

# B2

## **VERTEBRATE TOXIC AGENTS** MINIMUM LEGAL REQUIREMENTS FOR SAFE USE AND HANDLING

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## ABOUT NPCA

This document was published by NPCA (National Pest Control Agencies) which, until part way through 2018, provided a co-ordinating forum for agencies and stakeholders to address vertebrate animal pest control in New Zealand. In 2018 its role was largely taken over by the Ministry for Primary Industries.

## PUBLICATIONS

Most of NPCA's publications on animal pest control were partially updated in April 2018 and transferred to the library section of the Ministry for Primary Industries' 'BioNet' online portal. The updates reflect the transfer and also acknowledge the change in the regulatory regime during 2017 and 2018, while not fully incorporating these changes in the interim, pending further reviews of the publications. Written by experienced practitioners, the main titles cover:

- best practice guidelines on controlling and monitoring vertebrate pests; and
- information about relevant regulations.

The transferred publications can be found at [www.bionet.nz/library](http://www.bionet.nz/library)

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Bionet Portal (Ministry of Primary Industries)

[www.bionet.nz](http://www.bionet.nz)

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### REMEMBER

Follow **Label** Directions  
Have **Safety Data Sheet** On Hand

National Poisons Centre  
24 hour emergency service  
**0800 764 766**

General Emergency  
**Dial 111**

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## **PART 1. PURPOSE**

These guidelines were commissioned by the Biosecurity Managers Group through the National Pest Control Agencies (NPCA). Now administered by the Ministry for Primary Industries (MPI) under its BioNet initiative.

Regulatory aspects for use of vertebrate toxic agents (VTAs) are summarised. Some additional best practice standards for the safe use and handling of (VTAs) are also included. The primary audience is the field staff and contractors responsible for vertebrate pest control programs.

There has been significant regulatory change with the transfer of most VTA controls to WorkSafe NZ under the Health and Safety in the Workplace Act 2017 (with hazardous substances regulations effective December 2017).

The authoritative sources include the NZ legislation, WorkSafe, and EPA websites;

<http://legislation.govt.nz>

<http://worksafe.govt.nz>

<https://www.epa.govt.nz>

### **1.1 Cautions**

This document identifies where to find minimum legal requirements for the use of vertebrate toxic agents. It is not intended to be a detailed analysis of legislation.

When subject to legislative requirements readers are directed to the legislation itself and asked to consult their legal advisors.

The legislation referred to in these guidelines is liable to change.

Additional Best Practice Guidelines for various target species are available. These complementary guidelines are available from the BioNet publication library <https://www.bionet.nz/library/>.

### **1.2 Acknowledgements**

Thanks to the expert working group involved in the preparation of these guidelines. We acknowledge the contribution of the Department of Conservation, whose documentation provided much of the basis of this document, and the detailed review and commentary provided by Ray Clarey, Grant Crawford, Bill Simmons and other members of the original expert working group.

## **PART 2. PRINCIPLES AND PHILOSOPHY OF SAFE TOXIN USE**

Vertebrate toxic agents (VTAs) are designed to kill vertebrates. Vertebrates are creatures with backbones, and that includes mankind. The use of these toxins demands the highest duty of care.

Safety is always your first responsibility. Your own safety, that of others working with you, and the public.

Principles of safe and responsible toxin use include:

- Persons handling toxins are fit and proper persons, not alcohol or drug impaired, physically and mentally capable of acting safely and dealing with emergencies.
- Follow label and regulatory requirements. These rules have a purpose, to ensure safe toxin use.
- Have necessary licences and training in place. The people best able to act safely and respond appropriately in emergencies are those that have been trained to do so.
- Apply the precautionary principle. If you are unsure that your actions are safe, assume they are not.
- Prevention is better than cure. Imagine “what if” and take preventative action.
- Be responsible for yourself. Don’t just rely on your supervisor to take charge if something goes wrong.....they may not be able to.
- If you need help from other staff or emergency services, get it immediately.
- Deadlines, budgets, and bosses do not take priority over safe toxin use.

## **PART 3. REGULATION OF VERTEBRATE TOXIC AGENTS – FOUR PRINCIPAL ACTS**

### **3.1 Relevant Legislation**

Vertebrate Toxic Agents (VTAs) are mainly regulated under the **Health and Safety at Work Act 2015** (hereafter HSW Act), via the Health and Safety at Work (Hazardous Substances) Regulations 2017 (hereafter the HSWHS regulations 2017).

The **Hazardous Substances and New Organisms Act 1996** (HSNO) still applies to aspects of VTA use concerned with managing environmental effects. This is done via EPA (Environmental Protection Authority) notices. However, the EPA and WorkSafe work together to ensure that the requirements align as far as practicable. What this means in practice, is that where you comply with the HSWHS regulations for Class 6 and 8 substances, that will mostly ensure compliance with Class 9 (ecotoxic) controls set by the EPA (there are some exceptions and additional controls which are referenced in this document as applicable).

The **Agricultural Compounds and Veterinary Medicines Act 1997** (ACVM) also continues to apply, although it has less relevance to use of VTA's in the workplace. While there are legal requirements, these will be on the product label. So the important thing to remember is that LABEL CONDITIONS MUST BE FOLLOWED. No "off-label" use is permitted. There is an anomaly regarding use of Pindone liquid concentrate, or any broadcast application of pindone baits, which requires a Controlled Substances License (CSL) under ACVM conditions. However, Pindone does not trigger CSL requirements under the HSWHS regulations. Therefore users will have to apply directly to the ACVM unit (Ministry for Primary Industries) for this necessary qualification.

The **Land Transport Act 1998** – particularly the Land Transport Rule: Dangerous Goods 2005 (Rule 45001/1), published by the Land Transport Safety Authority, which available at <http://www.nzta.govt.nz/resources/rules/dangerous-goods-2005-index.html> or from Whitcoulls and Government bookshops. The rule is an authoritative summary of transport requirements. However, the HSWHS Regulations set additional restrictions, refer 13.16 of the HSWHS regulations.

Other relevant legislation includes, but is not limited to:

- Animal Welfare Act 1999
- Health Act 1956
- Resource Management Act 1991
- Legislation relating to Conservation Estate and wild animal control.

### 3.2 Using the EPA and WorkSafe Websites

- There is extensive information available directly from the administering authorities' websites.
- The WorkSafe home page: <https://worksafe.govt.nz>
- The Hazardous Substances Toolbox and calculator: <https://www.hazardoussubstances.govt.nz/>
- A guide to the key changes in 2017: <https://worksafe.govt.nz/topic-and-industry/hazardous-substances/guidance/interpretive-guides/>
- A practical guide to working safely with hazardous substances: <https://worksafe.govt.nz/topic-and-industry/hazardous-substances/guidance/your-practical-guide/>

### 3.3 Classifications of Hazardous Substances

There are nine classifications of hazardous substances. Categorised by their hazardous properties as follows:

- Class 1 - Explosiveness
- Class 2 - Flammability - gases
- Class 3 - Flammability liquids
- Class 4 - Flammability solids
- Class 5 - Oxidising capacity
- Class 6 - Toxicity
- Class 7 - Radioactive materials (covered under Radiation Protection act)
- Class 8 - Corrosiveness
- Class 9 - Ecotoxicity

Classifications relevant to most VTAs are

- 4.3 substances which in contact with water emit flammable gases (e.g. Magtoxin)
- 6.1A, B, C, D acute toxic
- 6.3A & B skin irritant
- 6.4A eye irritant
- 6.5B sensitisers (dermal)
- 6.5A sensitisers (respiratory)
- 6.6 mutagen
- 6.7 carcinogen
- 6.8 reproductive/developmental
- 6.9 target organ/systemic



- 8.1A corrosive to metals
- 8.2 A, B & C skin corrosive
- 9.1A, B & C, aquatic ecotoxicity
- 9.2A, B & C, soil ecotoxicity
- 9.3A & B, terrestrial vertebrate ecotoxicity
- 9.4A, B & C, terrestrial invertebrate ecotoxicity

### **3.4 Packing Groups**

In order to match the level of hazard of a substance, four levels of packaging containment are specified. Three of these are equivalent to United Nations Recommendations on the Transport of Dangerous Goods (UNRTDG). Packing Groups level I-III. The fourth level has lesser performance requirements for small packages and lower hazard substance. It is derived from UNRTDG criteria for Dangerous Goods packed in Limited Quantities (DGLQ) and is consistent with requirements of the land transport rule: Dangerous Goods 2005.

The formal descriptions are:

- Level 1: Schedule 1 Equivalent to Packing Group 1 (PGI)
- Level 2: Schedule 2 Equivalent to Packing Group 2 (PGII)
- Level 3: Schedule 3 Equivalent to Packing Group 3 (PGIII)

Level 4: Schedule 4 Equivalent to Packing Group 4 (UNDGLQ)

Packing Groups are important in deciding how much care is required to move a VTA.

The relationships between Class 6.1 toxins and packing groups are:

- 6.1A – PGI
- 6.1B – PGII
- 6.1C - PGIII

### **3.5 Bait Colour**

Baits used for vertebrate pest control must be coloured blue or green, except for control of pest birds where baits have no specified colour requirement.

### **3.6 Work place use only**

Controlled substances must be used in the workplace. Class 9 (ecotoxic) substances (including VTA's) intended for workplace use, may not be used at home or for private purposes.

For more information refer to the relevant Hazardous Property Controls (HPC) notice at [www.epa.govt.nz](http://www.epa.govt.nz)

## PART 4. LICENSING AND SUPERVISION

### 4.1 Dangerous Goods Endorsement (DG) for Driver Licence

You must hold a DG endorsement when:

1. Receiving or transporting any quantity of VTAs if you are not an Certified Handler (unless you are not otherwise required to be an Certified Handler, e.g. brodifacoum baits).
2. Transporting larger quantities of VTAs, as follows:
  - Packing Group I. More than 5 kg solids, or 5 litres liquid.
  - Packing Group II. More than 50 kg solids, or 50 litres liquid.
  - Packing Group III. More than 250 kg solids, or 250 litres liquid.

There is an option for Certified Handlers to carry larger quantities of VTA's without a DG endorsement by completing a Transport Course, thereby obtaining an exemption on their test certificate<sup>1</sup>.

### 4.2 Certified Handler Compliance Certificate

If you were an Approved Handler for a substance as at December 2017, then that certificate will be deemed to be Certified Handler Compliance Certificate until it expires.

For more information on obtaining a Certified Handler Compliance Certificate, refer to the guidance on the WorkSafe website, which includes a helpful link to their "Quickguide" - <https://worksafe.govt.nz/topic-and-industry/hazardous-substances/certification-authorisation-approvals-and-licensing/certification-of-people/certified-handlers/>

Vertebrate Toxic Agents and Fumigants requiring a Certified Handler Compliance Certificate include

- sodium fluoroacetate (1080)
- sodium cyanide
- potassium cyanide
- phosphorus
- 3-chloro-p-toluidine hydrochloride (also known as DRC1339 or "Starlicide")
- chloropicrin
- pindone liquid concentrate (NOTE – special interim conditions apply, see footnote<sup>1</sup>)
- Rotenone
- Microencapsulated zinc phosphide (MZP)

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<sup>1</sup> At present (June 2021), licensing requirements for liquid pindone concentrate are no longer under WorkSafe NZ, but are managed on an annual licensing basis by the ACVM section of the Ministry for Primary Industries. For more information contact [www.mpi.govt.nz](http://www.mpi.govt.nz)

- Para-aminopropiophenone (PAPP)
- Encapsulated sodium nitrite (ESN)
- Alpha-chloralose – solid for making baits
- Bromadiolone liquid bait
- Magnesium phosphide and aluminium phosphide– if you have more than 3 kg of pellets.

### 4.3 Controlled Substances Licence

If you held a CSL for a substance as at December 2017, then that certificate will be deemed to be CSL under the new regulatory regime until it expires.

For more information on obtaining a CSL, refer to the guidance on the WorkSafe website - <https://worksafe.govt.nz/topic-and-industry/hazardous-substances/certification-authorisation-approvals-and-licensing/certification-of-people/controlled-substances-licences/>

Substances requiring a Controlled Substance Licence are:

1	Powder containing 970–980 g/kg 3-chloro-p-toluidine hydrochloride, HSNO approval number HSR1611
2	Paste containing 4.5–5 g/kg yellow phosphorus, HSNO approval number HRC000019
3	Paste containing 9.5–10 g/kg yellow phosphorus, HSNO approval number HRC000021
4	Paste containing 0.6–0.8 g/kg sodium fluoroacetate, HSNO approval number HSR002420
5	Pellets containing 0.4–0.8 g/kg sodium fluoroacetate, HSNO approval number HSR002422
6	Pellets containing 1.0 g/kg sodium fluoroacetate , HSNO approval number HSR002423
7	Paste containing 15 g/kg para-aminopropiophenone (PAPP Paste B), HSNO approval number HSR100495
8	Bait containing 0.55–1.84% w/w encapsulated cyanide, HSNO approval number HSR007628
9	Feratox pellets in Ferafeed paste, HSNO approval number HSR100752
10	MZP Paste containing 15 g/kg zinc phosphide, HSNO approval number HSR100557
11	PAPP Ready-to-use Bait, HSNO approval number HSR100496

A CSL is also required if you possess more than 3 kg of the fumigants Magnesium phosphide or Aluminium phosphide.

In addition, a CSL is required to be in possession of or use Pindone-soluble concentrate, or any Pindone product when it is intended for aerial or other broadcast (i.e. not in a bait station) application. However, this CSL requires you to apply directly to ACVM and it is not managed via WorkSafe NZ.

#### **4.4 Working under Supervision**

A VTA or fumigant which requires a certified handler certificate, or CSL, may be handled by other persons only if the certified handler has provided guidance to the person in respect of the handling and is available at all times to provide assistance, as necessary, to the person while the substance is being handled by the person.

For more information refer to the HSWHS regulations and the guidance provided by WorkSafe, including a helpful “Quick Guide” – <https://worksafe.govt.nz/topic-and-industry/hazardous-substances/managing/information-instruction-supervision-training/>

People using class 9 ecotoxic substances are also not required to be certified handlers under the Regulations. However, the EPA HPC Notice requires people applying certain highly hazardous pesticides to be appropriately qualified to ensure the environment is protected. For more information about these qualifications, refer to the HPC Notice on the EPA website: [www.epa.govt.nz](http://www.epa.govt.nz)

## PART 5. TRANSPORT

### 5.1 Limits for Transportation by Land

Requirements for transporting VTAs are determined by the Classification, the Packing Group and the quantity being transported<sup>2</sup>.

The Land Transport Rule: Dangerous Goods 2005 (Rule 45001/1), published by the Land Transport Safety Authority is <http://www.nzta.govt.nz/resources/rules/dangerous-goods-2005-index.html> . or from Whitcoulls and Government bookshops. This is an authoritative summary of transport requirements.

However, the HSWHS Regulations set additional restrictions:

#### **13.16 Additional restrictions relating to transport of certain vertebrate toxic agents and fumigants**

- (1) *A person who transports a vertebrate toxic agent or fumigant that has the potential to release a toxic gas when in contact with water or water vapour must ensure that the substance is transported in —*
- (a) an external vehicular compartment; or*
  - (b) an internal compartment that does not share an internal air supply with any compartments of the vehicle containing passengers at the time; or*
  - (c) the luggage compartment of a vehicle, but only if—*
    - (i) the substance (and any associated packaging, or contaminated clothing or equipment) is sealed in an airtight, secondary container before being placed in the vehicle; and*
    - (ii) the airtight, secondary container is labelled to indicate the need to restrict access by children or companion animals.*

### 5.2 General Transport Standards for Smaller Quantities

General Transport Standards can be followed for smaller quantities, as follows:

- Packing Group I.                                      Less than 5 kg solids, or 5 litres liquid.
- Packing Group II.                                    Less than 50 kg solids, or 50 litres liquid.
- Packing Group III.                                  Less than 250 kg solids, or 250 litres liquid.
- Packing Group IV.                                  Any quantity.

The operator must be either a Certified Handler, or have a Dangerous Goods Endorsement (DG) on their driver licence.

Note that some packing group classifications have changed. For example, 0.15% 1080 pellets are now PG II, so only 50 kg can be transported under General Transport Standards (previously

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<sup>2</sup> Quantity transported refers to the total quantity of product, NOT just the active ingredient.

250 kg). 0.08% 1080 pellets are still packing group III and 250kg may be transported under General Transport Standards.

### 5.2.1 General Transport Standards

General Transport Standards are:

- Packaging is appropriate and specifically designed for the nature and quantity of the product.
- There is nothing on the vehicle that could damage the packaging in which the VTA is contained.
- Lids of drums and bottles are checked and secured for handling, and packaging of VTA is inspected for holes and rips.
- The VTA is held securely on the vehicle.
- Packages with VTA must be segregated from other hazardous substances with which they may react dangerously.
- Articles of food and drink are kept away from the VTA.
- The driver is supplied with a map or route to the site where the VTA is to be delivered (if required) and enough time is allowed for travel at safe speeds.
- Areas of high population or traffic density are by-passed.
- If a road vehicle transporting hazardous substances is to be parked for longer than 18 hours, it should be parked in a depot and securely locked or attended to at all times.
- Vehicles carry equipment to deal with small spillage up to 100 kg (broom, shovel, spare container, protective clothing).
- An Emergency Response Plan<sup>3</sup> is required for quantities greater than (check Safety Data Sheet (SDS) for your specific product):
- 100kg or litres of 1080, cyanide paste or micro-encapsulated paste, pindone liquid concentrate, DRC1339, phosphorus.
- 1000kg or litres of alphachloralose, flocoumafen.
- 10,000kg or litres of brodifacoum, bromadiolone, coumatetralyl, cholecalciferol, diphacinone, pindone pellets.
- A handbook is available for a fee from Standards New Zealand: *Dangerous Goods – Initial Emergency Response Guide* at [www.standards.co.nz](http://www.standards.co.nz)

### 5.2.2 Additional Standards by Car or Truck

- When using a transport company, advise them of the product they are transporting.

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<sup>3</sup> Note: these figures relate to the amount of bait not the active ingredient. Refer to Emergency Response section for the requirements of the plans

- Emergency Response Information (e.g. an SDS or a Dangerous Goods Declaration) has been placed in the internal compartment of the driver's door. This task must be completed for each truckload. The VTA is transported in a covered vehicle or trailer. A handbook is available for a fee from Standards New Zealand "Dangerous Goods – Initial Emergency Response Guide" at [www.standards.co.nz](http://www.standards.co.nz)
- The VTA or fumigant shall NOT be kept in driver's cabin.
- Contaminated protective clothing shall NOT be worn inside driver's cabin.

### **5.2.3 Breakdowns**

When a vehicle transporting hazardous substances breaks down, the driver should follow label instructions and ensure:

- Place four hazard warning triangles (recommended for road vehicles), one on each corner of the vehicle.
- Turn on hazard warning lights (road vehicle only).
- Remain with the vehicle.
- If possible, move the vehicle so that it does not create a hazard.
- Call for assistance (use a bystander if necessary).

### **5.2.4 Additional Standards by Motorbike, ATV, or UTV**

- A tarpaulin is used in wet conditions to cover packages containing VTA.

### **5.2.5 Additional Standards by Foot**

- All packages must have the label intact except pre-bagged bait, which must be clearly marked to identify contents, and be carried in a backpack with the VTA label securely attached to the outside of the backpack and SDS readily available.
- When sacks or backpacks are used, a plastic liner is placed inside them.
- All equipment used to handle, dispense or carry (e.g., bait station, back packs etc) must be fit for purpose and be free of defects (e.g., no rips, tears, holes or cracks).

## **5.3 Transport Standards for Larger Quantities**

Additional requirements apply for transporting larger quantities, as follows:

- |                      |  |
|----------------------|--|
| • Packing Group I.   | More than 5 kg solids, or 5 litres liquid.     |
| • Packing Group II.  | More than 50 kg solids, or 50 litres liquid.   |
| • Packing Group III. | More than 250 kg solids, or 250 litres liquid. |
| • Packing Group IV.  | General Transport Standards can be followed.   |

The driver must have a Dangerous Goods Endorsement (DG) on their licence (but does not need to be a Certified Handler).

Drivers with a DG endorsement have been trained to the required standards, and these are not repeated here.

The Land Transport Rule: Dangerous Goods 2005 (Rule 45001/1), published by the Land Transport Safety Authority is available from Whitcoulls and Government bookshops. This is an authoritative summary of transport requirements.

<https://www.nzta.govt.nz/resources/rules/dangerous-goods-2005/>



## PART 6. EMERGENCY RESPONSE PLANS

### 6.1 When is an Emergency Response Plan Required?

For smaller quantities of VTAs, label instructions and the SDS provide the emergency response procedures.

However, even if you are not required to have an Emergency Response Plan (ERP) for your hazardous substances, you still have a duty to prepare an emergency plan under the General Risk and Workplace Management (GRWM) Regulations.

WorkSafe provides guidance on Emergency Response Plans and includes a flipchart resource to help you through the process. See <https://worksafe.govt.nz/topic-and-industry/hazardous-substances/managing/emergency-plans/>

When transporting or storing larger quantities, a separate emergency management plan is required. The limits are<sup>4</sup> (check your specific product SDS):

- 100 kg or litres of 1080, cyanide paste or micro-encapsulated paste, pindone liquid concentrate, DRC1339, phosphorus, alphachloralose solid, MZP, rotenone, ESN, Aluminium or magnesium phosphide, PAPP paste A.
- 1000 kg or litres of alphachloralose, flocoumafen, alphachloralose seeds and paste, cholecalciferol (no possums), sodium nitrite bait, PAPP ready to use bait and paste B.
- 10,000 kg or litres of brodifacoum, bromadiolone, coumatetralyl, cholecalciferol, diphacinone, pindone bait.

### 6.2 Changes in Emergency Response with shift to HSW Act

Most of the requirements for preparing an Emergency Response Plan remain the same; however, you also need to include a few new items in your ERP.

In addition to the previous information needed in your ERP, your ERP must now also include the following.

- Address all 'reasonably foreseeable' emergencies arising from hazardous substances.
  - ▶ *Make sure that your ERP includes all the emergencies that could reasonably be expected to happen at your workplace due to a breach or failure of the controls of any hazardous substances that you have or are likely to have at your workplace.*
- State any special training that the people who have responsibilities in an emergency need for emergencies involving each substance.
  - ▶ *Think about what workers need to know to respond to an emergency at your workplace.*

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<sup>4</sup> Note: these figures relate to the amount of bait, not the active ingredient.

- Provide an inventory of the hazardous substances at your workplace and a siteplan showing all hazardous substance locations (HSLs) in the workplace.
  - ▶ *This could mean keeping the inventory and site plan close to your ERP, attaching them to the ERP, or making sure that the ERP clearly states how to access them.*
- Fire extinguishers must be clearly visible and readily accessible (instead of no more than 30 m away from the substance). In simple terms, this means anyone who needs a fire extinguisher can reach (and see) it easily in an emergency.

Fire and Emergency New Zealand can now review your ERP to make sure any role you propose for them is achievable and reflects their operational policies. If they make a written recommendation about your ERP, you must amend your ERP to follow the recommendation so far as is reasonably practicable. *(It is recommended that you take advantage of this new opportunity to ensure your compliance).*

Engage your workers when preparing and testing your emergency plan. Their knowledge and experience will be useful for producing an effective plan.

You can enter the substances in your workplace and their quantities into the Calculator to find out if you are required to have an ERP, but it is always good practice to have one. However, even if you are not required to have an ERP for your hazardous substances, you still have a duty to prepare an emergency plan under the General Risk and Workplace Management Regulations.

For a template of an ERP (with the new items mentioned above, including the Calculator), see the *Emergency Response Flipchart*, available from the Hazardous Substances Toolbox website at: [www.hazardoussubstances.govt.nz](http://www.hazardoussubstances.govt.nz)

## PART 7. TRACKING

### 7.1 Tracking

Tracking is mandatory for VTAs which require a Certified Handler (any 6.1A or B product). Check **LABEL** and **SDS** for your product.

For guidance on tracking requirements from the WorkSafe website, refer - <https://worksafe.govt.nz/topic-and-industry/hazardous-substances/managing/tracking-hazardous-substances/>

Make sure that any worker who needs to handle a tracked substance knows where to find this record and can access it when they need it. The recorded information must be readily understandable to any competent person who is required to have access to the substance – that is, the language and terminology should be commonly used and understood or, otherwise, clarified to make the meaning clear.

Class 6.1C substances are no longer tracked under HSWA. However, under the HPC Notice, suppliers must not sell certain highly hazardous substances (including 6.1C substances) to the general public and must keep records of who they sell such substances to. For more information about these requirements, see the HPC Notice on the EPA website: [www.epa.govt.nz](http://www.epa.govt.nz)

The person who takes responsibility for a tracked substance after it is transferred must be a 'competent person'. For substances with certified handler requirements, the competent person is a certified handler; for other substances (i.e. 6.1C), it is a worker who has received information, instruction and training about that substance.

Before you transfer a tracked substance, you must receive written notification that a competent person at the destination workplace will accept responsibility for the substance.

### 7.2 Record of Use

Records of use are generally required whenever VTAs are applied in a place where members of the public may lawfully be present, or where the substance might leave the place via air or water<sup>1</sup>. The record must be kept for at least 3 years and include:

- the name of the substance;
- the date and time of each application or discharge of the substance.
- the classification or classifications of the substance;
- the amount of the substance applied or discharged;
- the location where the substance was applied or discharged;
- the name of the user of the substance and the user's address.

These requirements can be met by ensuring the post-operational report specifies the required matters. Alternatively, they can be incorporated into the tracking form. While not all VTA's are required to be tracked, and most VTA's used in a public place do require a record of use, there is nothing to prevent a field worker meeting both tracking and record of use requirements in one set of documents.

**Note** - For Class 9 substances there is an additional requirement under EPA's HPC Notice to include a record of *other measures taken to ensure there are no significant adverse effects beyond the boundary of the application area* – refer <https://www.epa.govt.nz/assets/Uploads/Documents/Hazardous-Substances/EPA-Notices/Hazardous-Substances-Hazardous-Property-Controls-Notice-2017.pdf>. Requirements for fumigants are similar. For more information refer the HSWHS regulations and the WorkSafe website.

### 7.3 Record Structure

Most Certified Handlers will need to maintain at least two separate personal folders. One folder will be kept at the Hazardous Substance Store (the “store”), and the other will be carried with them in their vehicle as they go about their work.

#### *Example.*

John takes delivery of 5 tubes of cyanide and records the receipt in his personal record as they go into the store. This record is kept near the store. When John takes two tubes out of storage to use in the field, he is now a “PCBU” of substances at two different places. Namely, the cyanide at the store and the cyanide in the field. The record of the 3 tubes of cyanide remaining at the store must remain at the store and the record of the 2 tubes in the field must be kept in John's vehicle.

John would only need one folder to maintain records if he (a) never takes delivery of product, being responsible for field work only, or (b) has an administrative role, taking delivery of product and being the person in charge of the store but never doing field work.

John would need more than two record folders if he were to work from several stores.

In each folder, the “store” folder, and the “field” folder, John will keep a separate record sheet for every substance he uses. This is strongly recommended because an approved handler must be able to show how much of a substance is in his or her control at any time – necessitating a running total to be kept. This can become very confusing if one form is used for different substances.

The system described here assumes that John both receives product, and uses product from one location. And he is not alone, as Henry can also receive and use product from the same store, as explained further below. This scenario allows us to describe a system that should be able to be used or easily modified for any situation.

### 7.4 The Store Form

While every Certified Handler has a folder for the store form, this can, of course, be one master folder, tabbed for every Approved Handler to maintain their separate personal records. So we still have one master store folder.

Under each Certified Handler's tabs, there will be separate forms for each of the tracked substances the Certified Handler is licensed for.

It might look as follows:

Scanned Copy of Business Card, showing at a minimum full name, address (must be the same as the Hazardous Substance Store address), and position in the organisation.

[illegible]



## 7.6 Explanation of the Forms

The fields of the forms should be completed to the following standards.

- **Substance:** a clear description of the substance or tradename (e.g. 0.15% 1080 pellets, Feratox capsules).
- **Date:** the date the product is received, transferred, used, recovered or disposed of.
- **ID number:** this must be a unique number which can identify a specific product lot. It may be presented as a sequence. That may mean you have to join several codes or numbers together, for instance the Purchasing Request Form (PRF), batch and pack numbers.
- **In/Out** the amount. This can be either by weight or volume or units.
- **Certified Handler:** state the name (at least first initial and surname) and organisation of the person. This may, in case of transport, be a DG license holder rather than a Certified Handler, or it might be a “competent person”.
- **Organisation:** company or organisation employing a Certified Handler. If self employed, say so.
- **Place:** a physical address or place description that will allow someone else to quickly locate the tracked substance.
- **Method:** of use or disposal.

## 7.7 Examples of using the Forms

How will this work? We will show how the 1080 pellet example will work for John and Henry. In this example, John is transferring to Henry for his use. But remember, that it would work exactly the same if John was using the product. He would then be transferring to himself, and the entries would be the same (other than name).

We explain the example below, and then show the two forms as they would have been filled out during this process. John and Henry both work for Fred’n’Bob Ltd.

- 1 John receives 100 kg of 0.15% 1080 pellets from Animal Control Products Ltd. on 10 June 2007.
- 2 John transfers 40 kg of 0.15% 1080 pellets to Henry to go and kill some possums in a bait station operation at World’s End on 15 June 2007.
- 3 Henry uses 20 kg of 0.15% 1080 pellets on the 15th, and returns the other 20 kg back to the store, but maintains control himself (he could just as easily have transferred it back to John’s control, but for this example that did not happen).
- 4 On 30 June Henry recovers 10 kg of uneaten bait from the bait station and signs it back into the STORE (again he keeps control of it).
- 5 Henry then disposes of the uneaten bait on 10 July by burial in the local landfill, “Dump”.
- 6 On 26 July John transfers the 60 kg remaining in his control to Sly, who happens to be a Certified Handler in need of some product at his workplace.

The running totals at the end show that John has control of 0 kg of pellets in the store, Henry has control of 20 kg of pellets in the store. Of the original 100 kg, 10 kg are recorded as having been dumped, 10 kg are recorded as used, 20 kg remaining in Henry’s control in the store, and 60 kg





HENRY

Substance

23

HENRY

Substance

0.15 1080 PELLETS

24

## **PART 8. PERMISSIONS AND NOTIFICATION**

Before using VTAs it's important that you communicate with people who could be affected by their use. How you communicate will depend on the VTA and application method you use and its potential effects. There are specific communication requirements for aerial application of 1080. These are set out in the Communication guideline for aerial 1080 application that is available on the EPA website – [www.epa.govt.nz](http://www.epa.govt.nz). This guideline is useful for communications for other VTAs.

For temporary storage of VTA's away from the main work depot, a Hazardous Substance Location will need to be established and WorkSafe must be notified. Refer 13.34 of the HSWHS regulations.

### **8.1 Mapping the Operation Boundary**

A clear and unambiguous definition of the intended area of poisoning is required for any approval or notification process. This will normally be communicated in the form of a map, and ensures boundaries are:

- Clearly identified, with exclusion zones and sensitive areas shown.
- Captured digitally.
- Confirmed with adjoining landowners.
- Communicated to operators.

Your map(s) should show the following as a minimum:

- Map number and series (e.g. T17 NZMS260). 1:50,000 is the preferred scale.
- The external boundary of the treatment area or those treatment blocks included in this operation (shading along the inside boundary is recommended where there is potential for confusion).
- Legal property boundaries.
- Name and financial year of operation.
- Land tenure and adjacent owners, including leased land.
- Any areas excluded from the treatment area (such as around public water supplies, pa sites).
- Location of any warning signs and public information signs.
- Any water catchments or bodies of water (include rivers, streams, lakes, reservoirs, wetlands, coastal marine areas).
- Recreational facilities (tracks, huts, road ends, roads, picnic sites).
- Date map prepared.

Prior to ground-based operation, the operator has received a copy of the base map, and has been briefed regarding the location of sensitive boundaries and exclusion areas.

Prior to aerial operation, the aerial contractor has:

- Received a digital copy of the treatment boundary and exclusion zones, and uploaded these to the on-board GPS system prior to applying VTA.
- Flown the boundaries of the treatment area and exclusion zones with the operation controller (or a person nominated by them) to confirm that the electronic boundary is correct.
- Been briefed regarding the location of sensitive boundaries and exclusion areas, and outlines his/her sowing plan to ensure that these boundaries will not be breached.
- Received copies of all relevant consents and permissions, and a hard copy of the base map.

## **8.2 EPA Permission**

Permission from EPA is required (HSNO Act 95A) whenever a VTA is proposed to be applied to any Department of Conservation managed land. However, EPA has delegated permission functions to DoC, so when you have the necessary DoC permissions you do not need to approach EPA.

Permission is required (HSNO Act 95A) whenever a specified VTA is proposed to be applied to any catchment area from which water is drawn for human consumption, or any other place where a risk to public health may be created by application of the VTA. (for instance, any place to which the public normally has access). However, EPA has delegated permission functions to Ministry of Health, so when you have the necessary Ministry of Health permissions you do not need to approach EPA.

Applicable VTAs are:

- 1080
- Any cyanide product
- Any yellow phosphorus product
- 3-chloro-p-toluidine hydrochloride (DRC1339)
- MZP

If you intend to use sodium nitrite to control pigs on land that is not managed by DOC you will need a permission from EPA.

## **8.3 Department of Conservation Permission**

Any application of VTAs on Department of Conservation land requires the Department's permission, regardless of whether permission would be required under HSNO Act 95A. As Department of Conservation land is public, MOH permission may also be required.

The Department of Conservation has extensive procedures in place for vertebrate pest control operations. These apply to external contractors, as well as Department staff.

Contact your nearest Department of Conservation office, they will guide you through the process.

## 8.4 Ministry of Health Permission

If Ministry of Health permission is required use the forms specified by your local MoH, and allow at least 3 weeks to process your application. Medical Officers of Health and Health Protection Officers are the first point of contact for this process.

If you are unsure whether there may be a risk to public health, ask the Medical Officer of Health whether he or she requires you to obtain their permission.

## 8.5 Local Authority Approval

Approval from Local Authorities (LAs) is required when proposing to apply a VTA on any land managed by them. The general requirement for LA authority prior to aerial baiting no longer exists. However, it is recommended that LAs are notified of such operations, and this will in fact often be a condition of MoH permissions.

Paper roads are public lands vested in local authorities. Ensure you have their approval to apply toxin on paper roads, and also check whether the MOH considers there is a risk to public health on paper roads.

## 8.6 Resource Consent

Resource consent requirements for ground or aerial discharge (i.e. other than in contained bait stations) of 1080, brodifacoum and rotenone are controlled under the Resource Management Exemption) Regulations 2017.. Schedule 2 requires (as at February 2021, please check the regulations for possible amendments)

### 1 Notice of proposed discharge

- (1) The operator must give written notice to the relevant regional council with the following information:
  - (a) the objectives of the proposed discharge:
  - (b) the VTA, pre-feed, or repellent to be used in the proposed discharge:
  - (c) the bait, delivery method, application rate, or lures to be used in the proposed discharge:
  - (d) a map showing the boundaries of each proposed discharge area:
  - (e) the location of any warning signs for each proposed discharge area:
  - (f) the period during which the proposed discharge will occur in each proposed discharge area:
  - (g) the name and contact details of—
    - (i) the operator; and
    - (ii) if the operator is acting for another person, that other person.
- (2) The operator must give the notice as early as practicable, but no later than 48 hours, before the discharge starts.

### 2 Compliance with notice of proposed discharge

The operator must ensure that the discharge complies with the information in the notice of the proposed discharge.

### 3 Notice of actual discharge

The operator must give written notice to the relevant regional council with the following information no later than 20 working days after the discharge ends:

- (a) a map showing the boundaries of each discharge area:
- (b) the period during which the discharge occurred in each discharge area.

## **8.7 Occupier Consent**

Obtain written approval (signature) from all occupiers on whose land you intend to apply a VTA. You may not apply VTAs without occupier consent unless you are properly authorised to do so under statutory enforcement provisions.

## **8.8 Tangata Whenua**

Consult with local iwi regarding proposed application of VTAs to public lands. Be willing to negotiate amendments to your proposal during the consultation process.

The MoH may specify other interest groups you are required to consult.

## **8.9 Notification**

Where public normally have access to a place, notify applicable interest groups. Such groups may include tramping clubs, hunting groups etc. As part of the permission process, DOC and/or Ministry of Health (MoH) may specify additional interest groups they require you to notify or consult with.

Adjoining landowners should be notified in all cases.

In the case of aerial bait application you must also:

- Notify local Police (unless you are the occupier of the land).
- Publish Public Notification in local newspapers.

Information should include:

- Operation name.
- A map of the boundaries of the area where you are planning to apply VTA.
- The method of applying the bait.
- The name of the VTA and how the bait is presented (e.g. 1080, cereal pollard bait)
- The date of intended VTA application.
- Identification of risks associated with the VTA and the operation and measures available to avoid or mitigate these risks.
- Purpose of the operation.
- Any condition requirements of permission from MOH or consenting authority
- Any relevant information presented during the consultation phase of the operation.
- Details on treatment in case of poisoning or National Poisons Centre phone number.
- Contact name and phone number to call for further information.

## 8.10 Public Notice Requirements

For proposed aerial operations, public notice (newspapers) will specify:

- The date on which, or as soon as practicable after which, it is intended to apply the VTA
- The name, nature and method of application of the VTA
- A clear description, by reference to its boundaries (including districts, roads and other commonly known features) of the land to which the VTA is to be applied, and contain sufficient information to enable the reader, without reference to other information, to understand the general nature of the application and whether it will affect him or her.
- The location(s) where members of the public may view maps of the area over which the VTA will be applied, and the times at which such maps may be viewed.
- The name, address and phone number of the person or body responsible for the application of the VTA
- Other key facts, especially the communication and management of risks.

Timing of Public Notices:

- Shall be published a sufficient period prior to (but not more than 2 months) before the intended date of application of the VTA.
- Becomes invalid if the VTA has not been applied to the land within two (2) months after the date on which the notice is published in the newspaper, and
- Re-publish Public Notice every two (2) months until operation is completed. Second and subsequent Public Notices need to refer that it is an extension of the existing Public Notice, or
- Timing as specified in Consent conditions.

## **PART 9. HEALTH AND SAFETY**

Health and Safety requirements have moved to the HSWA regime. There are generic requirements in addition to the specific hazardous substances controls. Generic requirements are not further addressed in this document. For more information refer the WorkSafe website [www.worksafe.govt.nz](http://www.worksafe.govt.nz) .

Health and Safety requirements specific to Hazardous Substances are variously referenced throughout this document.



## PART 10. LABELLING STANDARDS

All hazardous substances in your workplace need to be properly labelled. This includes making sure that the correct manufacturer or importer label is on containers of hazardous substances that arrive at your workplace and that this label can be read.

The HSWHS Regulations specify labelling requirements for hazardous substances you produce in your workplace (including waste) and for substances that are decanted or transferred in the workplace.

For guidance from WorkSafe, including a helpful “Quick Guide”, refer <https://worksafe.govt.nz/topic-and-industry/hazardous-substances/managing/labelling/>

If you remove a substance from its original container, or if you produce a hazardous substance or hazardous waste in your workplace, you need to label the containers you use for these substances.

- ▶ If possible, keep substances in original containers. If you move substances from their original containers into smaller containers (e.g. for ease of storage or use), make sure the containers are suitable for the substance and label them.
- ▶ If you produce a substance in your workplace, you must also label all containers holding those manufactured or waste substances, including any portable containers (40 L or less) into which you decant or transfer the substances from the original containers you used. You must not supply these containers outside your workplace.

The label needs to be in English and include:

- the product or chemical name of the substance
- hazard pictograms and hazard statements reflecting its hazardous properties.

While a container is labelled for a hazardous substance, use it only for that substance. If you relabel a container, before you place a new substance in it, completely remove the former label and thoroughly clean the container of any residue of the previous substance first.

You do not have to label portable containers if you are going to use the substance so soon after you put it into the container that it is impracticable to label it. You also need to thoroughly clean the container immediately after you use it, making sure that no residue remains that could pose a hazard.

If you can do so safely, according to the EPA Hazardous Substances (Disposal) Notice 2017, you can dispose of labelled containers (e.g. ampoules or vials). For more information about this notice, see the EPA website: [www.epa.govt.nz](http://www.epa.govt.nz)

## **PART 11. PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Correct Personal Protective Equipment (PPE) must be available, maintained and properly used.

### **11.1 Personal Protective Equipment to be Used**

Consult **Label Directions** for PPE to be used.

### **11.2 Care, Maintenance and Storage of Personal Protective Equipment**

- All PPE, including footwear is cleaned before and after use.
- Where PPE is being used, have manufacturer's instructions for maintenance and use (where these exist) for PPE available at all times.
- PPE is stored clean and dry and protected from exposure to workplace contaminants when not in use.
- Filters are stored in sealed containers.
- Contaminated clothing is securely contained and labelled for either:
  - Commercial laundering wherever practical after being labelled and securely contained.
  - Separate washing, either on-site or elsewhere after being securely bagged and/or contained and put directly into a washing machine.
  - Disposal, through the use of disposable versions of PPE, which do not require laundering.

## **PART 12. STORAGE OF VTA'S**

### **12.1 Storage and security**

Substances that require a certified handler must be secured. Refer the HWSHS regulations Part 13 and the WorkSafe guidance at <https://worksafe.govt.nz/topic-and-industry/hazardous-substances/managing/storage/> Use the Calculator to find out if this control applies to your substances.

### **12.2 Standards for Buildings**

The purpose of the Building Act 2004 is to make buildings safe. Its application to animal pest control is to ensure that building standards are consistent with the safe storage and processing of hazardous substances. A subsidiary objective is to ensure that buildings used for the storage and processing of hazardous substances do not pose a risk. The Act is administered principally by territorial local authorities.

Operators must ensure buildings used for the preparation, handling and storage of hazardous substances have:

- Restrictions to prevent unauthorised access
- Safeguards to prevent hazardous substances from getting into sewers and drains
- Means for the harmless escape of pressure if there is a risk of explosion
- Protection for ignition sources, if flammable or explosive goods are stored
- Adequate means of ventilation
- Impervious and easily cleaned surface finishes
- Signs for escape routes.

The Fire and Emergency New Zealand (Fire Safety, Evacuation Procedures, and Evacuation Schemes) Regulations 2018 prescribe the circumstances in which an evacuation scheme must be prepared. This will invariably include any building used to store commercial or operational quantities of Hazardous Substances. Schedule 4 of the Regulations provide the application form you must use for your proposed evacuation scheme..

Contact Fire and Emergency NZ if leakage, spill or other hazardous incident occurs, allow them access, provide assistance and comply with directions.

## PART 13. HANDLING OF VTAS

Always **follow LABEL instructions**, ensure the **SDS is available** to all workers, and all workers have received necessary instruction and guidance accordingly.

### 13.1 Pre-Operational

Follow label instructions and ensure:

- Potential hazards, spillage and accident procedures are discussed before commencing the work.
- Personal protective equipment is worn per label requirements.
- When a forklift is used for loading or unloading VTA, the driver is a licenced forklift operator.
- Lids of drums and bottles are checked and secure for handling, and VTA packaging are inspected for holes and rips.
- Certified Handlers receiving packaged VTAs must check details are correct on label.
- Protective clothing and equipment is removed and hands/arms/face thoroughly washed before eating, drinking, smoking or using the toilet.
- No person who is not lawfully assisting in that operation may remain in the vicinity of the operation.

### 13.2 Using Liquid Concentrates

When using liquid 1080 or Pindone, follow label instructions and ensure:

- Bait preparation techniques (mixing/diluting/spraying/injecting/etc) and potential hazards are discussed with staff before commencing the work.
- Packages with VTA must be clearly marked with the correct label and Safety Data Sheet (SDS) is with the VTA and available at all times.
- Personal protective equipment is worn per label requirements.
- Protective clothing and equipment is removed and hands/arms/face thoroughly washed before eating, drinking, smoking or using the toilet.
- Suitable antidote, if any, is immediately available and within use-by date.
- Washing facilities are immediately available e.g., soap, paper towels, nail brush and a clean supply of water.
- No person who is not lawfully assisting in that operation may remain in the vicinity of the operation.

### **13.3 Pre-Bagging Bait**

Follow label instructions and ensure:

- Bait preparation, sampling techniques and potential hazards are discussed with staff before commencing the work.
- Personal protective equipment is worn per label requirements.
- VTA is handled on sites where spillage cannot enter waterways, wells or contaminate the environment. Consider using a tarpaulin floor.
- Where toxic bait is pre-bagged:
  - Pre-bagging must occur in a dry and sheltered but ventilated area.
  - Bags must be clearly marked to identify contents
  - Bags must be carried in a backpack with the VTA label securely attached to the outside of the backpack and the SDS readily available.
- Protective equipment is removed and hands/arms/face thoroughly washed before eating, drinking, smoking or using the toilet.
- Suitable antidote, if any, is immediately available and within use-by date.
- No person who is not lawfully assisting in that operation may remain in the vicinity of the operation.
- All equipment used to handle, dispense or carry VTAs (e.g. bait station, back packs) must be fit for purpose and be free of defects (i.e., no rips, tears, holes or cracks).

### **13.4 Bait Handling in the Field**

#### **13.4.1 Bait stations and Ground Based Application**

Follow label instructions and ensure:

- Bait application techniques (placing and removing) and potential hazards are discussed with staff before commencing the work.
- Personal protective equipment is worn per label requirements.
- Where toxic bait is pre-bagged:
  - Bags must be clearly marked to identify contents.
  - Bags must be carried in a backpack (with plastic liners inside them) with the VTA label securely attached to the outside of the backpack and the SDS readily available.
- Food and drink are kept away from the VTA.
- Protective clothing and equipment is removed and hands/arms/face thoroughly washed before eating, drinking, smoking or using the toilet.

- Antidote, if any, is immediately available and within use-by date.
- No person who is not lawfully assisting in that operation may remain in the vicinity of the operation.
- All equipment used to handle, dispense or carry VTAs (e.g., bait station, back packs) must be fit for purpose and be free of defects (i.e., no rips, tears, holes or cracks).
- A reliable bait recovery system is in place where bait is recovered from the field (e.g. bait stations). This may include some combination of numbering, mapping GPS, flag tape.

### **13.4.2 Aerial Application**

Follow label instructions and ensure: [Question for TAG – should this section be deleted, or referenced potentially to other document?]

- Potential hazards are discussed with staff before commencing the work.
- The boundaries of the loading site are marked and signs are erected.
- For any aerial operation lasting longer than one day, the loading site and any storage area must be fenced so that people do not inadvertently enter the site and stock cannot gain access to the area.
- Staff involved in loading the bucket or hopper near or beneath the aircraft wears white overalls, white gum boots, respirators, rubber gloves, a high visibility safety helmet with chinstrap (type 410), hearing and eye protection.
- Staff involved in loading the bucket or hopper away from the aircraft wears white overalls, white gumboots, dusk masks, rubber, gloves and eye protection.
- Protective clothing and equipment is removed and hands/arms/face thoroughly washed before eating, drinking, smoking or using the toilet.
- Suitable antidote, if any, is immediately available and within use-by date.
- No person who is not lawfully assisting in that operation may remain in the vicinity of the operation.
- All equipment used to handle, dispense or carry VTAs (e.g., bucket or hopper, back packs) must be fit for purpose and be free of defects (i.e., no rips, tears, holes or cracks).

## **13.5 Post Operational**

### **13.5.1 Clean-up**

Follow label instructions and ensure:

- Clean-up techniques and potential hazards are discussed with staff before commencing work.
- Personal protective equipment is worn per label requirements.

- Contaminated safety equipment, vehicles and any other equipment that has been in contact with VTA are thoroughly washed at a VTAs location where runoff is unlikely to enter any watercourse or water bodies.
- Surplus VTA (meaning fresh bait that is still OK for use) should be stored in its original packaging with manufacturers label attached and SDS available.
- Surplus VTA (meaning fresh bait that is still OK for use) shall only be passed on or sold to individuals or organisations that are authorised users, in their original packaging, manufacturers label attached and SDS available.
- Any contaminated equipment to be refilled must be triple rinsed.
- No VTA containers shall be re-used for any other purpose.
- Washing facilities are immediately available e.g. soap, paper towels, nailbrush, and a supply of clean water.
- Suitable antidote, if any, is immediately available and within use-by date.
- All equipment used to handle, dispense or carry VTAs (e.g., bait station, back packs) must be fit for purpose and be free of defects (i.e., no rips, tears, holes or cracks).
- Protective clothing and equipment is removed and hands/arms/face thoroughly washed before eating, drinking, smoking or using the toilet.
- No person who is not lawfully assisting in that operation may remain in the vicinity of the operation.
- Aircraft, aircraft hopper or helicopter bucket are thoroughly washed before leaving the site and under no circumstances is the aircraft allowed to leave the site before decontamination is completed.
- Ensure that decontamination of the aircraft and associated equipment is specified in the contract with the aircraft company.

## 13.6 Disposal

Refer <https://worksafe.govt.nz/topic-and-industry/hazardous-substances/managing/hazardous-waste/>

## PART 14. ACCIDENTS, LOSS, SPILLAGE

Always **follow Label and SDS** instructions.

### 14.1 General Precautions

Follow label instructions and ensure:

- All operators are briefed on emergency procedures, hazard controls and first aid procedures.
- Personal protective equipment is worn per label requirements.
- All operators are familiar with health and safety incident reporting procedures.
- All operators are familiar with reporting procedures in case of any lost or misplaced VTAs.
- Incidents and accidents are reported.
- Protective clothing, first aid supplies, and emergency service phone numbers are readily available.
- Suitable antidote, if any, is immediately available and within use-by date.
- All practicable steps are taken to prevent or minimise any hazard arising from such an incident.

### 14.2 Misapplied, Spilt or Lost VTAs

If any Vertebrate Toxic Agents are applied other than in the intended application area, or is lost or spilt, the person who is in possession of the substance at the time it was misapplied, lost or spilt must report the nature and quantity of the substance within 24 hours of the substance being misapplied, lost, or spilt to:

- All consent providers; and
- In addition for all cyanide, phosphorus, DRC 1339, Rotenone and 1080 products,
  - Officer in charge of the nearest police station to which the person has access; and
  - The person on whose behalf the substance is being applied.
  - The enforcement agencies (whoever granted a permission, and WorkSafe in any case).

In case of spillage, in addition to the above, ensure:

- Label directions are followed.
- Personal protective equipment is worn per label requirements.
- When required, manufacturer is consulted for advice.
- All practicable steps are made to prevent the spilled substance coming into contact with any person or any other vehicle.
- All practicable steps are made to isolate the spill (e.g. fencing).



- All practicable steps are made to prevent the spilled substance from entering into any sewer, drain or natural waters.
- Emergency Response Plan implemented (if applicable).
- Personal protective equipment is worn per label requirements.

### 14.3 Poisoning (of persons)

- Read the label for immediate first aid.
- Request medical assistance (**dial 111**).
- Call National Poisons Centre if required (0800 764766).
- If possible, remove contaminated clothing from the patient, taking care not to contaminate yourself.
- Report to enforcement agency (whoever granted permission).

#### **FIRST AID GUIDELINE**

S Safety - make sure it is safe for you, bystanders and patient.

R Response - Check for response using voice and touch.

A Airway - Check the airway is clear and open. Check in mouth.

B Breathing - "look, listen and feel" for breathing (no more than 10 seconds). If no breathing then apply chest compressions at 120/minute or 2 per second, call 111. Use defibrillator (AED) if available.

C C Circulation - Check for signs of life colour, coughing and movement.

S Severe bleeding – Apply pressure to stem the flow.

## PART 15. WARNING SIGNS

Always **follow LABEL instructions and SDS**.

Signs must be maintained and kept up to date. If you store a class 6.1A, 6.1B, or 6.1C vertebrate toxic agent (VTA) or agrichemical at a temporary storage site outdoors (and not in a building or a room or a compartment in a building) you may not need to display signs. Such a site could be a temporary handling site for field bait or an aircraft loading site.

You must post warning signs at the location where the VTA has been used. Warning signs let people know which VTA has been used, what the hazards are and what to look out for. They are an important communication requirement when using VTAs.

You must put up warning signs at all normal points of entry to the treatment area when you use:

- Cyanide
- 1080
- Phosphorus
- PAPP
- MZP
- DRC1339
- Sodium nitrite.

When using any other VTA, except for rotenone, in a place where there is public access you must post warning signs at every normal access point. This includes parks, reserves, roadsides and public rights of way. The PHU (Public Health Units), EPA or DOC may require extra information on signs through conditions on permissions.

WorkSafe provides guidance on signage, including example signs – refer <https://worksafe.govt.nz/topic-and-industry/hazardous-substances/managing/hazardous-substances-signs/>

DOC has a series of template signs available at <https://www.doc.govt.nz/about-us/our-policies-and-plans/our-procedures-and-sops/managing-animal-pests/warning-sign-templates/>

### 15.1 Placement of Signs

Warning signs must be erected at every point where people normally obtain access to the land, before toxic bait is applied.

If the label indicates the product can only be sold to and/or used by a person holding a controlled substances licence then further requirements set by the ACVM are that signs must be posted in prominent places around the perimeter of the treated area, not just access points.

## **PART 16. FUMIGANTS**

Fumigants are considered separately from other VTAs. Fumigants are commonly used in the vertebrate pest control industry for control of rabbits in burrows.

If there is more than 3 kg of the substance under the personal control of a certified handler, then notification, storage and signage requirements apply. You do not require a Certified Handler Certificate or CSL when you have less than 3kg of the substance under your control. Up to 3 kg may be transported under “tools of trade” without DG (Dangerous Goods endorsement) or placarding.

For more information refer Part 14 of the HSWHS regulations.

## PART 17. SPECIFIC REQUIREMENTS FOR AERIAL APPLICATION

1080, pindone and DRC1339 (hand based application from an aircraft) are the only VTAs generally allowed to be applied by aerial application. Pindone may only be applied aerially by DoC, regional councils or unitary authorities.

DoC may aerially apply brodifacoum on offshore islands, and a COP has also been approved by the ACVM for aerial distribution of brodifacoum into “mainland islands”.

This publication does not attempt to provide detailed guidance for aerial application of VTA's. Separate guidelines documents exist and should be consulted, including:

- *Aerial 1080 Pest Control Industry Guidelines* (publcn # B9) – see the BioNet publication library: <https://www.bionet.nz/library/> (temporarily unavailable)
- *Aerial 1080 Control of Possums & Rabbits: Standard Operating Procedures for Regional Government* (publcn # A14) – see the BioNet publication library: <https://www.bionet.nz/library/>
- *Communications Guideline for Aerial 1080 Operations* – see the BioNet publication library: <https://www.epa.govt.nz/assets/Uploads/Documents/Hazardous-Substances/Guidance/4569c19e32/1080-Communications-Guidelines.pdf>
- *Pest Rooks - Monitoring and Control* (publcn # A6) ) – see the BioNet publication library: <https://www.bionet.nz/library/>
- Code of Practice: Aerial and Hand Broadcast Application of Pestoff® Rodent Bait 20R for the intended Eradication of Rodents from specified areas of New Zealand. New Zealand Food Safety Authority, Wellington September 2005 (revised 2006) – <https://www.pestoff.co.nz/assets/Code%20of%20Practice%2020R.pdf>

A code of practice has been prepared the Agricultural Aviation Association (Code of Practice for the Aerial Application of Vertebrate Toxic Agents). The Code is part of the NZAAA (Agricultural Aviation Assoc) Accreditation programme (see [www.nzaaa.co.nz](http://www.nzaaa.co.nz)) and it is intended to meet or satisfy DoC requirements for the aerial application of VTA. In fact, it is intended to apply to any situation where VTAs are applied by air. Among other things, it requires a contract to be drawn up between the aerial operator and the contractor.

## APPENDIX I: ABBREVIATIONS

ACVM	Agricultural Compounds and Veterinary Medicines Act 1997
CSL	Controlled Substances License
DG	Dangerous Goods
DGLQ	Dangerous Goods packed in Limited Quantities
EPA	Environmental Protection Authority
ERP	Emergency Response Plan
ESN	Encapsulated sodium nitrite
GRWM	General Risk and Workplace Management
HPC	Hazardous Property Controls
HSNO	Hazardous Substances and New Organisms Act
HSW or HSWA	Health and Safety at Work Act
HSWHS	Health and Safety at Work (Hazardous Substances) Regulations
MoH	Ministry of Health
MZP	Microencapsulated zinc phosphide
NPCA	National Pest Control Agencies (winding up in 2018)
NZAAA	Agricultural Aviation Association
PAPP	Para-aminopropiophenone
PCBU	Person Conducting a Business or Undertaking
PHU	Public Health Units
PPE	Personal Protective Equipment
SDS	Safety Data Sheet
UNRTDG	United Nations Recommendations on the Transport of Dangerous Goods
VTA	Vertebrate Toxic Agent

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