (whole plants) modified

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003995

**BCH Number:** 10688

**Description of Organism:** *Nicotiana benthamiana* (plants in enclosed tubs with no reproductive structures) modified

Containment: PC1

Category: A

And

*Nicotiana benthamiana* (whole plants) modified

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003996

**BCH Number:** 10683

**Description of Organism:** *Nicotiana tabacum* (plants in enclosed tubs with no reproductive structures) modified

Containment: PC1

Category: A

And

*Nicotiana tabacum* (whole plants) modified

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003997

**BCH Number:** 10684

**Description of Organism:** *Petunia x hybrida* (plants in enclosed tubs with no reproductive structures) modified

Containment: PC1

Category: A

And

*Petunia x hybrida* (whole plants) modified

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003998

**BCH Number:** 10685

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

*Escherichia coli* (K12 or B derivatives) modified with standard *Escherichia coli* cloning and expression plasmid vectors, or standard plant binary plasmid vectors for expression in plants.

Vectors will contain proteins involved in plant defence, development or flavour derived from *Arabidopsis*, *Malus*, *Actinidia*, *Petunia* or *Nicotiana* species and short antibody tag sequences. Vectors may also contain standard and commercially available selectable markers, protein purification tags and reporter genes

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003994

**BCH Number:** 10680

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

*Agrobacterium tumefaciens* (disarmed strains) modified with disarmed *Agrobacterium*-standard plant binary plasmid vectors containing proteins involved in plant defence, development or flavour derived from *Arabidopsis*, *Malus*, *Actinidia*, *Petunia* or *Nicotiana* species and short antibody tag sequences. Vectors may also contain standard and commercially available selectable markers, protein purification tags and reporter genes

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003992

**BCH Number:** 10681

**Applicant:** Lincoln University

**Institute Code:** GMO05/LU003

**Application Code:** GMD05095

**Purpose:** Production of transgenic moss (*Physcomitrella patens*) for the study of gene regulation and biochemistry of plant secondary metabolism

**Decision Notified:** 19 October 2005

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

*Escherichia coli* (non-pathogenic strains) modified with:

Vectors: standard plasmid cloning vectors.

Donor DNA: Genes involved in the production of secondary metabolites from the following sources: Onion, Snap dragon, Arabidopsis, Box tree, Dahlia, Gentian, Iris, Perillia, Petunia, Sage, Common broom, Sinningia, Wine grape, Maize

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003981

**BCH Number:** 10648

**Description of Organism:** *Physcomitrella patens ssp patens* [ecotype Gransden Wood] Ashton & Cove 1977

*Physcomitrella patens ssp patens* modified with:

Vectors: standard plasmid cloning vectors.

Donor DNA: Genes involved in the production of secondary metabolites from the following sources: Onion, Snap dragon, Arabidopsis, Box tree, Dahlia, Gentian, Iris, Perillia, Petunia, Sage, Common broom, Sinningia, Wine grape, Maize

**Containment:** PC2

**Category:** B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003982

**BCH Number:** 10649

**Applicant:** Lincoln University

**Institute Code:** GMO05/LU005

**Application Code:** GMD05099

**Purpose:** Development of transgenic potato and tobacco

**Decision Notified:** 19 October 2005

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

*Agrobacterium tumefaciens* (non-pathogenic strains) modified with genes involved in secondary metabolite production from the following sources using plasmid cloning vectors: Onion, Snap dragon, Arabidopsis, Box tree, Dahlia, Lisianthus, Gentian, Iris, Tomato, Tobacco, Perillia, Petunia, Physcomitrella, Sage, Common broom, Sinningia, Eggplant, Potato, Wine grape, Maize, Chrysanthemum

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003985

**BCH Number:** 10651

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

*Escherichia coli* (non-pathogenic strains) modified with genes involved in secondary metabolite production from the following sources using plasmid cloning vectors: Onion, Snap dragon, Arabidopsis, Box tree, Dahlia, Lisianthus, Gentian, Iris, Tomato, Tobacco, Perillia, Petunia, Physcomitrella, Sage, Common broom, Sinningia, Eggplant, Potato, Wine grape, Maize, Chrysanthemum

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003986

**BCH Number:** 10650

**Description of Organism:** *Nicotiana tabacum*

*Nicotiana tabacum* (tissue culture) modified with genes involved in secondary metabolite production from the following sources using plasmid cloning vectors: Onion, Snap dragon, Arabidopsis, Box tree, Dahlia, Lisianthus, Gentian, Iris, Tomato, Tobacco, Perillia, Petunia, Physcomitrella,

Sage, Common broom, Sinningia,  
Eggplant, Potato, Wine grape, Maize,  
Chrysanthemum

Containment: PC1

Category: A

and

*Nicotiana tabacum* (whole plants) modified  
with DNA as above using binary plasmid  
vectors

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003987

**BCH Number:** 10654

**Description of Organism:** *Saccharomyces cerevisiae*  
Hansen 1883

*Saccharomyces cerevisiae* modified with  
genes involved in secondary metabolite  
production from the following sources  
using plasmid cloning vectors: Onion, Snap  
dragon, Arabidopsis, Box tree, Dahlia,  
Lisianthus, Gentian, Iris, Tomato, Tobacco,  
Perillia, Petunia, Physcomitrella, Sage,  
Common broom, Sinningia, Eggplant,  
Potato, Wine grape, Maize,  
Chrysanthemum

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003988

**BCH Number:** 10652

**Description of Organism:** *Solanum tuberosum* L.

*Solanum tuberosum* (tissue culture)  
modified with genes involved in secondary  
metabolite production from the following  
sources using plasmid cloning vectors:  
Onion, Snap dragon, Arabidopsis, Box  
tree, Dahlia, Lisianthus, Gentian, Iris,  
Tomato, Tobacco, Perillia, Petunia,  
Physcomitrella, Sage, Common broom,  
Sinningia, Eggplant, Potato, Wine grape,  
Maize, Chrysanthemum

Containment: PC1

Category: A

and

*Solanum tuberosum* (whole plants)  
modified with DNA as above using binary  
plasmid vectors

**Containment:** PC2

**Category:** B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003989

**BCH Number:** 10653

**Applicant:** Lincoln University

**Institute Code:** GMO05/LU002

**Application Code:** GMD05103

**Purpose:** Genetic modification of *Arabidopsis thaliana* to allow the characterisation of genes involved in secondary metabolism

**Decision Notified:** 20 October 2005

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

*Arabidopsis thaliana* modified with standard  
plasmid cloning vectors and Donor DNA:  
Genes involved in the production of secondary  
metabolites from the following sources:  
Onion, Snap dragon, Arabidopsis, Box tree,  
Dahlia, Lisianthus, Gentian, Iris, Tomato,  
Tobacco, Perillia, Petunia, Physcomitrella,  
Sage, Common broom, Sinningia, Eggplant,  
Potato, Wine grape, Maize.

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD004007

**BCH Number:** 10675

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

*Escherichia coli* (non-pathogenic strains)  
modified with standard plasmid cloning  
vectors and Donor DNA: Genes involved  
in the production of secondary metabolites  
from the following sources: Onion, Snap  
dragon, Arabidopsis, Box tree, Dahlia,  
Lisianthus, Gentian, Iris, Tomato, Tobacco,  
Perillia, Petunia, Physcomitrella, Sage,  
Common broom, Sinningia, Eggplant,  
Potato, Wine grape, Maize.

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD004008

**BCH Number:** 10672

**Description of Organism:** *Saccharomyces cerevisiae* Hansen 1883

*Saccharomyces cerevisiae* modified with

standard plasmid cloning vectors and Donor DNA: Genes involved in the production of secondary metabolites from the following sources: Onion, Snap dragon, Arabidopsis, Box tree, Dahlia, Lisianthus, Gentian, Iris, Tomato, Tobacco, Perillia, Petunia, Physcomitrella, Sage, Common broom, Sinningia, Eggplant, Potato, Wine grape, Maize.

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD004009

**BCH Number:** 10674

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

*Agrobacterium tumefaciens* (non-pathogenic strain) modified with standard plasmid cloning vectors and Donor DNA: Genes involved in the production of secondary metabolites from the following sources: Onion, Snap dragon, Arabidopsis, Box tree, Dahlia, Lisianthus, Gentian, Iris, Tomato, Tobacco, Perillia, Petunia, Physcomitrella, Sage, Common broom, Sinningia, Eggplant, Potato, Wine grape, Maize.

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD004006

**BCH Number:** 10673

**Applicant:** Lincoln University

**Institute Code:** GMO05/LU004

**Application Code:** GMD05102

**Purpose:** Cloning and characterisation of genes involved in grapevine secondary metabolism

**Decision Notified:** 20 October 2005

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

*Agrobacterium tumefaciens* (non-pathogenic strains) modified with genes involved in secondary metabolite production from the following sources using cloning vectors: Onion, Snap dragon, Arabidopsis, Box tree, Dahlia, Lisianthus, Gentian, Iris, Tomato, Tobacco, Perillia,

Petunia, Physcomitrella, Sage, Common broom, Sinningia, Eggplant, Potato, Wine grape, Maize.

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003999

**BCH Number:** 10663

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

*Escherichia coli* (non-pathogenic strains) modified with genes involved in secondary metabolite production from the following sources using cloning vectors: Onion, Snap dragon, Arabidopsis, Box tree, Dahlia, Lisianthus, Gentian, Iris, Tomato, Tobacco, Perillia, Petunia, Physcomitrella, Sage, Common broom, Sinningia, Eggplant, Potato, Wine grape, Maize.

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD004000

**BCH Number:** 10662

**Description of Organism:** *Saccharomyces cerevisiae* Hansen 1883

*Saccharomyces cerevisiae* modified with genes involved in secondary metabolite production from the following sources using cloning vectors: Onion, Snap dragon, Arabidopsis, Box tree, Dahlia, Lisianthus, Gentian, Iris, Tomato, Tobacco, Perillia, Petunia, Physcomitrella, Sage, Common broom, Sinningia, Eggplant, Potato, Wine grape, Maize.

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD004001

**BCH Number:** 10664

**Description of Organism:** *Vitis vinifera*

*Vitis vinifera* (tissue culture) modified with genes involved in secondary metabolite production from the following sources using binary plasmid vectors: Onion, Snap dragon, Arabidopsis, Box tree, Dahlia, Lisianthus, Gentian, Iris, Tomato, Tobacco, Perillia, Petunia, Physcomitrella, Sage, Common broom, Sinningia, Eggplant,

Potato, Wine grape, Maize.

Containment: PC1

Category: A

or

*Vitis vinifera* (whole plants) modified with genes involved in secondary metabolite production from the following sources using binary plasmid vectors: Onion, Snap dragon, Arabidopsis, Box tree, Dahlia, Lisianthus, Gentian, Iris, Tomato, Tobacco, Perillia, Petunia, Physcomitrella, Sage, Common broom, Sinningia, Eggplant, Potato, Wine grape, Maize.

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD004002

**BCH Number:** 10665

---

**Applicant:** Lincoln University

**Institute Code:** GMO05/LU011

**Application Code:** GMD05101

**Purpose:** To determine the species diversity of the fungal pathogen *Spilocaea oleagina*, the causal agent of olive leaf spot. Diversity will be ascertained by DNA sequencing of ribosomal internal transcribed spacer regions

**Decision Notified:** 25 October 2005

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

*Escherichia coli* (non-pathogenic strains) modified with non-conjugative plasmid type vectors and DNA: conserved internal transcribed spacer regions from the fungus *Spilocaea oleagina*

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD004010

**BCH Number:** 10676

---

**Applicant:** Massey University

**Institute Code:** GMO05/MU017

**Application Code:** GMD05105

**Purpose:** To investigate molecular differences in genes and proteins between two *Ostertagia circumcincta* strains, utilising additional DNA sourced from *Caenorhabditis elegans*

and *Rattus norvegicus*, to identify new targets for future control of these parasites

**Decision Notified:** 20 October 2005

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

*Escherichia coli* (non-pathogenic strains) modified with non-conjugative cloning vectors carrying DNA from rat (*Rattus norvegicus*), *Caenorhabditis elegans* and *Ostertagia circumcincta*

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD004003

**BCH Number:** 10666

---

**Applicant:** University of Auckland

**Institute Code:** GMO05/UA023

**Application Code:** GMD05106

**Purpose:** X-ray Crystallographic Studies III: Proteins from Mycobacteria

**Decision Notified:** 28 October 2005

The following approved organisms are modified with:

**Modification:** Standard non self transmissible *Escherichia coli* cloning and expression vectors. Standard non self transmissible *Mycobacterium smegmatis* vectors

Standard non self transmissible *Corynebacterium glutamicum* vectors with:

Genes sourced from *Mycobacterium* species including: *Mycobacterium avium* complex; *Mycobacterium asiaticum*; *Mycobacterium bovis*; *Mycobacterium bovis* BCG vaccine strain; *Mycobacterium chelonae*; *Mycobacterium fortuitum*; *Mycobacterium kansasii*; *Mycobacterium leprae*; *Mycobacterium malmhoense*; *Mycobacterium marinum*; *Mycobacterium paratuberculosis*; *Mycobacterium scrofulaceum*; *Mycobacterium simiae*; *Mycobacterium smegmatis*; *Mycobacterium szulgai*; *Mycobacterium tuberculosis* complex; *Mycobacterium ulcerans*; *Mycobacterium xenopi*;

that encode:

1. enzymes from metabolic pathways which may be suitable targets for the design of new drugs (e.g. amino acid biosynthesis, cell wall biosynthesis, siderophore biosynthesis);

2. proteins which are known to be up-regulated in response to environmental stimuli important to bacterial survival in vivo (e.g. hypoxia, starvation, acidic conditions);
3. secreted and coat proteins likely to be involved in host-pathogen interaction;
4. proteins which are known to be essential for bacterial growth in vitro;
5. proteins involved in the maintenance and repair of DNA;

Genes will be expressed ectopically in specified low risk vector systems, for the purposes of determining the molecular structure by X-ray diffraction and/or NMR.

In all cases genes will be expressed singly or in pairs, with the exception of proteins which require the expression of a chaperone protein unique to the target protein (to allow the target protein soluble expression). In such cases the specific chaperone required and target protein will be co-expressed together.

To also include cDNA sequences encoding protein tags or fusion constructs (including fluorescent and reporter marker proteins) to determine transgene localisation or aid protein purification (including his tags, GFP, FLAG and GST fusion proteins and c-myc tags)

The following exclusions will apply in all cases:

Genes will not encode toxins with an LD50 < 100µg/kg

Genes will not encode for infectious particles

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

*Escherichia coli* (non pathogenic laboratory adapted strains) modified

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD004011

**BCH Number:** 10677

**Description of Organism:** *Corynebacterium glutamicum*

*Corynebacterium glutamicum* (non pathogenic strains, commercially grown) modified

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD004012

**BCH Number:** 10679

**Description of Organism:** *Mycobacterium smegmatis*

*Mycobacterium smegmatis* (non pathogenic laboratory adapted strains, e.g. mc2155) modified

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD004013

**BCH Number:** 10678

**Applicant:** University of Auckland

**Institute Code:** GMO05/UA024

**Application Code:** GMD05096

**Purpose:** To investigate the role of NOD2 gene in Crohn's disease. Update of GMO02/UA013

**Decision Notified:** 19 October 2005

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

*Escherichia coli* (K12 and B strains) modified with pcDNA3/Hyg vector with genes encoding human NOD2 and CARD12 protein

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003983

**BCH Number:** 10655

**Description of Organism:** *Homo sapiens* (Linnaeus, 1758)

*Homo sapiens* (cell lines THP-1, U937, HL-60, 293T and normal and patient monocytes) modified with pcDNA3/Hyg vector with genes encoding human NOD2 and CARD 12 protein

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003984

**BCH Number:** 10656

**Applicant: University of Otago**

**Institute Code: GMO05/UO009**

**Application Code: GMD05097**

**Purpose:** To modify *Escherichia coli* with non-human, non-native, animal DNA in order to study the molecular mechanisms which control development, regeneration and tissue repair in model organisms

**Decision Notified:** 20 October 2005

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

*Escherichia coli* (strain K12 derivatives) modified with non-conjugative plasmids; cDNAs, ESTs or genomic sequences including promoter and enhancer regions from *Mus musculus*, (mouse) *Rattus* spp. (rat), *Xenopus tropicalis*, *Xenopus laevis* (clawed frog), *Danio rerio* (zebrafish), *Gallus gallus* (chicken), *Drosophila melanogaster* (fruit fly), *Caenorhabditis elegans* (nematode), *Dugesia* spp. (planarian flatworm), *Aequorea victoria* (jellyfish) and *Strongylocentrotus purpuratus* (purple urchin); DNA from other, non-model but non-native amphibian, fish and reptile species (specifically only genes involved in controlling development, regeneration and tissue repair)

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code: GMD004004**

**BCH Number: 10670**

---

**Applicant: University of Otago**

**Institute Code: GMO05/UO012**

**Application Code: GMD05089**

**Purpose:** To clone microsatellite DNA from freshwater fishes into *Escherichia coli* strain B or K12 derivatives in order to search for evidence of hybridisation between freshwater fishes

**Decision Notified:** 06 October 2005

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

*Escherichia coli* (strain B or K12 derivatives) modified with non-conjugative plasmid vectors; 300-800 bp fragments of DNA enriched in microsatellite DNA from native South Island freshwater fishes.

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code: GMD003978**

**BCH Number: 10627**

---

**Applicant: University of Otago**

**Institute Code: GMO05/UO013**

**Application Code: GMD05098**

**Purpose:** To modify *Escherichia coli* with gene fragments encoding human amyloidogenic proteins in order to examine the processes of amyloid formation

**Decision Notified:** 20 October 2005

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

*Escherichia coli* (strain B or K12 derivatives) modified with non-conjugative expression vectors such as pET-32 Ek/LIT; PCR-amplified fragments from human genes (non-Māori) that encode amyloidogenic proteins such as exon V of the fibrinogen Aalpha gene

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code: GMD004005**

**BCH Number: 10671**

---

**Applicant: University of Otago**

**Institute Code: GMO05/UO020**

**Application Code: GMD05087**

**Purpose:** *Streptococcus mutans* and *Streptococcus sobrinus* modified to express a reporter protein for the purpose of quantitating the effect of various antisense constructs against this gene when grown as part of a microbial biofilm. Update GMO03/UO028

**Decision Notified:** 05 October 2005

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

*Escherichia coli* (strain K12 derivatives) modified by non-conjugative plasmids such as pFW; DNA from *Streptococcus mutans*, *Streptococcus sobrinus* or characterised DNA sourced from non-streptococcal bacterial species, a tetracycline resistance gene and a reporter gene such as chloramphenicol acetyltransferase or green fluorescent protein

Containment: PC1

Category: A

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003975

**BCH Number:** 10624

**Description of Organism:** *Streptococcus mutans*,  
Clarke 1924

*Streptococcus mutans* modified by non-conjugative plasmids such as pFW or pVA838 that are able to replicate in streptococcal species; DNA from *Streptococcus mutans*, *Streptococcus sobrinus* or characterised DNA sourced from non-streptococcal bacterial species, a tetracycline resistance gene and a reporter gene such as chloramphenicol acetyltransferase or green fluorescent protein

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003976

**BCH Number:** 10625

**Description of Organism:** *Streptococcus sobrinus*,  
Coykendall 1974

*Streptococcus sobrinus* modified by non-conjugative plasmids such as pFW pVA838 that are able to replicate in streptococcal species; DNA from *Streptococcus mutans*, *Streptococcus sobrinus* or characterised DNA sourced from non-streptococcal bacterial species, a tetracycline resistance gene and a reporter gene such as chloramphenicol acetyltransferase or green fluorescent protein

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003977

**BCH Number:** 10626

**Applicant:** University of Otago

**Institute Code:** GMO05/UO024

**Application Code:** GMD05088

**Purpose:** To characterise bacteriocins by cloning and expressing streptococcal (*Streptococcus* spp.) or lactococcal (*Lactococcus* spp.) bacteriocin genes and bacteriocin-related

proteins in the oral bacterium

*Streptococcus gordonii*

**Decision Notified:** 06 October 2005

**Description of Organism:** *Streptococcus gordonii*  
Kilian et al. 1989

*Streptococcus gordonii* modified by non-conjugative, replicative *Escherichia coli*-Gram-positive shuttle vectors; DNA containing bacteriocin genes, or DNA encoding bacteriocin-associated proteins, from streptococcal and lactococcal species.

Containment: PC2

Category: B

**Decision:** Approved with Controls

**ERMA Approval Code:** GMD003979

**BCH Number:** 10628

## AMENDMENTS TO APPROVALS

There have been no amendments made under section 67A of the HSNO Act for minor or technical errors amendments during this period.

## HAZARDOUS SUBSTANCES

### 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 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@ermanız.govt.nz](mailto:info@ermanız.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:** Bomac Laboratories Limited

**Application Code:** HSR05097

**Purpose:** To import OLAMB3840NC a veterinary medicine, intended for oral use in sheep for controlling internal parasites

**Date Publicly Notified:** 28 September 2005

**Date Submissions Close:** 10 November 2005

**Applicant: Bomac Laboratories Limited**

**Application Code: HSR05107**

**Purpose:** SS001NC, ET002NC, FM003NC: To import three active ingredients for use in the manufacture of veterinary medicines

**Date Publicly Notified:** 28 September 2005

**Date Submissions Close:** 10 November 2005

---

**Applicant: Taranaki NuChem Limited**

**Application Code: HSR05119**

**Purpose:** To manufacture Scimitar, an insecticide containing acetamiprid, for export to the Pacific Islands

**Date Publicly Notified:** 07 October 2005

**Date Submissions Close:** 21 November 2005

---

**Applicant: EOTL Limited**

**Application Code: HSR05112**

**Purpose:** EOTL Substance 9: To import for use as an additive in wood protection systems at industrial treatment facilities

**Date Publicly Notified:** 13 October 2005

**Date Submissions Close:** 25 November 2005

---

**Applicant: Reckitt Benckiser (New Zealand) Limited**

**Application Code: HSR05122**

**Purpose:** To import and release RB-2-123, a domestic dishwashing product

**Date Publicly Notified:** 25 October 2005

**Date Submissions Close:** 06 December 2005

---

**Applicant: Osmose New Zealand**

**Application Code: HSR05118**

**Purpose:** Protim Optimum II & III: To manufacture ready-to-use timber preservative solutions containing tebuconazole, propiconazole and permethrin in a hydrocarbon solvent with the option of also adding iodocarb as an additional fungicide

**Date Publicly Notified:** 26 October 2005

**Date Submissions Close:** 07 December 2005

---

**Applicant: Biosecurity New Zealand**

**Application Code: HSR05104**

**Purpose:** Engage Ant Bait and Distance Ant Bait - to import and release for the control of foreign ant infestations

**Date Publicly Notified:** 26 October 2005

**Date Submissions Close:** 07 December 2005

---

**Applicant: Novartis New Zealand Limited**

**Application Code: HSR05106**

**Purpose:** Ricobendazole: To import for use in the manufacture of several veterinary medicines, drenches for the treatment and prevention of internal parasites of sheep and cattle

**Date Publicly Notified:** 26 October 2005

**Date Submissions Close:** 07 December 2005

---

## NON-NOTIFIED APPLICATIONS RECEIVED

**Applicant: Raytheon Polar Services (NEW ZEALAND) Limited**

**Application Code: TNS05005**

**Purpose:** To tranship explosives of Class 1.3C through New Zealand en route from the USA to Antarctica

**Date Formally Received:** 03 October 2005

---

## APPLICATIONS WITHDRAWN

**Applicant: DuPont (New Zealand) Limited**

**Application Code: HSR05128**

**Purpose:** Harmony 50SG: To import and release for use by New Zealand arable cropping and dairy farmers for control of a range of weeds in cereal crops, pastures and in conservation tillage situations

**Date Formally Received:** 10 October 2005

**Date Withdrawn:** 14 October 2005

---

## DECISIONS ON APPLICATIONS

**Applicant: CIBA Specialty Chemicals New Zealand Limited**

**Application Code: HSR05063**

**Purpose:** To import and manufacture Irgazone 997, a novel, non-staining p-phenylene diamine (PPD) antioxidant, antiozonant and antifatigue agent for vulcanised rubber applications

**Decision Notified:** 13 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** IRGAZONE 997

**Classification:** 6.5B Skin Sensitiser, 9.1C Aquatic Eco-toxicant

**ERMA Approval Code:** HSR001728

**Applicant: The New Zealand Refining Company Limited**

**Application Code:** HSR05054

**Purpose:** CORTES: To import and release a vapour corrosion inhibitor for use to prevent corrosion of the underside of oil storage tanks

**Decision Notified:** 17 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** Cortes VCI-307/VpCI/VmCI-Powder

**Classification:** 6.1C Acute Toxicity, 8.2C Skin Corrosion, 8.3A Eye Corrosion, 9.1B Aquatic Ecotoxicity, 9.3B Terrestrial Vertebrate Ecotoxicity

**ERMA Approval Code:** HSR001730

**Applicant: Mark Bell-Booth Limited**

**Application Code:** HSR05059

**Purpose:** To import or manufacture a range of parasitocidal and other large volume veterinary medicines

**Decision Notified:** 18 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** Olsson's Bloatiq Molasses Block with Terric, FIL Emollient Salve, Ecovet, Uptite, Elthamol, Patten's Milkeeze

**Classification:**

**Olsson's Bloatiq Molasses Block with Terric**

6.3A Skin Irritant

6.4A Eye Irritant

**FIL Emollient Salve**

9.1D Aquatic Ecotoxicity

**Ecovet**

3.1C Flammable Liquid

6.4A Eye Irritation

9.1D Aquatic Ecotoxicity

**Uptite**

6.8B Reproductive/Developmental Toxicity

**Elthamol**

9.1D Aquatic Ecotoxicity

**Patten's Milkeeze**

6.5B Skin Sensitisation

9.1D Aquatic Ecotoxicity

**ERMA Approval Codes:** HSR001731-36

**Applicant: Grace (New Zealand) Limited**

**Application Code:** HSR05044

**Purpose:** MIRA: To manufacture and import a concrete admixture for use in concrete structures

**Decision Notified:** 31 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** MIRA AC55

**Classification:** 6.1D Acute Oral Toxicant, 6.3B Skin Irritant, 6.4A Eye Irritant, 6.5A Respiratory Sensitiser, 6.5B Skin Sensitiser, 6.8B Reproductive/Developmental Toxicant, 6.9B Target Organ Systemic Toxicant, 9.1C

Aquatic Eco-toxicant, 9.3C Terrestrial Vertebrate Eco-toxicant

**ERMA Approval Code:** HSR001743

**Applicant: Quadrant Pacific Agencies Limited**

**Application Code:** TNS05006

**Purpose:** To tranship explosives through the Ports of Auckland en route to Noumea

**Decision Notified:** 31 October 2005

**Decision:** Approved with Controls

**ERMA Approval Code:** TNS000078

## 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: BASF New Zealand**

#### **Application Code: HSR05089**

**Purpose:** REGALIS: To import and release a plant growth regulator intended for use as a dilute water based spray in commercial orchards to control spring shoot elongation on apple trees

**Decision Notified:** 03 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** Regalis

**Classification:** 9.1D (designed for biocidal action)

**ERMA Approval Code: HSR001724**

---

### **Applicant: Macspred Pty Limited**

#### **Application Code: HSR05110**

**Purpose:** 'Velmac' CR - to import and release for use by forestry companies for control of a range of weeds in Pinus radiata plantations (rapid similar)

**Decision Notified:** 06 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** 'Velmac' CR

**Classification:** Skin Irritancy 6.3B, Eye Irritancy 6.4A, Target Organ Systemic Toxicity 6.9B, Aquatic Ecotoxicity 9.1A, Soil Ecotoxicity 9.2A

**ERMA Approval Code: HSR001725**

---

### **Applicant: Chemiplas New Zealand Limited (Head Office)**

#### **Application Code: HSR05105**

**Purpose:** To import Stalosan F for use in livestock housing, to improve the external environment and flooring conditions around animals (Rapid Low Hazard)

**Decision Notified:** 11 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** Stalosan F

**Classification:** eye irritant 6.4A, target organ/systemic toxicant 6.9B

**ERMA Approval Code: HSR001726**

---

### **Applicant: Key Industries Limited**

#### **Application Code: HSR05096**

**Purpose:** To import Thymovar, a sponge cloth impregnated with thymol oil for the control of Varroa mites on honeybees within beehives by slow release vapour action

**Decision Notified:** 12 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** THYMOVAR

**Classification:** Acute Toxicity 6.1D, Skin Corrosive 8.2C, Eye Corrosive 8.3A, Skin Sensitiser, Aquatic Ecotoxicity 9.1D, Target Organ Systemic Toxicant, Terrestrial Vertebrate Ecotoxicity 9.3C

**ERMA Approval Code: HSR001727**

---

### **Applicant: Dow AgroSciences**

#### **Application Code: HSC05033**

**Purpose:** Experimental pesticides; to import or manufacture under containment for field testing, experimental substances for the purpose of control of plant and plant-damaging organisms in various agricultural and horticultural crops

**Decision Notified:** 12 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** Experimental Pesticides (HSC05033)

**ERMA Approval Code: HSC000222**

---

### **Applicant: Yates New Zealand Limited**

#### **Application Code: HSC05030**

**Purpose:** To use in containment for the purpose of field testing the hazardous substance SD-1005 in order to assess its efficacy on fungal and insect diseases of tomatoes (field trials)

**Decision Notified:** 13 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** SD-1005

**ERMA Approval Code: HSC000223**

---

### **Applicant: Agronica New Zealand Limited**

#### **Application Code: HSR05123**

**Purpose:** AGRONICA CHLORSULFURON HERBICIDE: to import and release for the control of broadleaf weeds in wheat, barley and oats

**Decision Notified:** 17 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** AGRONICA  
CHLORSULFURON HERBICIDE

**Classification:** Skin irritation 6.3B, Eye irritation 6.4A, Aquatic ecotoxicity 9.1A, Soil invertebrate toxicant 9.2A

**ERMA Approval Code:** HSR001729

**Applicant:** DuPont (New Zealand) Limited

**Application Code:** HSR05129

**Purpose:** Granstar 50SG: To import and release for use by New Zealand arable crop farmers for control of a range of weeds in cereal crops and in conservation tillage situations

**Decision Notified:** 26 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** Granstar 50SG

**Classification:** 6.5B Contact sensitiser, 6.9B Target organ sensitiser, 9.1A Aquatic ecotoxicity, 9.2A Soil toxicity

**ERMA Approval Code:** HSR001737

**Applicant:** Agronica New Zealand Limited

**Application Code:** HSR05130

**Purpose:** NIMROD EW FUNGICIDE: To import for release, 250g/L bupirimate, an oil in water emulsion for use on pipfruit and curcubits.

**Decision Notified:** 26 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** Nimrod EW Fungicide

**Classification:** 6.9B Target organ effect, 9.1A Aquatic ecotoxicity

**ERMA Approval Code:** HSR001738

**Applicant:** Orion Crop Protection Limited

**Application Code:** HSR05127

**Purpose:** Supamec IT: to import and release for use as a herbicide for control of broadleaf weeds in wheat, oats and barley

**Decision Notified:** 26 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** Supamec IT

**Classification:** 6.1D Acute toxicity, 6.3B Skin irritation, 8.3A Eye corrosivity, 6.5A Respiratory sensitiser, 6.5B Contact sensitiser, 6.8B Reproductive/Development

toxicant, 6.9A Target organ effect, 9.1A Aquatic ecotoxicity, 9.2A Terrestrial vertebrate toxicant, 9.3C Terrestrial invertebrate toxicant

**ERMA Approval Code:** HSR001739

**Applicant:** Taranaki Nuchem Limited

**Application Code:** HSR05125

**Purpose:** Procure: To manufacture for supply to the agricultural industry, a fungicide for the control of a range of diseases

**Decision Notified:** 28 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** Procure

**Classification:** 6.3B Skin Irritant, 6.4A Eye Corrosive, 6.9B Target Organ Systemic Toxicant, 9.1A Aquatic Ecotoxicity

**ERMA Approval Code:** HSR001740

**Applicant:** Greenseal (New Zealand) Limited

**Application Code:** HSR05113

**Purpose:** General Purpose Insect Spray: To manufacture for supply as a home and garden product. A low strength general purpose insect spray, it contains the active diazinon at 48g/L

**Decision Notified:** 28 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** General Purpose Insect Spray

**Classification:** 6.1E Acute toxicity, 6.3B Skin irritation, 6.4A Eye irritation, 6.8B Reproductive /Development toxicant, 6.9B Target organ effect, 9.1A Aquatic ecotoxicity, 9.3A Terrestrial vertebrate toxicant, 9.4A Terrestrial invertebrate toxicant

**ERMA Approval Code:** HSR001741

**Applicant:** DuPont (New Zealand) Limited

**Application Code:** HSR05133

**Purpose:** Harmony 50SG: To import and release for use by New Zealand arable crop farmers for control of a wide range of weeds in cereal crops and in conservation tillage situations

**Decision Notified:** 28 October 2005

**Decision:** Approved with Controls

**Identifier for Substance:** Harmony 50SG

**Classification:** 9.1A highly toxic to the aquatic

environment, 9.2A highly toxic to the terrestrial environment

**ERMA Approval Code: HSR001742**

## AMENDMENTS TO APPROVALS

There have been no amendments made under section 67A of the HSNO Act for minor or technical errors amendments during this period.

## SEARCHING ERMA NEW ZEALAND'S ONLINE REGISTERS

### Introduction

Our online registers <http://www.ermanz.govt.nz/> are the most convenient way to find information on hazardous substance and new organism applications. These registers contain applications under Part V, or hazardous substances that have been transferred. (It does not currently list transferred explosives, other substances matching existing approvals, or organisms in New Zealand prior to July 1998.)

### Searching the registers

Enter in the **Search** box at the bottom of the home page, either the code for the approval or application, or the **name** of the substance or organism, for all documents relating to an application or approval. The Search Results page will show:

- The substance/organism name – this links to the details about that substance/organism
- Trade or other names – contains trade names, synonyms
- The applicant's name
- The purpose of the application
- The application status.

Click on the substance/organism name for more detail about that substance/organism including information in Word or PDF format of the:

- Decision/Control
- Evaluation and Review report
- Full application
- Application Summary

### Contact us

If you need to receive a hard copy of the application or approval documents, or want help searching, please contact us on 0800 376 234 or email [info@ermanz.govt.nz](mailto:info@ermanz.govt.nz).

## 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: Mark Lowry**

**Region: Auckland**

**Decision:** Approved with Limitations

**Date of Approval:** 04 October 2005

**ERMA Approval Code: TST000160**

**Applicant: Alistair Waters**

**Region: Auckland**

**Decision:** Approved with Limitations

**Date of Approval:** 28 October 2005

**ERMA Approval Code: TST000198**

**Applicant: John Lees**

**Region: Auckland**

**Decision:** Approved with Limitations

**Date of Approval:** 28 October 2005

**ERMA Approval Code: TST000196**

**Applicant: Peter Barns-Graham**

**Region: Auckland**

**Decision:** Approved with Limitations

**Date of Approval:** 28 October 2005

**ERMA Approval Code: TST000197**

## CORRECTION FROM BULLETIN 70

**Applicant: Jhon Thorn**

**Region: Northland**

**Decision:** Approved with Limitations

**Date of Approval:** 30 September 2005

**ERMA Approval Code: TST000145**