Environmental Protection Authority
Te Mana Rauhī Taiao

APPLICATION FORM
CONTAINMENT

Application Form: HS3 Import or Manufacture any Hazardous Substance in Containment

under section 31 of the Hazardous Substances and New Organisms Act 1996

To submit an application, please send by post to: Environmental Protection Authority, Private Bag 63002, Wellington 6140
OR email to: HSApplications@epa.govt.nz

Payment must accompany application: see our fees and charges schedule for details. Please allow 10 working days for processing.

Applicant:

Kirsty Boyd-Wilson, Bioprotection Compliance Officer for Plant & Food Research

Name of substance:

Plant & Food Research Experimental Plant Production Compounds

APPLICANT CHECKLIST

Mandatory sections filled out	☐	**Appendices enclosed**	☐
Initial fees enclosed	☐	**Signed and dated**	☐
Please invoice NZIN05			
Electronic copy of application emailed to EPA	☐		

Office use only

Application code:

Date received:

EPA contact:

Initial fees paid: $

Application version no.:

Important

1. You can talk to an applications advisor at the EPA, who can help you scope and prepare your application. We need all relevant information early on in the application process. Quality information up front will speed up the process.
2. This application form may be used to seek approvals for more than one hazardous substance where the substances are related – for example, a concentrated compound (active ingredient) and its related formulations, or a range of substances for similar purposes to be tested in a field trial.
3. Any extra material that does not fit in the application form must be clearly labelled, cross-referenced, and included in an appendix to the application form.
4. Commercially sensitive information must be collated in a separate appendix.
5. Unless otherwise indicated, all sections of this form must be completed for the application to be progressed.
6. You can get more information at any time by contacting us. One of our staff members will be able to help you.

   Environmental Protection Authority
   Private Bag 63002
   Wellington
   New Zealand
   Telephone: 64 4 916 2426
   Facsimile: 64 4 914 0433
   Email: HSApplications@epa.govt.nz
   http://www.epa.govt.nz

Section 1 – Applicant details

1.1 Name and postal address in New Zealand of the organisation making the application:

Name: The New Zealand Institue for Plant & Food Research

Address: Private Bag 92169, Auckland Mail Centre, Auckland 1142

Phone: 09 925 7000

Fax:

1.2 The applicant's location address in New Zealand (if different from above):

Address:

1.3 Name of the contact person for the application:

This person should have sufficient knowledge to respond to queries and either have the authority to make decisions that relate to processing the application on behalf of the applicant, or have the ability to go to the appropriate authority.

Name: Kirsty Boyd-Wilson

Position: Bioprotection Compliance Officer

Address: Private Bag 4704, Christchurch Mail Centre, Christchurch 8140

Phone: 03 9777 355

Fax:

Email: Kirsty.boyd-wilson@plantandfood.co.nz

Section 2 – Application type and related approvals required

This form is only for an application to import a hazardous substance into containment, or manufacture a hazardous substance in containment.

2.1 Is this application to manufacture or import a hazardous substance in containment for any of the following purposes?

Containment applications can only be made for a limited range of purposes. In particular, the substance must not be intended for commercial manufacture or sale.

Small amounts of any hazardous substance for use as an analytical standard, where approval to import or manufacture that substance has been declined?	☐ Yes	☒ No
Research on any hazardous substance to acquire information for use in assessing that substance for a HSNO approval?	☒ Yes	☐ No
Research and development on any hazardous substance?	☒ Yes	☐ No
Use in an emergency?	☐ Yes	☒ No
Formulating, relabelling, repackaging, or storing any hazardous substance for export to a destination outside New Zealand?	☐ Yes	☒ No
Other purposes?	☐ Yes	☒ No

2.2 If you answered 'yes' to one of the purposes listed above, please provide some supporting detail. If you answered 'yes' to 'other purpose', describe the purpose and explain why this purpose is appropriate to a containment application.

This application is a renewal with modifications of a generic approval for trials in containment (HSC08015-HSC000363). The purpose of this application is to import and manufacture experimental plant production compounds for the purpose of testing the control of plant damaging micro-organisms, invertebrates and weeds and improving plant production in containment trials to provide information for research and development of selected substances.

We wish to apply for a generic approval which covers a range of substances including insecticides, fungicides, herbicides, plant growth regulators, plant activators and semiochemicals and other plant production compounds. Contained trials will be carried out on research orchards, privately-owned properties and publically-accessible areas (insect semiochemical trials only). We wish to have the same notification prior to commencement of trials as previously stated for HSC000363, whereby EPA assumes that our trials met the requirements of the approval

conditions. Details of email correspondence between EPA and Plant and Food Research (PFR) can be found in Appendix 2. Plant and Food Research has an internal audit system to ensure that we are following processes required

2.3 Is the information in this application relevant to import, manufacture or both?

Import the substance(s) only?	☐ Yes	☐ No
Manufacture the substance(s) only?	☐ Yes	☐ No
Import and manufacture the substance(s)?	☒ Yes	☐ No
If import only, indicate whether or not manufacture is likely in New Zealand:	☐ Yes	☐ No

2.4 If the information in the application relates to manufacture of the substance(s) in New Zealand, provide information on the proposed manufacturing process and any alternatives.

Manufacturing will take place at a Plant & Food Research laboratory or another organisation working with or on behalf of Plant & Food Research.

2.5 If this substance(s) needs an approval under any other legislation, has an application for this approval been made?
(Optional)

Name of approval	Application made
Agricultural Compounds and Veterinary Medicines Act 1997	☒ Yes ☐ No ☐ NA
Food Act 1981	☐ Yes ☐ No ☐ NA
Medicines Act 1981	☐ Yes ☐ No ☐ NA
Chemical Weapons (Prohibition) Act 1996	☐ Yes ☐ No ☐ NA
Radiation Protection Act 1965	☐ Yes ☐ No ☐ NA
Biosecurity Act 1993	☒ Yes ☐ No ☐ NA
Resource Management Act 1991	☐ Yes ☐ No ☐ NA
Other (please specify):	
	☐ Yes ☐ No
	☐ Yes ☐ No

☐ Yes ☐ No

Section 3 – Information on the substance(s)

Note that all information that is commercially sensitive must be attached as an appendix. The application form should be cross-referenced to the appendix but should be able to be read as a stand-alone document (which will be publicly available).

If approval is being sought for more than one hazardous substance, this section must be completed separately for each hazardous substance.

Trial work will cover a range of substances including pheromones and semiochemicals, insecticides, fungicides, herbicides, plant growth regulators, plant activators and other plant production compounds.

3.1 State the unequivocal identification of the substance(s).

This section should include all information necessary to unequivocally identify the substance(s) and may include:

- Chemical name (Chemical Abstracts Preferred Index name or IUPAC name)
- Common name
- Synonyms
- Trade names
- CAS Registry number
- Molecular formula
- Structural formula
- Impurities.

For mixtures, in addition to the above information being provided on the actual mixture, information is also required on the composition of the mixture – ie, the chemical name, CAS number, function (eg, active ingredient, emulsifier, surfactant, filler) and percentages of ALL components of the mixture (including non-hazardous components and impurities) should be provided. This information may be best expressed in tabular form. If the composition is variable, please ensure to state the limits.

If there are commercial reasons for not providing full information in the main part of the form, alternative approaches must be discussed with and agreed by the EPA. These must include the provision of a unique identifier of some kind.

The known identification of each substance will be provided to EPA prior to commencement of trial work.

3.2 Provide information on the chemical and physical properties of the substance(s).

Provide as much information as possible on the chemical and physical properties of the substance(s) [at 20°C and 1 atmosphere unless otherwise stated] – eg:

- Appearance (colour, odour, physical state or form)
- pH
- Density
- Vapour pressure
- Boiling/melting point
- Solubility in water
- Water/octanol partitioning co-efficient.

For mixtures, information is required on the chemical and physical properties of the mixture itself. However, if this information is not available, you should provide information on the chemical and physical properties of EACH hazardous component of the mixture.

The known chemical and physical properties of each substance will be provided to EPA prior to commencement of trial work.

3.3 Provide information on the hazardous properties of the substance(s).

Information should be provided on the hazardous properties of the substance(s) known to the applicant. You should consider each of the six hazardous properties below and provide information on those hazardous properties. This information is needed in order to assess risks and determine whether or not, and how, the substance can be adequately contained.

- Explosiveness
- Flammability
- Oxidising properties
- Corrosiveness
- Toxicity
- Ecotoxicity.

If your substance is a mixture and you cannot provide direct information on its hazardous properties, you can apply mixture rules to the hazardous components of the mixture. If you do this, then you will need to provide information on the hazardous properties of each hazardous component of the mixture, and show your workings.

Safety Data Sheets where available will be provided to EPA prior to commencement of trials. It is possible that only limited information will be available on these experimental substances.

3.4 Provide information on what will happen to the substance throughout its whole life, from its introduction into New Zealand, its uses, through to disposal.

The information provided needs to reflect the containment character of the application. It will be used in the development of exposure scenarios and the assessment of risks, and hence the specification of the containment conditions.

Plant and Food Research complies with the Exempt Laboratories Code of Practice for CRI and University (ELCOP). Handling of substances in the field will be in accordance with the Code of Practice for the Management of Agrichemicals NZS 8409: 2004.

Transport

Each experimental compound will be imported fully packaged, with the compound contained in polyethylene terephthalate (PET) bottle or other suitable containers. These compounds when transported in bulk, will be packed in UN approved packaging that is suitable for the shipment to and within New Zealand. Transport workers, wharf workers will only handle the fully packaged product, comprising the outer package, inner absorbent material and the inner package containing the substance. Exposure during transport, storage and handling is only possible through the breach of this packaging. The volatile substances will be transported from Plant & Food Research sites to field trials in an outer package with an inner absorbent material (if a liquid) and an inner package.

The substances will be transported in accordance with good practice. Concentrates may be transported by Plant and Food Research staff to designated sites. Substances will be contained to prevent leakage or spillage from contaminating the environment.. A Safety Data Sheet (if available) will accompany any transported substances.

Storage

Substances will be stored according to the Code of Practice for CRI and University Laboratories (ELCOP) when at a Plant & Food Research site or the Code of Practice for the Management of Agrichemicals NZS 8409: 2004 if stored at a non-Plant & Food Research site. Any surplus concentrate shall be returned to Plant and Food Research where it shall be securely stored in a laboratory until further use. Surplus substances and used containers shall ultimately be disposed of in a manner compliant with the Hazardous Substances (Disposal) Regulations 2001.

Manufacturing and dispensing

Manufacturing (if required) and dispensing may be carried out on-site in Plant and Food Research laboratories and trial sites (dispensing). Some manufacturing may be carried out by another organisation working with or on behalf of Plant & Food Research. This organisation would work to the controls imposed by this approval. Only staff with ID cards can access laboratories. Personnel use personal protective clothing and equipment. Preparation will occur in fume hoods or well ventilated areas as specified in the SDS or any available precautionary information.

Intended use of the substance

The plant production substances will be applied by ground application methods or by seed/plant treatment. Other specific information on the intended use, potential formation of by-products/metabolites/waste products during use, will be provided prior to commencement of the trials. Written permission will be obtained from the owner of private land. In the case of semiochemical trials verbal or other permission will be obtained and the trial director will hold a written record of the details of this permission.

Disposal of the substance

Disposal options will relate to the relevant requirements of the Hazardous Substances (Disposal) Regulations 2001 and standard NZS8409:2004 Management of Agrichemicals. In the case of insect semiochemicals, any unused product will be disposed of through autoclaving or evaporation in a fumehood. The cost of materials means that there is little or any waste generated.

The amount of compound prepared will be the minimum necessary for the trial. Any surplus will be disposed of where possible within the trial site by applying over designated non-crop and non-grazed areas. Application equipment will be thoroughly triple-rinsed after use and the rinsate disposed of as for surplus application-ready substance.

Any surplus concentrate shall be returned to Plant and Food Research where it shall be securely stored in a laboratory until further use. Surplus substances and used containers shall ultimately be disposed of in a manner compliant with the Hazardous Substances (Disposal) Regulations 2001.

3.5 Provide information on the quantity of the substance proposed to be imported or manufactured.

This information is used in the development of exposure scenarios and the assessment of risks.

In all cases, an effort will be made to only import and/or manufacture the volume necessary to satisfy the requirements of the trials. The compound volume involved per season and over the period of the approval will be provided confidentially to EPA prior to commencement of the trials. We propose to keep the current notification system, whereby the compounds and their volumes are listed along with the trial site and target organism in a Microsoft® Excel sheet and then emailed to EPA prior to the trial. As the results from trials are used to inform future related trials (i.e. blends of semiochemicals to attract a target), in some cases we state the maximum amount of various compounds to be used at the same site targeting the same organism(s) for a suite of trials, reducing the number of email notification from PFRto EPA.

The volume of the experimental substances is expected to be ≤ 50 litres (kg) of active ingredient (a.i.) per substance per season. This gives a total expected quantity per substance of ≤ 250 litres (kg) a.i. for the five-year period of the approval.

Section 4 – Information on the proposed containment system

4.1 Provide information on the proposed containment system.

It is essential that good information is provided on the containment system because the adequacy of containment, in conjunction with the hazardous properties of the substance, will have a major impact on whether or not approval is given.

You will need to provide a description of the containment proposed AND information on how you intend to address the following issues (proposed controls):

- **Methods for preventing the escape of the contained hazardous substance and preventing the contamination of the facility**

Subtances are stored securely as detailed above. At all times other than when the compounds are being applied to trial plots, the compounds are stored and transported in clearly labelled, robust containers, in locked Plant and Food Research facilities that are only accessible to experienced/authorised staff. Spray drift is controlled as detailed below. Application equipment is thoroughly washed and rinsed after each use. The rinsate will be disposed of as described previously.

- **Methods for excluding unwanted organisms from the facility or to control organisms within the facility**

The trial plants are routinely monitored by the experimenters for signs of unwanted pests and diseases. Pesticides may be used to control these providing these do not interfere with the trial. Insect semiochemicals should only attract the target insect. Active and passive insect and rodent traps are present throughout the laboratory facilities. Trial sites that are at risk from grazing animals will be secured by stock proof fencing during the duration of the trial. In the case of semiochemical trials where grazing animals are not excluded, devices will be located above grazing height.

- **Methods for excluding unauthorised people from the facility**

Trials (except on insect semiochemicals) will be carried out on research orchards, privately-owned properties, or areas not readily accessible to the public. Trials on insect semiochemicals may be carried out in areas accessible to the public.

Access to the trial site on private property will be by permission of the trial director or owner of the property. For semiochemical trials in publically-accessible areas, access restrictions, publicity and signage will be jointly agreed with the relevant local territorial authority or other administrating body and the application and will depend on the location and scale.

Trial site boundaries will be clearly marked and distinctly visible from outside the trial site throughout the duration of the trial. The research sites will also clearly labelled with signs that prohibit unauthorised access, identify the area as an experimental site, and state that products are not to be removed and consumed from the study site.

In the case of semiochemical trials, which may have only a few lures/dispensers per hectare and may cover a large area, the devices that administer the substance will be clearly labelled. The label will state that semiochemicals are in use and have the relevant EPA approval number, please do not touch, and contact details of the trial director.

Semiochemical trials, where the substance is sprayed will be contained as described for other sprayable substances.

Property owners or managers/organisations leasing or responsible for managing land where the proposed trials are to be located will be notified in advance of when treatments are to be applied and asked to inform any staff working on the property that this is a trial site. A letter outlining containment and disposal procedures will be sent to the grower or administrator of the public site before the onset of trials.

- **Methods for preventing unintended release of the substance by experimenters**

No treated produce shall be consumed by people or (so far as is reasonably practicable) animals or sold, offered for sale, given away, bartered or otherwise distributed unless the ACVM Group has approved this process as part of a provisional registration or research permit. Sprayed produce from any trial that does not have ACVM approval for consumption will be ploughed in, mulched or buried on the trial site or disposed off at an approved landfill. The method of disposal will be determined by the trial director. Sprayed produce will not be composted.

In all cases, trial sites shall be chosen so as to prevent the substances entering any surface water or groundwater system and to prevent residential buildings or workplaces not related to the research being exposed to the substance.

For applications which involve spraying, spray drift will be minimised by only spraying when winds are less than 15 km/hr and the wind direction predictable. All spray plots are surrounded by a buffer zone of non-sprayed plants. Spray equipment is cleaned after each use, and calibrated regularly to ensure accurate delivery of dose. Experimental compounds applied with a sprayer will be applied by under the direction of approved handler/Growsafe® accredited personnel. Experimental compounds that are not applied with a sprayer will be applied by trained staff. These personnel will be made aware of the contents and requirements of the Project Plans and controls in order to adequately manage the substances.

- **Methods for controlling the effects of any accidental release of the substance**

Where available, material safety data sheets for individual constituents are kept on file by the project leader. Spillages will be contained, prevented from entering water bodies, and be absorbed with appropriate material. This

will then be placed into sealed containers for disposal at an appropriate waste disposal facility. All staff working with the substance will be advised of this procedure prior to commencement of the trial.

- **Inspection and monitoring requirements of the containment facility.**

A management plan may be attached as an appendix. This plan should specify the procedures for implementing the above methods for containing the substance(s), and provide details of the qualifications of the person responsible for implementing those controls.

Application records will be kept and are available for inspection for all substances for a minimum of three years from cessation of a trial.

Section 5 – Identification and assessment of risks

In completing this section, it is important that you take account of the proposed containment system you described in Section 4. We are particularly interested in knowing about risks that may still remain with the containment system in place. You will need to consider the effects on the environment and public health, including any social effects. You should also take account of the quantity of material involved and the number of different locations that may be involved.

Complete this section as far as you can.

5.1 Identify all of the risks of the substance(s).

Include information on potentially significant, possible risks of the substance and whether or not these risks are *likely* to be significant. It is important to think about the source of the risk – ie, the way in which the risk is created (the exposure pathway) and then the consequences of exposure. Risks should be considered in relationship to:

- the sustainability of native and valued introduced flora and fauna
- the intrinsic value of ecosystems
- public health (including occupational exposure)
- the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, valued flora and fauna, and other taonga
- the economic and related benefits to be derived from the use of the hazardous substance
- New Zealand's international obligations.

The compounds (e.g. synthetic copies of naturally-occurring insect pheromones) covered by this application are experimental and limited information is available therefore suitable controls have been proposed. Given that field trials are on a small scale basis, there would be limited amounts of the substance present at any time and are unlikely to have a significant effect on taonga, ecosystems or reduce or harm New Zealand's exports or global image.

There are a number of activities that provide pathways for escape from containment. These activities are:

Importation and transport

Insecure packaging or an accident could result in spillage of the formulations either on arrival in New Zealand and unloading or during transport to the containment facilities. In the event of a transport accident between the airport and the containment facilities the environment could be exposed to the substance. The substance will be transported in liquid or solid form and therefore the environment could come into contact with it if the packaging split and a member of the public (or the driver) attempted to clean it up. If water is used to wash the product away it could reach stormwater systems or waterways and result in adverse effects on terrestrial ecosystems.

Storage

Inadequate containment during storage of the substance, prior to use, could lead to effects to the ecosystems through direct contact or spillage.

Dispensing, Manufacturing and Mixing

Similarly these processes may pose risks to ecosystems if the product is spilt.

Use i.e. spraying

There is a risk of adverse environmental effects on ecosystems and species, during application or spray drift.

Disposal of surplus mix, surplus concentrate, treated produce.

Disposal risks relate to excess product remaining after the trial has been completed (at the storage facility), excess product taken to the trial sites and not used, and excess mixed product at the trial site. Excess product poses potential risks to ecosystems. Removal by contamination of unauthorised visitors/animals accessing the site, or from product being moved from the site by water, air, or carried on workers clothing, may also lead to risks to the environment. Insect pheromones (within species communication) are generally species specific and no adverse affects are foreseen from their use, other semiochemicals (between species communication) may be not be as specific (e.g. plant odours) and may effect non-target organisms. If this was the. They degrade quickly in the presence of ultra-violet light and oxygen. Some treatments are being conceived with the cooperation of the Department of Conservation and insect semiochemicals are used throughout the world for monitoring and trapping insect pests. Furthermore, regular aerial application of semiochemicals is used in the eastern US for the control of the gypsy moth.

Accidents, natural hazards and sabotage

Risks may arise from accidents, natural hazards such as earthquakes, and through sabotage or deliberate misuse of the substance.

5.2 Provide an assessment of the potential risks identified in Section 5.1.

An explicit risk assessment only needs to be provided for those risks which might be significant. The assessment should consider whether the identified risks can be adequately managed by the proposed containment system, and the substance(s) itself adequately contained.

The assessment should include the nature, probability of occurrence, and magnitude of each adverse effect. The uncertainty bounds of the information contained in the assessment should also be discussed.

(Optional)

	Hazard Low/Medium or High	Risk Low/Medium or High	Managed	Controls used in management
Importation and transport	Very Low	Low	Yes	Suitable packaging, MSDS's, clean up

				procedures. Use of transportation companies that have appropriate approvals
Storage	Very Low	Low	Yes	Suitable storage facilities
Dispensing, Manufacturing and Mixing	Very Low	Low	Yes	Trained personnel
Use i.e. spraying	Very Low	Low	Yes	Trained personnel
Disposal of surplus mix, surplus concentrate, treated produce.	Very Low	Low	Yes	Trained personnel, disposal procedure
Accidents, natural hazards and sabotage	Very Low	Low	Yes	Suitable storage facilities and packaging, trained personnel

All risks can be adequately managed by the proposed containment system.

Section 6 – International considerations

6.1 The EPA is interested in whether this substance (or any of its components) has been considered by any other regulatory authority in New Zealand, or by any other country. If you are aware of this, please provide details of the results of such consideration.

(Optional)

Some of the semiochemicals that have been identified by PFR and other research institutes have been commercialised and approved for use in New Zealand and international markets. The use of semiochemicals for insect pest management in New Zealand has allowed New Zealand growers to maintain or increase market access while still keeping insecticide residue at or below acceptable limits.

Section 7 – Miscellaneous

7.1 Provide a glossary of scientific and technical terms used in the application.

Fungicide	A substance used to kill or control fungi.
Herbicide	A substance used to kill or control unwanted plants
Insecticide	A substance used to kill or control insects
Pesticide	A substance for destroying unwanted organisms, can be specifically a fungicide, herbicide, insecticide, miticide, nematicide, parasiticide or rodenticide.
PFR	Plant and Food Research
Pheromone	A chemical substance or mixture that carries a message between organisms from the same species
Plant Growth Regulator	A substance that regulates plant growth
Plant Activator	A substance that triggers plant defence mechanisms.
Plot	Plot - a single homogeneous unit, being plant(s) or area, used for an assessment of a substance at a specific rate or concentration.
Semiochemical	A chemical substance or mixture that carries a message between organisms

7.2 Provide here any other information you consider relevant to this application that is not already included.

Section 8 – Summary of public information

The information provided in this section may be used in the EPA's public register of substances, required under Section 20 of the HSNO Act.

This summary information will be used to provide information for the people and agencies (eg, Ministry for the Environment, Department of Conservation, Regional Councils etc) that will be notified of the application, and for potential submitters who request information. This information will also be used to prepare the public notice of the application.

For these reasons, applicants should ensure that this summary information does not contain any commercially sensitive material.

8.1 Name of the substance(s) for the public register:
Please use a maximum of 80 characters.

Plant & Food Research Experimental Plant Production Compounds

8.2 Purpose of the application for the public register:

This should include an abstract (in a maximum of 255 characters) giving information on the intended use of the substance and why an application is needed, based on its hazardous properties.

To import and manufacture Plant & Food Research Experimental Plant Production Compounds for use as pesticides and plant production compounds on various crops.

8.3 Use categories of the substance(s):

The EPA has adopted the system of use categories developed by the European Union, which identify various functional uses of substances. This information is pertinent to the assessment of exposure scenarios and the determination of risk, and is also useful for building up a profile of the substance. There are three sets of use categories. Within each of these, applicants should state which use categories are relevant to all intended uses of the substance(s).

1. Main category: 4 - Wide-dispersive use
2. Industry category: 1 – Agricultural industry.
3. Function/Use category: 38 and 39

(Optional)

8.4 Executive summary:

In this section, the applicant should provide a summary of information contained in this application, including:

- the identification of the substance, its hazardous properties, intended uses and disposal
- an assessment of the adverse effects of the substance
- information on the proposed containment.

This is a generic application to import and manufacture experimental plant production compounds. The intention is to conduct contained laboratory, field and glasshouse trials to provide information relevant for the development of these compounds. Substances to be trialled will include insecticides, fungicides, herbicides, plant growth regulators, plant activators, insect semiochemicals and other plant production compounds. Contained trials will be carried out on research orchards, privately-owned properties, or publically-accessible sites (semiochemical trials only).

The containment practices proposed within this application are designed to contain the compounds and manage any hazards and risk. These include secure storage, safe transport, appropriate labelling and signage, control of spray drift, , limiting use of treated produce, use of trained staff and notification of trial conditions to property owners/managers and limiting access to trial sites. For semiochemical trails in publically-accessible areas, access restrictions, publicity and signage will be jointly agreed with the relevant local territorial authority or other administering body and the application and will depend on the location and scale.

Details of the substances will be notified to EPA before commencement of the trials.

KSH Boyd-Wilson	11/12/2013
Signature	**Date**

Appendix 1 – Commercially sensitive information