

SILVER PEAKS AERIAL BOVINE TB CONTROL OPERATION

OSPRI'S TBFREE PROGRAMME

The TBfree programme aims to manage and eventually eradicate bovine tuberculosis (TB) from New Zealand's farmed cattle and deer and wild animal populations. Controlling disease prevents livestock production losses and protects the world leading reputation of New Zealand's dairy, beef and deer products. We use possum control, along with regular herd testing and movement restrictions, to achieve our eradication goals. Information gathered from wild animal surveys, recent and historic findings of TB in wild animals, herd testing results and the operational history of the region is used when planning operations.



We're running a possum control operation in the Silver Peaks area (please see map provided for the operation area). It will cover 8,581 hectares.

To eradicate bovine TB, possum numbers need to be kept extremely low – around one to two animals every 10 hectares. Monitoring has shown that further control work is needed



in the Silver Peaks area to reduce the possum population and minimise the risk of the disease spreading through wild animal populations and onto farmed cattle and deer. The Silver Peaks part of this block was last aerially treated in 2011. The Silver Stream portion has not received aerial control before.

WHAT TO EXPECT

The operation will begin with the distribution of non-toxic, tan-coloured cereal pellets by helicopter. This "prefeed" gives possums a taste for the pellets and overcomes bait shyness. One to two weeks later, toxic, green cereal pellets – each containing









0.15 percent biodegradable sodium fluoroacetate (also known as 1080) - will be applied by helicopter at a rate of 1.5 kilograms per hectare in the Silver Peaks part of the block and at a rate of two kilograms per hectare in the Silver Stream portion. A sowing rate of two kilograms per hectare results in about one bait every 60 square metres. The Silver Peaks operation will be subject to strict safety, quality-assurance and monitoring requirements.

Advanced GPS navigational equipment will be used to ensure the pellets are accurately placed and exclusion zones avoided.

THE METHOD

A vast majority of possum control in the region is done by local contractors using ground-based traps and



hand-laid toxins. The remaining, far smaller area is controlled using aerially applied pellets containing biodegradable 1080. Aerial control is efficient, cost effective and has been extremely successful at knocking possum numbers down to very low levels in the past. It is preferred in areas like Silver Peaks due to the rugged nature of the terrain. The Parliamentary Commissioner for the Environment also supports aerial control. The commissioner completed an extensive review into the use of 1080, in which she strongly endorsed its continued use in New Zealand.

Please visit pce.parliament.nz to read this report.

WHAT HAPPENS NOW

This operation is planned to commence from 1 May 2017. A contractor will be doing the work on behalf of OSPRI's TBfree programme. Before the operation, affected landowners and occupiers will be contacted and visited by a contractor representative. They will discuss boundary issues, water supply safety and the management of any risks to dogs and livestock. Consents from the Department of Conservation and the Ministry of Health are required for this operation. Affected landowners and occupiers will be contacted again before the operation starts, notices will be published in local newspapers and warning signs will be placed at all likely access points to the operational area.

BIODIVERSITY BENEFITS

The operation will have additional conservation benefits for native birds and bush. Possums eat the forest canopy and prey on native birdlife, including eggs and chicks. Biodegradable 1080 is also extremely effective at controlling other introduced predators such as ship rats and stoats.











IMPORTANT INFORMATION

Warning signs will be placed at all main access points to the operational area and everyone must follow the cautions on the signs. There's no health risk when using this area as long as you follow these instructions:

Do not handle any bait or allow children to wander unsupervised. Cereal baits containing 1080 are dyed green.

Do not hunt or take game from within a two kilometre radius of the operational area for human or pet consumption. It's an offence to sell meat products that have been exposed to 1080. Hunting can resume approximately four months following the control work, or after two months if 100mm of rain has fallen.

Please observe these rules whenever you see warning signs about the pesticide. Warning signs indicate that pesticide residues may still be present in baits or animals. When the signs are officially removed, you can resume normal activities in the area. Free dog muzzles will be provided on request. Please contact OSPRI's Dunedin office on 03 477 9829 to obtain a muzzle.



Do not bring dogs into the area until the warning signs have been officially removed.

Dogs are particularly susceptible to 1080. They must not be allowed access to bait or poisoned carcasses which remain toxic to dogs until they have fully decomposed.



THERE IS NO RISK TO PUBLIC DRINKING WATER

Biodegradable 1080 is highly soluble and does not persist in water or soil. Local health authorities apply strict conditions to aerial operations so that drinking water supplies are not contaminated. Safety has been confirmed by tests on several thousand water samples taken after aerial 1080 operations over many years.

WHAT TO DO IF YOU SUSPECT POISONING

Contact your local hospital or doctor, or **dial 111**

National Poisons Centre 0800 POISON (764 766)

If a domestic animal is poisoned, contact a local veterinarian.



FURTHER INFORMATION

OSPRI

Southern South Island P 03 477 9829 E cr_ssi@ospri.co.nz tbfree.co.nz | ospri.co.nz

Contractor

Contract Wild Animal Control Limited P 03 249 7374 E office@cwac.co.nz

For more information on controlling bovine TB and why 1080 is used in New Zealand, visit 1080facts.co.nz





DANGER: DEADLY POISON KEEP OUT OF REACH OF CHILDREN. ECOTOXIC HSNO CLASSES: 6.1B, 6.8A, 9.1D, 9.3A 0.15% 1080 PELLETS

Bait in pellet form for poisoning of possums and rodents Contains 1.5g/kg sodium fluoroacetate in the form of a bait

PRECAUTIONS

Acutely toxic. May be fatal if swallowed, inhaled or absorbed through the skin. Repeated oral exposure may cause reproductive or developmental damage. When handling open containers or baits, wear protective equipment as shown in precautions box below.

Very toxic to terrestrial vertebrates. Take measures to reduce the risk of non-target animals being exposed to the toxin either through eating baits or by scavenging the carcasses of poisoned animals.

Harmful to aquatic organisms. Manage bait application rates carefully and comply with any restrictions imposed on placing baits over or near waterways. Avoid pollution of any water supply with pellets or used container.

Storage: Store in original container, tightly closed, under lock and key and away from feed or foodstuffs. Keep out of reach of children. This product must always be under the control of an approved handler who holds a current test certificate endorsed for Class 6 and Class 9 substances. Do not store in direct or diffused sunlight. Avoid cyclic heating and cooling.

Handling: When handling open containers or laying baits, wear overalls worn outside rubber boots, and impervious rubber or PVC gloves. When loading aircraft or working in windy conditions, wear goggles and a dust mask as protection against dust entering the eyes or mouth. Do not eat, drink or smoke when using the product or handling open containers. Wash protective clothing and equipment daily after work. Remove protective clothing and wash hands and exposed skin thoroughly before meals and after any contact. Thoroughly wash implements, spreading equipment, aircraft and bait stations before removing them from the operational area.

EMERGENCY MANAGEMENT

Symptoms of Poisoning: Early Symptoms: Nausea, vomiting, tingling and numbness in face and hands, stomach pains, apprehension and anxiety. Later Symptoms: Muscular twitching, blurred vision, mental confusion. Severe Symptoms: Coma, convulsions

First Aid: Act immediately if poisoning is suspected. DO NOT induce vomiting. Call a doctor or emergency physician at your nearest hospital immediately. For further advice contact National Poisons Centre 0800 POISONS (Phone 0800 764 766).

Spillage: In the event of major spills, inform the Fire Service immediately, and then local health protection officers at your District Health Board or hospital. Isolate the spill area and exclude all bystanders. Take all practicable steps to manage any harmful effects of a spillage including preventing baits from entering streams or waterways. Scoop spilled baits into secure containers. Recover any undamaged bait for later use by placing in appropriately labelled containers and dispose of spoiled bait as directed below. Use a broom to collect fine material and wash down the spill area with copious volumes of water only after all spilled bait has been removed.

Disposal: The active ingredient, sodium fluoroacetate, is degraded through microbial activity and will decompose at temperatures above 200 degrees Celsius. It dilutes readily in water. Product which is surplus or spoiled should be disposed of by burying with other organic material on the active tip face of an appropriately managed landfill or buried within the biologically active layer of soil elsewhere within a secure area. Ensure that a good covering of earth is applied over the bait immediately to prevent access by scavenging birds. Avoid deep disposal or burying where groundwater contamination may occur. Alternatively, burn unwanted bait material in a suitably constructed and appropriately located incinerator and bury any residues as above. Treating the baits through a sewage oxidation facility or other chemical treatment facility is also an acceptable means of disposing of unwanted bait material where this is allowed by local by-laws and regulations. Burn empty bags or bury in a suitable location at a landfill at a depth of at least 60 cm. Do not use the empty container for any other purpose.

DIRECTIONS FOR USE

Ground based treatment: Pellets may be applied in weather proof bait stations, by using a mechanical spreader or by hand broadcasting. A period of pre-feeding with non-toxic baits prior to applying toxic baits, is recommended for best results. **Aircraft:** Apply bait by aircraft using suitable bait spreading equipment. For best results, pre-feed the area to be treated with non-toxic baits

Aircraft: Apply balt by aircraft using suitable balt spreading equipment. For best results, pre-reed the area to be treated with non-toxic balts at least 2 weeks prior to application of the toxic balts. Bait application rates will vary according to possum or rodent density and habitat type but bait application rates of 3kg – 5kg per best are will achieve effective control in most cases.

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Weather conditions: If weather proof bait stations are not being used, this product should not be laid unless fine weather is expected for 72 hours after bait application.

Deer Repellent: When possum control is to be undertaken in areas where feral deer may be at risk from eating baits, GEDR[™] deer repellent, applied to the surface of pellet baits at a rate of 12 kg per tonne in accordance with the manufacturer's label instructions, may be used to reduce or eliminate the uptake of baits by deer.

LEGAL OBLIGATIONS

Sale and use: This product must be sold only to or used by a person holding a Controlled Substances Licence issued by a test certifier who has been approved. If the product is applied aerially, public notification is required. Additional permissions may be required depending on the method of use and location of use. This product must only be used as specified in the label.

Signage: Signs must be erected at every normal point of entry to the place where the substance is to be applied. Signs must remain in place until baits are retrieved or are no longer toxic, or until any other legal requirement affecting signage has been complied with.

Tracking: It is a legal requirement that this product is tracked using the unique pack identifiers for its full lifecycle, including date, location of its use or means of disposal.

GENERAL INFORMATION

Shelf life: The shelf life of this product may vary according to the suitability of storage conditions. As a guide, it is recommended that the product be used within 3 months of date of manufacture as studies have shown that the palatability of bait may progressively decline after that time. Any product held after the expiry date shown on the bag should be disposed of according to label directions.

Livestock: It is extremely important to prevent access to baits by domestic livestock and pets. Stock must be kept off the treatment area until baits have been washed out by rain, removed or destroyed. Dogs and cats are particularly at risk from eating poisoned possum and rodent carcasses and pet owners in the immediate vicinity must be notified of this risk. Collect poisoned animal carcasses where practicable for burning or burying at least 600 mm below ground, otherwise limit access to the treatment area until poisoned animal carcasses are unlikely to be eaten or to contain residues.

Conditions of sale: As no control can be exercised over the methods or conditions under which this product is used, no responsibility or claim, other than those required by statute, will be accepted for any damage or injury whatsoever arising from the storage, handling, application, use or disposal of this product.

Transport information: Proper shipping name: PESTICIDES, SOLID, TOXIC, N.O.S.; UN 2588, Packing Group II, Toxic 6.1B, Hazchem 2X



ANIMAL CONTROL PRODUCTS LTD



SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:	(a) 0.04% 1080 PELLETS
	(b) 0.08% 1080 RODENT PELLETS
	(c) 0.08% 1080 PELLETS
	(d) 0.10% 1080 FERAL CAT BAIT
	(e) 0.15% 1080 PELLETS
	(f) 0.2% 1080 PELLETS
Synonyms:	1080 pellets
Supplier:	Animal Control Products Ltd
Street address:	Physical address: 408 Heads Road, Whanganui 4501,
	New Zealand.
Postal address:	Postal address: Private Bag 3018, Whanganui 4540,
	New Zealand.
Telephone:	64 (0) 6 344 5302
Website	www.pestoff.co.nz
After hours telephone numbers:	0274798 318 or 0274798 319
ACCIDENTAL HUMAN POISONING	Dial 111 and be ready to provide information from the
	product label to medical personnel.
National Poisons Centre:	Free phone 0800 764 766
Emergency phone number for spills,	
transport emergencies and risk	
mitigation:	Dial 111

2. COMPOSITION / INFORMATION ON INGREDIENTS

Product Name:	 (a) .04% 1080 PELLETS (b) 0.08% 1080 RODENT PELLETS (c) 0.08% 1080 PELLETS (d) 0.10% 1080 FERAL CAT BAIT (e) 0.15% 1080 PELLETS (f) .2% 1080 PELLETS
Synonyms:	1080 pellets
Active Ingredient:	Sodium fluoroacetate 0.04% - 0.2%
Other Ingredients:	(a, b, c, e, f) Cereals, sugars and binders (d) Fishmeal, fish oil and binders
Molecular Weight of Active:	100.02
Molecular Formula of Active:	$F C H_2 CO_2 Na$
Recommended Use:	Pelletised bait for the control of rabbits, possums, rodents, wallabies or feral cats.
Appearance:	Cylindrical green pellets.

3. HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE: This product contains a DEADLY POISON.

HSNO Approval Codes: HSR002422 (0.04%-0.08%), HSR002423 (0.1%), HSR002424 (0.15%-0.2%)

HAZARD CLASSES:	0.04% & 0.08% 1080 pellets: 6.1C, 9.3B 0.1% 1080 pellets: 6.1C, 6.8A, 9.1D, 9.3B 0.15% - 0.2% 1080 pellets: 6.1B, 6.8A, 9.1D, 9.3A
HAZARD IDENTIFIERS:	Priority Identifiers - Danger. Deadly Poison. Keep out of reach of children. Ecotoxic.

HAZARD IDENTIFIERS continued:	Secondary Identifiers - Acutely toxic. May be fatal if swallowed, inhaled or absorbed through the skin. Repeated oral exposure may cause reproductive or developmental damage. When handling open containers or baits, wear protective equipment as indicated below. Toxic to terrestrial vertebrates. Take measures to reduce the risk of non-target animals being exposed to the toxin either through eating baits or by scavenging the carcasses of poisoned animals. Harmful to aquatic organisms. Manage bait application rates carefully and comply with any restrictions imposed on placing baits over or near waterways. Avoid pollution of any water supply with pellets or used container.
DANGEROUS GOODS CLASS:	0.04% - 0.1% 6.1C (Packing Group 3) 0.15% - 0.2% 6.1B (Packing Group 2)
GENERAL REQUIREMENTS:	Deadly Poison. Subject to tracking requirements for individual packs. Available for purchase and use only by holders of Controlled Substances Licenses. This substance must be under the control of an Approved Handler for Class 6 and Class 9 Hazardous substances at all times unless being transported by a transport operator with a Dangerous Goods License endorsement.

SYMPTOMS OF POISONING:

Early Symptoms: Nausea, vomiting, tingling and numbness in face and hands, stomach pains, apprehension and anxiety.

Later Symptoms: Muscular twitching, blurred vision, mental confusion.

Severe Symptoms: Coma, convulsions.

4. FIRST AID MEASURES

Ingestion:	Seek immediate medical assistance in all cases where poisoning is suspected. National Poisons Centre recommends <u>against</u> inducing vomiting in most cases but in particular, <u>never</u> use any chemical means of inducing vomiting. In areas remote from medical assistance, there may be benefit in inducing vomiting by placing a finger down the throat. Giving the patient ½ glass of whiskey with a tablespoon of sugar added may be of possible benefit if carried out immediately after poisoning has occurred.	
Eye Contact:	Wash eyes with copious amounts of water.	
Skin Contact:	Wash exposed area twice with soap and water.	
Contaminated Clothing:		

Do NOT induce vomiting or give anything by mouth if patient is unconscious or convulsing.

PROMPT TREATMENT IS ESSENTIAL. CALL FOR MEDICAL ATTENTION IMMEDIATELY.

5. FIRE FIGHTING MEASURES

Low flammability risk. 1080 pellets have no toxic emissions as either vapours, gases or odours. In pellet form, hazards arise through prolonged direct contact with skin, or by ingestion.

6. ACCIDENTAL RELEASE MEASURES

In the event of major spills, inform the Fire Service immediately via the 111 emergency phone service, and then local health protection officers at your District Health Board or hospital.

Isolate the spill area and exclude all bystanders. Take all practicable steps to manage any harmful effects of a spillage including preventing baits from entering streams or waterways. Scoop spilled baits into secure containers. Recover any undamaged bait for later use by placing in appropriately labeled containers and dispose of spoiled bait as directed below. Use a broom to collect fine material and wash down the spill area with copious water only after all spilled bait has been removed. Give consideration to possible hazards arising from washing down and ensure people, pets, livestock, wildlife and fish will not be exposed to the dilute toxic run-off.

7. HANDLING AND STORAGE

When handling open containers or baits, wear overalls worn outside rubber boots, and impervious rubber or PVC gloves. When loading aircraft or working in windy conditions, wear goggles and a dust mask as protection against dust entering the eyes or mouth. Do not eat, drink or smoke when using the product or handling open containers. Wash protective clothing and equipment daily after work. Remove protective clothing and wash hands and exposed skin thoroughly before meals and after any contact.

Store in original container, tightly closed, under lock and key and away from feed or foodstuffs. Keep out of reach of children. This product must always be under the control of an approved handler who holds a current test certificate endorsed for Class 6 and Class 9 substances.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits: Ministry of Health exposure limit set February 2002 is 0.015 micrograms of 1080 per ml in urine.

Tolerable Exposure Limits (TEL) : ERMA NZ has prescribed the TEL_{water} for sodium fluoroacetate, expressed as the amount of sodium fluoroacetate per volume of water as 0.0035 milligrams per litre of water (0.00000035%).

Engineering Measures: Decontaminants are water (dilution), heat > 120°C (denaturing) and microbial decomposition (degradation).

Personal Protection Equipment: Operators using or handling the product in open containers must wear gloves, overalls and waterproof boots. Do not smoke, drink or eat while handling the product. Wash hands, face and any exposed areas after use. Wash protective equipment immediately after use or otherwise isolate and containerise for return to a washing facility. When working around aircraft, wear a suitable dust mask to prevent inhalation of airborne particles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: 1080 pellets in have a cylindrical form, are dyed green and may have an odour of cinnamon, fruit flavouring or fish.

Solubility in Water (g/L)	Pellets will eventually lose their form and disintegrate if immersed in water for several hours or more.
Decomposition Point (°C)	The active ingredient 1080 decomposes at 200 degrees Celsius and becomes unstable at 110 degrees Celsius.

10. STABILITY AND REACTIVITY

1080 pellets are stable and non-reactive under normal storage and use conditions.

11. TOXICOLOGICAL INFORMATION

Exposure must be kept to absolute minimum. Sodium fluoroacetate may be absorbed through the eyes, broken skin or via the mouth.

TOXICITY DATA FOR THE ACTIVE INGREDIENT - VARIOUS SPECIES*

White laboratory rat (oral) LD_{50} Brush-tailed possum (oral) LD_{50} Dog (oral) LD_{50} Cat (oral) LD_{50} Bennett's wallaby (oral) LD_{50} Mule deer (oral) LD_{50} Mouse (oral) LD_{50} Human (oral) LD_{50} (estimated) 0.2 mg/kg B/W (Body Weight) 0.3 – 1.0 mg/kg B/W 0.1 – 0.35 mg/kg B/W 0.35 mg/kg B/W 0.2 mg/kg B/W 1.0 mg/kg B/W 5.0 – 19.3 mg/kg B/W 0.7 – 2.1 mg/kg B/W

* Data from US Department of the Interior, Biological Report No. 27 (1995); Ronald Eisler *"Sodium monofluoroacetate (1080) Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review"*

12. ECOLOGICAL INFORMATION

Use the pellets only for the purpose indicated and in the manner prescribed by the label. Sodium fluoroacetate may be present for many months in the carcasses of poisoned animals; thus presenting a secondary poisoning danger to carnivorous birds and mammals. Take steps to mitigate any potential non-target exposure by wildlife or domestic animals. Studies have shown that 1080 concentrations will decline within rotting carcasses through the microbial degradation of 1080.

1080 wastes are ecotoxic. Improper disposal of excess pesticide is unlawful. If wastes can not be disposed of by use according to label instructions, contact local Regional Council or a hazardous waste advisor for guidance.

13. DISPOSAL CONSIDERATIONS

The active ingredient sodium fluoroacetate is degraded through microbial activity and will decompose at temperatures above 200 degrees Celsius. It dilutes readily in water. Product which is surplus or spoiled should be disposed of by burying with other organic material on the active tip face of an appropriately managed landfill or buried within the biologically active layer of soil elsewhere within a secure area. Ensure that a good covering of earth is applied over the bait immediately to prevent access by scavenging birds. Avoid deep disposal or burying where groundwater contamination may occur. Alternatively, burn unwanted bait material in a suitably constructed and appropriately located incinerator and bury any residues as above. Treating the baits through a sewage oxidation facility or other chemical treatment facility is also an acceptable means of disposing of unwanted bait material where this is allowed by local by-laws and regulations.

Burn empty bags or bury in a suitable location at a landfill at a depth of at least 60 cm. Do not use the empty container for any other purpose.

Proper Shipping Name:	Pesticide, solid, toxic, n.o.s. [contains Sodium
	fluoroacetate]
U.N. NO:	2588
Class:	6.1
Packing Group:	III (0.04% - 0.1%) and II (0.15% - 0.2%)
Maximum transport quantity as tools of	0.04% - 0.1% = 250 kilograms
trade:	0.15% - 0.2% = 50 kilograms
	(Placarding and DG documents not required but
	this Safety Data Sheet must be carried.)

14. TRANSPORT INFORMATION

15. REGULATORY INFORMATION

Deadly poison: Available only to holders of Controlled Substances Licenses or persons licensed to transport dangerous goods. Label directions are mandatory. Registered Pesticides:

- (a) .04% 1080 PELLETS -V003785. HSNO Approval HSR002422
- (b) 0.08% 1080 RODENT PELLETS V009015. HSNO Approval HSR002422
- (c) 0.08% 1080 PELLETS V002829. HSNO Approval HSR002422
- (d) 0.10% 1080 FERAL CAT BAIT V004107. HSNO Approval HSR002423
- (e) 0.15% 1080 PELLETS V002848. HSNO Approval HSR002424
- (f) .2% 1080 PELLETS V002538. HSNO Approval HSR002424

Packaging approvals: The packaging for these products has been tested and complies with the UN convention for transportation of dangerous goods and with the ERMA NZ HSNO controls and variations stipulated under the 1080 re-assessment decision arising from application HRE05002 and released on 10 August 2007.

16. OTHER INFORMATION

SPECIAL PRECAUTIONS & OTHER COMMENTS:

It is strongly recommended that approved handlers carry an operable telephone, radio telephone or other means of obtaining urgent medical assistance as a precaution when using 1080 poison. Test communication systems and coverage before commencing operations.

May be fatal if swallowed. Wear waterproof gloves when using 1080. Wash hands after handling pellets or animals that have been contaminated with 1080. Do not use poisoned or contaminated animals for food or feed.

This product is toxic to wildlife. Birds and mammals feeding on carcasses of contaminated animals may be fatally poisoned. Take measures to minimise the chance of baits accidentally entering any body of water. Apply the product only as specified by label directions.

Where practicable, the exposed bodies of all poisoned animals should be collected and destroyed by complete burning or deep burial at a landfill approved for hazardous wastes. Dehydrated carcasses may remain dangerous to dogs or cats for an indefinite period. A single mouse poisoned by 1080 may contain enough poison to kill an adult dog.

CONSULT NEAREST POISON CONTROL CENTER FOR CURRENT INFORMATION.

All information contained in this Data Sheet is as accurate and up-to-date as possible. Since Animal Control Products Ltd cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application.

Revised by: WJ Simmons Date of Revision: 15 March 2016