

ENVIRONMENTAL RISK MANAGEMENT AUTHORITY DECISION

6 November 2010

Application code	ERMA200600
Application category:	Import into Containment any New Organism under section 40(1) of the Hazardous Substances and New Organisms (HSNO) Act 1996.
Applicant:	Otago Museum, Dunedin
Purpose:	To import 53 species of tropical butterflies into New Zealand for public display.
Date application received:	1 October 2010
Consideration date:	29 October 2010
Considered by:	A Committee of the Environmental Risk Management Authority (the Authority)

1 Summary of decision

- 1.1 Application ERMA200600 to import into containment of 53 species of tropical butterflies for the purpose of public display is **partially approved** with the controls set out in Appendix 1.
- 1.2 The importation of 52 species of tropical butterflies (listed in 2.1) is **approved** with the controls set out in Appendix 1.
- 1.3 The importation of *Catopsilia scylla* for the purpose of public display is **declined**.
- 1.4 The application was considered in accordance with the relevant provisions of the Hazardous Substances and New Organisms Act 1996 (the Act) and the Hazardous Substances and New Organisms (Methodology) Order 1998 (the Methodology).

2 The application

Description of the organism to be imported

- 2.1 The organisms approved to be imported into containment are:

Kingdom: **Animalia**
Phylum: **Arthropoda**
Class: **Insecta**
Order: **Lepidoptera**

	Butterfly species	Common name
1.	<i>Anteos clorinde</i> (Godart, 1824)	White angled sulphur
2.	<i>Archaeoprepona demophon</i> (Linnaeus, 1758) Syn. <i>Prepona demophon</i> (Linnaeus, 1758)	One-spotted prepona

	Butterfly species	Common name
3.	<i>Biblis hyperia</i> (Cramer, 1782)	Red rim
4.	<i>Caligo atreus</i> (Kollar, 1850)	Yellow-edged giant owl
5.	<i>Caligo illioneus</i> (Cramer, 1776)	Giant owl
6.	<i>Callicore pitheas</i> (Latreille, 1813)	Pitheas 88
7.	<i>Cepora aspasia</i> (Stoll, 1790)	
8.	<i>Charaxes bupalus</i> (Staudinger, 1889)	
9.	<i>Charaxes harmonidius</i> (Felder, 1866)	
10.	<i>Consul fabius</i> (Doubleday, 1849)	Tiger-striped leafwing
11.	<i>Danaus genutia</i> (Cramer, 1779)	Common tiger, Striped tiger
12.	<i>Danaus melanippus</i> (Cramer, 1777)	White tiger
13.	<i>Delias hyparete</i> (Linnaeus, 1758)	Painted jezebel
14.	<i>Dryadula phaetusa</i> (Linnaeus, 1758)	Banded orange heliconia
15.	<i>Eryphanis polyxena</i> (Meerburgh, 1775)	Purple mort bleu
16.	<i>Eueides aliphera</i> (Godart, 1819)	Aliphera longwing
17.	<i>Euploea sylvester</i> (Fabricius, 1793)	Double-banded crow, Two-brand crow
18.	<i>Euthalia adonia</i> (Cramer, 1782)	Green baron
19.	<i>Godyris zavaleta</i> (Hewitson, 1855)	Zavaleta glasswing
20.	<i>Greta nero</i> (Hewitson, 1854)	Nero glasswing
21.	<i>Hamadryas amphinome</i> (Linnaeus, 1767)	Red cracker
22.	<i>Hamadryas laodamia</i> (Cramer, 1777)	Starry night
23.	<i>Heliconius hecale</i> (Fabricius, 1775)	Tiger longwing
24.	<i>Heliconius hewitsoni</i> (Staudinger, 1875)	Hewitson's longwing
25.	<i>Heliconius ismenius</i> (Latreille, 1817)	Tiger heliconian
26.	<i>Heliconius sapho</i> (Drury, 1782)	Sapho longwing
27.	<i>Historis acheronta</i> (Fabricius, 1775)	Tailed cecropian
28.	<i>Idea leuconoe</i> (Erichson, 1834)	Paper kite/Rice wing
29.	<i>Ithomia heraldica</i> (Bates, 1866)	Herald clearwing
30.	<i>Lamproptera curius</i> (Staudinger, 1889)	White dragontail
31.	<i>Lexias pardalis</i> (Moore, 1878)	Common archduke
32.	<i>Pachliopta neptunus</i> (Guerin-Meneville, 1840) Syn. <i>Losaria neptunus</i>	Yellow-bodied clubtail
33.	<i>Mechanitis polymnia</i> (Bates, 1864)	Orange-spotted tiger clearwing
34.	<i>Memphis eurypyle</i> (Felder, 1863) Syn. <i>Anaea eurypyle</i> Syn. <i>Fountainea eurypyle</i> (Felder, 1863)	Pointed leafwing
35.	<i>Morpho granadensis</i> (Felder, 1862)	
36.	<i>Opsiphanes bogotanus</i> (Distant, 1875)	Bogota owl

	Butterfly species	Common name
37.	<i>Opsiphanes cassina</i> (Felder, 1862)	Split-banded owl
38.	<i>Opsiphanes tamarindi</i> (Felder, 1861)	Tamarind owlet
39.	<i>Pachliopta atropos</i> (Staudinger, 1888)	
40.	<i>Panacea procilla</i> (Hewitson, 1853)	Procilla beauty
41.	<i>Papilio daedalus</i> (Felder and Felder, 1861) Syn. <i>Achilles daedalus</i> (Felder and Felder, 1861)	
42.	<i>Papilio palinurus</i> (Fabricius, 1787)	Emerald swallowtail
43.	<i>Parantica aspasia</i> (Fabricius, 1787)	Yellow glassy tiger
44.	<i>Pareronia valeria</i> (Cramer, 1776)	Common wanderer
45.	<i>Parides childrenae</i> (Gray, 1832)	Green-celled cattleheart
46.	<i>Polyura schreiber</i> (Godart, 1824)	Blue Nawab
47.	<i>Samia luzonica</i> (Watson, 1913)	Luzoni silkmoth
48.	<i>Tithorea tarricina</i> (Hewitson, 1857)	Cream-spotted tigerwing
49.	<i>Troides magellanus</i> (Felder, 1862)	Magellan birdwing
50.	<i>Troides plateni</i> (Staudinger, 1888)	Dr Platen's birdwing
51.	<i>Vindula dejone</i> (Erichson, 1833) Syn. <i>Vindula. deione</i> (Erichson, 1833)	Cruiser
52.	<i>Vindula erota</i> (Fabricius, 1793)	Cruiser

2.2 The organism **declined** to be imported into containment is

Kingdom: **Animalia**
Phylum: **Arthropoda**
Class: **Insecta**
Order: **Lepidoptera**
Family: **Pieridae**
Genus: ***Catopsilia***
Species: ***scylla* (Linnaeus, 1763)**

Common names: **Yellow migrant, Orange migrant**

Inseparable organisms

2.3 The Committee did not identify any inseparable organisms relating to this application.

Applicant

2.4 The applicant is Otago Museum.

2.5 The Committee note that this approval can be used by multiple organisations, and as such impose Control 1, requiring that the approval user must ensure compliance with the controls of this approval.

2.6 In addition, the Committee impose Control 2 requiring each approval user to notify ERMA New Zealand and the MAF Inspector in writing that they intend to use this

approval. Notification must be given prior to first use, and must be given for each containment facility operated by the user.

Purpose of the application

- 2.7 The application was made to import new organisms into containment for public display.
- 2.8 In accordance with section 45(1)(a)(i) of the Act, the Committee determined that this application was for the purpose specified in section 39(1)(e) of the Act; namely: *the public display of any organism*.
- 2.9 The Committee considered that the 52 species of tropical butterflies (listed in 2.1) approved for importation may be only imported and held in containment for this purpose (Control 3).

3 Application process

Application receipt

- 3.1 Application ERMA200600 was formally received on 1 October 2010.

Public notification

- 3.2 Under section 53(2) of the Act the Authority has discretion as to whether to publicly notify an application to import into containment any new organism. In this case, the application was not publicly notified (following ERMA New Zealand guidelines) because no exceptional circumstances warranting public notification were identified.

Consultation with government departments

- 3.3 In accordance with section 58(1)(c) of the Act and clauses 2(2)(e) and 5 of the Methodology, the Department of Conservation (DoC) and the Ministry of Agriculture and Forestry (MAF) Biosecurity New Zealand were notified and provided with an opportunity to comment on the application. DOC did not raise any concerns with the application, and noted that in their opinion impact on the native environment, in the event of escape, would be low.
- 3.4 MAF stated that their past concerns with the adequacy of containment at the Otago Museum facility had been addressed, and they are satisfied with the operation of the facility. MAF also noted the risk of breaches of containment by public visitors to the facility, and recommended a control requiring visitors' bags to be kept outside the facility.
- 3.5 The Committee had particular regard to these submissions.

The decision-making committee

- 3.6 Section 19(2)(b) and clause 43 of Schedule 1 of the Act empower the Authority to appoint a committee to hear and decide an application. The Authority appointed a decision-making committee ("the Committee") consisting of Dr Max Suckling (Chair), Dr Kieran Elborough, and Dr Shaun Ogilvie to consider this application.

Consideration

- 3.7 The Committee considered the application 29 October 2010. The consideration followed the process described in the decision path for applications to import new organisms into containment under section 45 (ERMA new Zealand Decision Path Protocol, Figure 12).

- 3.8 The information that the Committee took into consideration included:
- Application ERMA200600 (on Form 121/01) prepared by the applicant.
 - A report with advice from the Agency to assist and support the Committee's decision making.
- 3.9 The application was determined in accordance with section 45, taking into account the matters specified in section 44 and 37, and other matters relevant to the purpose of the Act, as specified in Part II of the Act. Unless otherwise specified, references to sections in this decision refer to sections of the Act.
- 3.10 Consideration of the application followed the relevant provisions of the Methodology, as specified in more detail through the decision. Unless otherwise stated, reference to clause numbers in this decision refer to clauses of the Methodology.

Risk assessment methodology

- 3.11 The Committee evaluated the information provided in the application and advice prepared by the Agency. The Committee took into account all the potential adverse effects (risks and costs) and beneficial effects (benefits) of the organism and inseparable organisms on the environment, human health, Māori culture and traditions, society and the community, and the market economy. The level of each effect was assessed qualitatively, using the descriptors described in Decision Making: A Technical Guide to Identifying, Assessing and Evaluating Risks, Costs and Benefits (ERMA New Zealand, 2009).

Approach to risk

- 3.12 When considering an application, clause 33 requires the Authority to have regard for the extent to which a specified set of risk characteristics exist.
- 3.13 The Committee considered that because this organism is to be maintained in a zoo, in containment, those risk characteristics did not exist. Therefore the Committee concluded that additional caution was not warranted.

Approach to uncertainty

- 3.14 Section 7 and clauses 29 and 30 require the Committee to take into account the need for caution in managing adverse effects where there is scientific and technical uncertainty.
- 3.15 The Committee considered that there is a low level of scientific and technical uncertainty with regard to the potential adverse effects of the 52 tropical butterfly species listed in section 2.1; therefore additional caution is not warranted when considering these species.
- 3.16 The Committee noted that there is uncertainty about the potential adverse effects of *C. scylla* because of the potential for this organism to survive in the event of escape. Therefore the Committee exercised additional caution when considering whether those effects could be managed.

4 Containment of the organism

4.1 In carrying out its consideration, the Committee considered:

- the adequacy of containment;
- the probability that the organism may escape; and
- the ability of the tropical butterflies to form self-sustaining populations in the event of escape.

Containment regime

4.2 The Committee considered the adequacy of containment regime for the tropical butterflies in accordance with section 45(1)(a)(iii).

4.3 The Committee imposed control 4, which requires that the tropical butterflies (listed in section 2.1) must be imported into, and held within, a containment facility approved by MAF Biosecurity New Zealand under the MAF/ERMA Standard *Containment Facilities for Zoo Animals* (the Standard).

4.4 Schedule 17 of the Standard details the physical containment and operational procedure required to contain butterflies and moths given their physical abilities and behavioural factors. The Standard also requires the facility's containment manual to be updated to demonstrate how the physical construction of the facility and the operational procedures will contain the new species, and contingency plans for recovery should any escapes occur.

4.5 The Committee note that containment within a butterfly house is unusual because visitors (members of the public) have direct contact with the new organisms.

Potential for escape from containment

4.6 The Committee considered the probability that the organism may escape, in accordance with sections 44(b) and 45(4)(b).

4.7 The Committee identified and considered the following potential pathways through which containment of tropical butterflies could be breached:

- escape during transport to/from the containment facility;
- accidental or deliberate escape from the enclosure within the containment facility;
- escape due to accidental/unintentional release or deliberate removal from the containment facility by facility staff;
- escape due to accidental/unintentional or deliberate removal from the containment facility by facility visitors; and
- escape from containment following natural disaster (flood, earthquake etc.) or fire.

4.8 The Committee noted that there have been several incidents reported to ERMA where tropical butterflies have escaped from containment. The pathways involved in those incidents included escape through unsecured ventilation, escape through a door left open by staff, and escape through accidental/unintentional or deliberate removal by facility visitors.

4.9 The Committee consider that future escapes, in particular through accidental or deliberate removal by facility visitors, may occur. This is because visitors to the facility have direct access to the tropical butterflies, and the tropical butterflies are relatively small, so can easily be hidden in clothing or bags if desired, or be unwittingly carried out of

containment by a visitor. In addition, the target audience of these facilities is tourists and children who may not understand the consequences of their actions in removing a butterfly from the facility.

- 4.10 The Committee considered imposing additional controls to decrease the potential for escape through the actions of visitors, and concluded that no practicable controls can be put in place to reduce the likelihood of this occurring.
- 4.11 The Committee concluded that escape of the tropical butterflies from their enclosure or the containment facility is, at worst, **unlikely**.
- 4.12 The Standard requires that the facility manual show how the accidental release of any new organisms will be limited, and what the response to a breach of containment will be. The Committee impose Control 5 requiring the approval user to notify the MAF Inspector of any breach and details of any action taken to restore containment within 24 hours of the discovery of any breach of containment. A breach of containment includes: escape of organism(s), unauthorised entry to the facility or enclosure, and/or the structural integrity of the facility being compromised.

Ability of the organism to establish an undesirable self-sustaining population

- 4.13 In accordance with sections 44 and 37 and clause 10(e) the Committee considered the ability of the organisms to form undesirable self-sustaining populations should they escape containment, and the ease of eradication of such populations.
- 4.14 The Committee consider that in order for a species to establish outside of containment, either a gravid (a mated) female, or a male and female of the same species, would need to escape. Further the escaped tropical butterflies would need to find a suitable host plant to lay eggs, and produce viable off-spring that were capable of surviving on the host plant, and in turn reproduce.
- 4.15 The Committee consider that climatic conditions and the availability of suitable host plants would be the primary factors for the survival of any tropical butterfly species if a gravid female or mating pair of tropical butterflies escaped from containment. The Committee noted that only one species (*C. scylla*), of the 53 tropical butterflies in the application, is capable of surviving in New Zealand's climatic conditions, and has a suitable host plant present in New Zealand. This suggests that under optimal conditions, warm temperature and close proximity of a suitable host plant, a gravid female, or mating pair of *C. scylla* could survive and form a self-sustaining population.
- 4.16 A self-sustaining population would be undesirable because *C. scylla* has not been considered for release under the HSNO Act, and this species could cause adverse effects on the environment by feeding on plants, or carrying or transmitting disease.
- 4.17 The Committee concluded that it is **highly improbable** that the 52 species (listed in 2.1) could form an undesirable self-sustaining population, should they escape from containment. They also concluded that it is **unlikely** that *C. scylla* could form an undesirable self-sustaining population, however it could occur under optimal conditions.
- 4.18 Although tropical butterflies are distinctive, they are small and may not be easily located in the event of an escape. The Committee noted that in the past, escaped butterflies have been found dead or near dead, and consider that for those 52 species listed in 2.1 this is likely to occur in the event of escape.

- 4.19 The Committee considered that if *C. scylla* were to escape and form an undesirable self-sustaining population, it is possible that such a population could be eradicated, but it would depend on the extent of the population. If *C. scylla* became widespread, it is unlikely that such a population could be eradicated easily.

Conclusion on adequacy of the containment regime

- 4.20 The Committee considered the ability of the tropical butterflies to escape from containment, given their biological characteristics, the proposed containment regime, and the potential pathways of escape. Taking all these considerations into account the Committee concluded that the proposed containment regime is adequate to contain the organisms.

5 Risk Assessment

- 5.1 In accordance with clause 9(c) the Committee has categorised potential adverse effects into environmental, human health, Māori culture, market economy and social categories. These adverse effects have been considered in terms of the requirements of clauses 12, 13, and 14 including the probability of occurrence and the magnitude of adverse effects, whether or not they are monetary, and the distribution of costs and benefits over time, space and groups in the community. Risk characteristics are considered in terms of clause 33. The degree of uncertainty attached to evidence is taken into account, as required under clauses 25, 29 and 30.

Potential adverse effects on the environment

- 5.2 The Committee considered the potential for the organisms to cause adverse effects on the environment.
- 5.3 The Committee noted the potential for adverse effects on the environment is limited by the containment of the tropical butterflies, and that it is at worst **unlikely** that they will escape from containment. In addition, for the tropical butterflies to cause adverse effects on the environment, the escaped butterfly would need to produce viable off-spring who reached the caterpillar stage of their lifecycle (the feeding stage).
- 5.4 The Committee noted that it is highly improbable that the 52 species listed in 2.1 would survive and produce viable off-spring. Therefore the Committee concluded that potential adverse effects on the environment from those 52 species are **negligible**.
- 5.5 The Committee noted that *C. scylla* has the potential to survive and produce viable off-spring under optimal conditions. Several plant species known to be hosts to *C. scylla* are present in New Zealand, although they are not native. Those plants include: *Cassia fistula* (golden shower tree, Indian laburnum), *Senna alata* (Emperor's candlestick/candlebush), *Senna tora* (sickle senna), and *Tephrosia candida* (white hoary pea, white tephrosia). These are trees or shrubs that are grown as ornamentals in New Zealand. Although seeds of these species (except *T. candida*) are permitted for import, they are not widely sold or grown by nurseries in New Zealand. However, *C. scylla* could feed on those plant species and reduce their amenity value; which would be considered to be an adverse effect.
- 5.6 The Committee considered that the magnitude of potential adverse effects on the environment from *C. scylla* is **minimal** to **minor** and that it is **unlikely** that these effects will occur. The Committee concluded that potential adverse effects on the environment from *C. scylla* are level **A-B (low to negligible)**.

Potential adverse effects on human health and safety

- 5.7 The Committee considered the potential for the organisms to cause adverse effects on human health and safety.
- 5.8 The Committee noted that there is potential for the tropical butterflies to cause allergenic reactions in visitors to the facility. The risks of allergenic reactions to insects such as butterflies are similar to the risks associated with native butterflies, and exposure to the butterflies is voluntary (ie, the visitor chooses to visit the butterfly house). In addition this risk is understood by the general public.
- 5.9 Therefore the Committee concluded that the potential adverse effects on human health and safety are **negligible**.

Potential adverse effects on Māori and their culture and traditions

- 5.10 The Committee considered the potential Māori cultural effects of this application in accordance with clauses 9(b)(i) and 9(c)(iv) of the Methodology and sections 6(d) and 8.
- 5.11 The Committee noted that the potential adverse effects on Māori and their culture and traditions are dependent on escape from containment and formation of a self-sustaining population. The Committee concluded that the potential adverse effects on Māori and their culture and traditions are **negligible**.

Potential adverse effects on the market economy

- 5.12 The Committee considered the information available and did not identify any potential adverse effects on the market economy.

Potential adverse effects on society and communities

- 5.13 The Committee considered the information available and did not identify any adverse effects on society and communities.

6 Identification and Assessment of Potentially Significant Beneficial Effects

- 6.1 The Committee considered the potential beneficial effects associated with the application, in accordance with sections 5 and 6(e) and clauses 9(c), 10, 13, and 14.
- 6.2 The applicant explained that the application is intended to expand the range of butterflies they are able to house in their butterfly house. Although there are over 100 species of tropical butterflies approved for importation for display in butterfly houses, there are significant difficulties in obtaining many of those species.
- 6.3 The benefits of the application identified by the applicant include:
- availability of a wider range of species for the butterfly house will result in a heightened experience for visitors;
 - increased understanding of the tropical butterfly species through research and observation;
 - increased advocacy of the conservation message to the public; and
 - increased visitors to the facilities holding the tropical butterflies.
- 6.4 The Committee consider these benefits relate to all 53 species of tropical butterflies and are of **minor to moderate** value and **likely** to be realised and hence **non-negligible**.

7 Associated Approvals

- 7.1 The Committee noted that any approval user would need to meet the requirements of the Biosecurity Act 1993, such as the need for an Import Health Standard, and obtaining an import permit.
- 7.2 Approval users will also need to meet all other requirements under New Zealand law and international agreements such as the Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES).

8 Overall Evaluation of Risks, Costs and Benefits

- 8.1 The overall evaluation of risks, costs and benefits set out below was carried out in accordance with section 45 and clauses 26 and 27, having regard to clauses 22 and 34.
- 8.2 The Committee assessed the potential beneficial effects of importing all 53 species of tropical butterflies into containment, and concluded that those benefits would be **non-negligible**.
- 8.3 The Committee assessed the potential adverse effects (risks and costs) of importing the tropical butterflies into containment for public display.
- 8.4 The Committee considered that the potential adverse effects of the 52 species listed in 2.1 would be **negligible**. This takes into account the proposed controls (Appendix 1); their assessment that escapes from containment is, at worst, **unlikely**, and establishment of a self-sustaining population in the event of escape is **highly improbable**.
- 8.5 The Committee was unable to find common units of measurement with which to combine risks, costs, and benefits of the 52 species in accordance with clause 34(a). There were no dominant sources of risk relating to the 52 species of tropical butterfly (clause 34(b)). Because the risks as a whole are negligible the decision for these organisms is made in accordance with clause 26 (not clause 27) of the Methodology.
- 8.6 The Committee considered the potential adverse effects (risks and costs) of importing *C. scylla* into containment for public display separately from the 52 species above. This is because although escape from containment is, at worst, **unlikely**, the Committee consider there is potential for a self-sustaining population to form. The Committee assessed the potential adverse effects of *C. scylla* as being **low** to **negligible**.
- 8.7 The Committee was unable to find common units of measurement with which to combine risks, costs, and benefits of importing *C. scylla* for public display in accordance with clause 34(a). The Committee considered that the dominant source of risk was the potential for *C. scylla* to escape from containment and form an undesirable self-sustaining population. While noting that the level of effects on the environment from such a population would be **low**, the Committee consider that the risks of importing *C. scylla* for public display are significant when compared with the minor to moderate benefits of having the organism in containment.

9 Decision

- 9.1 Pursuant to section 45(1)(a)(i), the Committee is satisfied that this application is for a purpose specified in section 39(1), being section 39(1)(e): *the public display of any organism*.

52 species of tropical butterfly

- 9.2 Having considered all the possible effects in accordance with sections 38, 45(1)(a)(ii), 45(4) and 44 and pursuant to clause 26, and based on consideration and analysis of the information provided and taking into account the application of risk management controls specified in this decision, the Committee is satisfied the beneficial effects of having the organisms in containment outweigh the adverse effects of the organisms.
- 9.3 The Committee is satisfied that the containment regime, based on the Standard and the additional controls set out in Appendix 1, will adequately contain the organisms as required by section 45(1)(a)(iii).
- 9.4 The application to import into containment 52 species of tropical butterflies (listed in 2.1) for the purposes of public display is **approved** in accordance with section 45(1)(a). As required under section 45(2), the approval is subject to the controls listed in Appendix 1 of this decision.

Catopsilia scylla

- 9.5 Having considered all the possible effects in accordance with sections 38, 45(1)(a)(ii), 45(4) and 44, and based on consideration and analysis of the information provided and taking into account the application of risk management controls specified in this decision, the Committee determined that the risks of having this organism in containment for the purpose of public display are unacceptable given the low level of beneficial effects. Therefore, the application to import *C. scylla* for the purposes of public display is **declined** in accordance with section 45(1)(b).



6 November 2010

Max Suckling

Date

Chair of the Committee

Approval codes: NOC100024 - 75

Appendix 1: Controls Required by the Approval

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

- 1 The approval user (organisation using this approval) must ensure compliance with the following controls.
- 2 Each approval user must, the first time it uses this approval at each containment facility, notify ERMA New Zealand and the MAF Inspector in writing.
- 3 This approval is limited to the importation into containment of the tropical butterfly species listed in 2.1 for public display.
- 4 Subject to the other controls of this approval, tropical butterflies must be held within a containment facility in accordance with the MAF/ERMA New Zealand Standard *Containment Facilities for Zoo Animals*¹ (the Standard).
- 5 Within 24 hours of the discovery of any breach of containment² the approval user must notify the MAF Inspector of the breach and details of any action taken to restore containment.

¹ Any reference to this standard in these controls refers to any subsequent version approved or endorsed by ERMA New Zealand.

² A breach of containment includes: escape of organism(s), unauthorised entry to the facility or enclosure, and/or the structural integrity of the facility being compromised.

Approval numbers for organisms on application ERMA200600

Approval number	Organism
NOC100024	<i>Caligo atreus</i> Kollar 1894
NOC100025	<i>Opsiphanes cassina</i> Felder 1862
NOC100026	<i>Morpho granadensis</i> Felder 1867
NOC100027	<i>Idea leuconoe</i> Erichson 1834
NOC100028	<i>Dryadula phaetusa</i> Linnaeus 1758
NOC100029	<i>Eueides aliphera</i> Godart 1819
NOC100030	<i>Heliconius hecale</i> Fabricius 1777
NOC100031	<i>Heliconius hewitsoni</i> Staudinger 1875
NOC100032	<i>Heliconius ismenius</i> Latreille 1817
NOC100033	<i>Heliconius sapho</i> Drury 1782
NOC100034	<i>Ithomia heraldica</i> Bates 1866
NOC100035	<i>Mechanitis polymnia</i> Linnaeus 1758
NOC100036	<i>Tithorea tarricina</i> Hewitson 1857
NOC100037	<i>Anaea euryple</i> Felder 1862 aka <i>Memphis euryple</i> (Felder, 1863)
NOC100038	<i>Biblis hyperia</i> Cramer 1779
NOC100039	<i>Consul fabius</i> Cramer 1779
NOC100040	<i>Hamadryas amphinome</i> Linnaeus 1767
NOC100041	<i>Vindula deione</i> Erichson 1834 aka <i>Vindula dejone</i>
NOC100042	<i>Vindula erota</i> Fabricius 1793
NOC100043	<i>Papilio palinuris</i> Fabricius 1781 aka <i>Papilio palinurus</i> (Fabricius, 1787)
NOC100044	<i>Anteos clorinde</i> (Godart, 1824)
NOC100045	<i>Archaeoprepona demophon</i> (Linnaeus, 1758)
NOC100046	<i>Caligo illioneus</i> (Cramer, 1776)
NOC100047	<i>Callicore pitheas</i> (Latreille, 1813)
NOC100048	<i>Cepora aspasia</i> (Stoll, 1790)
NOC100049	<i>Charaxes bupalus</i> (Staudinger, 1889)
NOC100050	<i>Charaxes harmonidius</i> (Felder, 1866)
NOC100051	<i>Danaus genutia</i> (Cramer, 1779)
NOC100052	<i>Danaus melanippus</i> (Cramer, 1777)
NOC100053	<i>Delias hyparete</i> (Linnaeus, 1758)
NOC100054	<i>Eryphanis polyxena</i> (Meerburgh, 1775)
NOC100055	<i>Euploea sylvester</i> (Fabricius, 1793)
NOC100056	<i>Euthalia adonia</i> (Cramer, 1782)
NOC100057	<i>Godyris zavaleta</i> (Hewitson, 1855)
NOC100058	<i>Greta nero</i> (Hewitson, 1854)
NOC100059	<i>Hamadryas laodamia</i> (Cramer, 1777)
NOC100060	<i>Historis acheronta</i> (Fabricius, 1775)
NOC100061	<i>Lamproptera curius</i> (Staudinger, 1889)
NOC100062	<i>Lexias pardalis</i> (Moore, 1878)
NOC100063	<i>Pachliopta neptunus</i> (Guerin-Meneville, 1840)
NOC100064	<i>Opsiphanes bogotanus</i> (Distant, 1875)
NOC100065	<i>Opsiphanes tamarindi</i> (Felder, 1861)
NOC100066	<i>Pachliopta atropos</i> (Staudinger, 1888)
NOC100067	<i>Panacea procilla</i> (Hewitson, 1853)
NOC100068	<i>Papilio daedalus</i> (Felder and Felder, 1861)

NOC100069	<i>Parantica aspasia</i> (Fabricius, 1787)
NOC100070	<i>Pareronia valeria</i> (Cramer, 1776)
NOC100071	<i>Parides childrenae</i> (Gray, 1832)
NOC100072	<i>Polyura schreiber</i> (Godart, 1824)
NOC100073	<i>Samia luzonica</i> (Watson, 1913)
NOC100074	<i>Troides magellanus</i> (Felder, 1862)
NOC100075	<i>Troides plateni</i> (Staudinger, 1888)