17 May 2018



I refer to your email dated 29 April 2018 requesting the following information under the Official Information Act from Canterbury DHB. I note these are follow up questions to our response to your previous request WCDHB 9087.

 Ingestion of 1080 would cause symptoms such as nausea and vomiting. You have stated the symptoms are the same for ingestion and inhalation in your previous OIA response.
 Can you provide information that states inhalation of 1080 dust would also cause vomiting?

As we said in our response to your earlier inquiry, the information that was received from the Ministry of Health is that symptoms of 1080 poisoning are likely to be similar regardless of whether the toxin is ingested or inhaled. Further information about the toxicity of 1080 can found in the following document from the Environmental Protection Agency's website. https://epa.govt.nz/assets/FileAPI/hsno-ar/HRE05002/HRE05002-055.pdf;

Can you please provide information as to the differences between absorption and effectiveness/speed of toxins (1080 in particular), via both the ingestion and inhalation routes.

In general terms, exposure to a toxin by inhalation will tend to produce effects more rapidly than exposure by ingestion. However, there are insufficient data to be certain that this is the case for 1080. Please see the information in the report mentioned above.

- 3. A woman was outside during the last 1080 drop here, and within a few minutes, started coughing and had to retreat inside. A severe headache developed, and the cough continued for several days. During this time, the lady was also extremely fatigued and could hardly move. A few weeks after this, she developed a heart tachycardia and then severe CVTs which happened several times a minute and lasted several days before subsiding. They now reoccur frequently. This lady has had NO heart troubles before this occasion. An ECG was performed at the local health centre and they were very surprised to be able to capture these CVTS so easily.
  - Have you any evidence or information that these symptoms could have been caused by 1080 dust inhalation as the medical staff here knew nothing when asked.

We are unable to provide comment on an individual patient's diagnosis or medical care without further information and the informed consent of the patient in question.

- 4. Thank you for the advice to stay inside and keep windows and doors shut if concerned.
- How long would be required?

It should be sufficient for people who are particularly concerned to take these precautions while the drop is in progress.

How will the area get advanced notice in order to prepare for this?

We suggest that you request that TBFree and/or their contractor, Vector Free Marlborough, advise you 24 hours prior to the drop taking place. It is not possible to give accurate notice further out than that because the timing of the drop is weather dependent.

5. Can you please provide information as to the methods used around Hector, Ngakawau and Granity in the last two 1080 drops as we believe a trickle bucket was not used.

The permission for the 1080 drop conducted in **2015** by Vector Control Services which involved these areas (called Buller North) allowed for both aerial broadcast and trickle bucket application of 1080. However, staff are unable to locate a file copy of the map showing the areas treated by trickle bucket.

The permission issued to Epro Ltd for the 1080 drop carried out around these areas in **2009** (also called Buller North) did not include use of a trickle bucket in the methods of application permitted to be used, only aerial broadcast.

6. Can you provide details of the consent that requires a trickle bucket to be used, and a copy of the Medical Officer of Health's permission for this drop?

The consent and permission you refer to are one and the same. The permission does not require the use of a trickle bucket but allows for one to be used. A copy of the permission for this operation is attached as (**Appendix 2**) is a copy of the amendment notice which extended the duration of the permission.

7. Can you provide information on how the trickle bucket will alleviate dust? How does it remove the dust contained within the bags of 1080 pellets that go into the bucket?

A trickle bucket does not remove dust. However, a trickle bucket is flown lower and slower than the usual aerial broadcast method. This means that any dust that may be generated is less likely to disperse further from the site of application. The primary reason for using trickle bucket application is to ensure precise disposition of baits around potentially sensitive boundaries of operations, such as tracks.

8. Who monitors for compliance with the conditions of the consent? You have stated that 'provided' the condition are complied with, it is 'unlikely' that we would be exposed to dust - what happens if they are not complied with?

Public health staff monitor compliance with public health permissions. Department of Conservation staff monitor compliance with any DOC consents and TBFree also monitors the performance of their contractors with all required regulatory conditions. We cannot speak for DOC or TBFree but in the case of any non-compliance with public health permission conditions, these would be investigated, and depending on the seriousness of the non-compliance, actions ranging from a formal written warning through to withdrawal of the permission and/or prosecution could result. The West Coast Community and Public Health staff are also required to report any incident or non-compliance in relation to the operation to the Environmental Protection Agency. The EPA's compliance group may also carry out their own investigation.

I trust that this satisfies your interest in this matter.

Please note that this response, or an edited version of this response, may be published on the West Coast DHB website.

Yours sincerely

Carolyn Gullery

Executive Director

**Planning, Funding & Decision Support** 



a division of Canterbury District Health Board

# PERMISSION FOR USE OF VERTEBRATE TOXIC AGENT(S)

Approved VTA Permission Form Version 3: March 2010

Pursuant to section 95A of the Hazardous Substances and New Organisms Act 1996

То

Of Vector Free Marlborough Limited

Private Bag 1007

Blenheim

**Application Identification Code** 17/056/CB/GRYPH

Operation Name Karamea Kahurangi Combined

**Application Location** 70,834 ha of land in the Karamea Bluffs, Stormy Ridge and

Kahurangi West.

Territorial Local Authority(s) Buller District Council

Purpose of Operation Rat, Stoat and Possum Control

I, Cheryl Brunton being a person acting under powers delegated by the Environmental Risk Management Authority (the Authority), GRANT PERMISSION for the USE of the vertebrate toxic agent listed in SCHEDULE 1, in the area indicated on the map in SCHEDULE 3, subject to the CONDITIONS set out in SCHEDULE 1 and SCHEDULE 2 attached hereto and the HSNO approvals for that vertebrate toxic agent;

Between: Start date: 24th August 2017 End date: 31st December 2017

Signed:

Community & Public Health

4 Tarapuhi Street

PO Box 443 Greymouth 7805

**Contact Person:** 

Phone: (03) 768 1160 Fax: 03 768 1169

Email:CPHWestCoastVTAPermissions@cdhb.health.nz

Name: Cheryl Brunton

Title: Medical Officer of Health

Date Issued: 23rd August 2017

**Appeals:** Section 125 (1A) of the Hazardous Substances and New Organisms (HSNO) Act: A person may appeal to the District Court against a decision of the Authority, under section 95A about the terms and conditions of a permission held by the person. **Notice of Appeal:** Section 127 of the HSNO Act: Before or immediately after the filing and service of a notice of appeal, the appellant shall serve a copy of the notice on the Authority, and every other party to the proceedings, and any other person who made a submission to the Authority.

## PERMISSION CONDITIONS: SCHEDULE 1 (Vertebrate Toxic Agents)

Application Identification Code: 17/056/CB/GRYPH

Application Location: 70,834 ha of land in the Karamea Bluffs, Stormy Ridge and Kahurangi West.

Vertebrate Toxic Agent Information				
Kahurangi West blocks				
Vertebrate toxic agent	Strength	Form	Application rate	
Sodium monofluoroacetate	1.5g/kg	Cereal pellets (6g)	1.5 g/ha	
HSNO Approval Number: HSR00242	4	•		
Start Date: 24 August 2017	End Date: 31 D	End Date: 31 December 2017		
Methods of application for this VTA application and broadcast by hand.	allowed under this per	mission: Aerial and tri	ckle bucket	
Karamea Bluffs and Stormy Ridge b	locks			
Vertebrate toxic agent	Strength	Form	Application rate	
Sodium monofluoroacetate	1.5g/kg	Cereal pellets (12g)	2 kg/ha	
HSNO Approval Number: HSR00242	4	-		
Start Date: 24 August 2017	End Date: 31 D	End Date: 31 December 2017		
Methods of application for this VTA application.	allowed under this per	mission: Aerial and tri	ckle bucket	

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#### PERMISSION CONDITIONS: SCHEDULE 2

Application Identification Code: 17/056/CB/GRYPH

Application Location: 70,834 ha of land in Karamea Bluffs, Stormy Ridge and Kahurangi West...

The requirements specified under the Hazardous Substances and New Organisms 1996 (HSNO) Act, its regulations, and Approvals for Vertebrate Toxic Agents granted under the HSNO Act are minimum requirements, which must be met.

A person acting under a delegation from the Authority may impose additional (stricter) conditions to address local circumstances. In addition to requirements specified under the HSNO Act, the following conditions shall apply:

#### **Notifications**

#### **CONDITION 1: Start Date**

The applicant shall advise the Health Protection Officer at Community & Public Health (West Coast) of the commencement of the application of the VTA(s), at least 24 hours before commencing application.

#### **CONDITION 2: Changes to Permission**

The applicant shall advise the Health Protection Officer at Community & Public Health (West Coast) of any material changes to the applicant's proposed operation (such as changes in operational areas and application types/ rates).

#### **CONDITION 3: Warning Sign Removal**

The applicant shall advise the Health Protection Officer at Community & Public Health (West Coast) in writing of their intention to remove warning signs from the operational area.

#### **CONDITION 4: Complaints and Incidents**

All incidents or complaints relating to the operation shall be reported to the Health Protection Officer at Community & Public Health (West Coast) within 24 hours of the incident or complaint.

#### **CONDITION 5: Duration of Permission**

This approval is granted for the period **24 August 2017 to 31 December 2017**. The Health Protection Officer at Community & Public Health (West Coast) shall be notified if there is any alteration to the intended date of the application.

If the applicant wishes to continue the operation after this date, they should contact Community & Public Health (West Coast) at least two weeks before the expiry date of the original approval period.

Within the duration of this permission toxins may not be applied in publically accessible areas during school holidays or public holidays or within 24 hours of the start of such holidays.

No operation may be extended beyond 12 months from the original start date.

#### **CONDITION 6: Landowner Notification**

Before commencing the operation, the applicant shall notify occupiers and, as far as practicable, owners of land, dwellings or buildings immediately abutting the operational area.

The notice must be given sufficiently prior to, but within two months of, the proposed application of the VTA(s). If requested by the person notified, notification shall be repeated at a mutually agreed time before the proposed application.

The notice shall specify:

- i. the approximate date on which the VTA (s) will be applied.
- ii. the name and nature of the VTA (s).
- iii. a description of the area over which the VTA (s) will be applied.
- iv. the name and address of the person responsible for applying the VTA (s).
- v. information on safety and precautions with respect to the VTA(s) being used.

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#### **CONDITION 7: School Notification**

Before commencing the operation, the applicant shall notify schools, kōhanga reo, kindergartens and early childhood centres that are known to use the operational area. The notice must be given sufficiently prior to, but within two months of, the proposed application of the VTA(s).

If requested by the institution notified, notification shall be repeated at a mutually agreed time before the proposed application. The notice shall specify:

- i. the approximate date on which the VTA (s) will be applied.
- ii. the name and nature of the VTA (s).
- iii. a description of the area over which the VTA (s) will be applied.
- iv. the name and address of the person responsible for applying the VTA (s).
- v. information on safety and precautions with respect to the VTA(s) being used.

#### **CONDITION 8: Health Services Notification**

The applicant shall notify the nearest/ local health services of the proposed application of the VTA(s). Nearest/ local health services include GPs and other primary health services, ambulance services and hospitals.

The notice must be given sufficiently prior to, but within two months of, the proposed application of the VTA(s). The notice shall specify:

- i. the approximate date on which the VTA (s) will be applied.
- ii. the name and nature of the VTA (s).
- iii. a description of the area over which the VTA (s) will be applied.
- iv. the name and address of the person responsible for applying the VTA (s).
- v. information on safety and precautions with respect to the VTA(s) being used.

#### **CONDITION 9: Public Notification**

The applicant shall give public notice in the following media (e.g. newspapers, community newsletters) of the proposed application of the VTA (s):

- The Westport News
- The West Coast Messenger
- The Nelson Mail
- Golden Bay Weekly

The notice must be given sufficiently prior to, but within (seven days) of, the proposed application of the VTA(s). The notice shall specify:

- i. the approximate date on which the VTA (s) will be applied.
- ii. the name and nature of the VTA (s).
- iii. a description of the area over which the VTA (s) will be applied.
- iv. the name and address of the person responsible for applying the VTA (s).
- information on safety and precautions with respect to the VTA(s) being used.

The applicant must provide a copy of the public notice, and the date(s) and media in which it was published to Health Protection Officer at Community & Public Health (West Coast) before commencing the operation.

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#### Accidental direct exposure to VTAs

#### **CONDITION 10: Exclusion from Public Areas**

No Vertebrate Toxic Agent (VTA) shall be ground applied within 20 metres, applied by trickle bucket within 40 metres or aerially applied within 80 metres and not where it is within sight of, the following access points and public areas:

- Belltown/Manunui Hut
- Charming Creek Track carpark
- Heaphy Hut and campsite
- Kahurangi Keeper's house
- Katipo Creek shelter and campsite
- Kohaihai shelter and campsite
- Lake Hanlon Walk carpark
- Lewis Hut
- Scotts Beach campsite

Any other tramping huts, bivvies/shelters, tent camping sites, picnic areas in the operational area Any laybys and publicly accessible road entrances to 4WD or walking tracks in the operational area

Warning signs shall be placed at each of the access points and public amenity area(s) listed abive before the VTA(s) are laid in adjoining areas and shall remain in place until the VTA(s) are no longer toxic.

#### **CONDITION 11: Exclusion from Walking and Vehicle Tracks**

No VTA shall be ground laid within 20 metres, applied by trickle bucket within 40 metres, or applied aerially within 60 metres, and not where it is within sight of, the following walking tracks, walking routes and vehicle tracks:

- Heaphy Track
- Kohaihai Zigzag Track
- Any publicly accessible unnamed walking, vehicle tracks in the operational area.

Warning signs shall be placed at each of the access points to the above listed walking and vehicle tracks before the VTA(s) are laid in adjoining areas and shall remain in place until the VTA(s) are no longer toxic.

#### **CONDITION 12: Exclusion from Roads**

No VTA shall be ground laid within 20 metres, applied by trickle bucket within 40 metres or applied aerially within 60 metres of the following roads and where possible all baits and bait stations shall be out of sight of roads and lay-bys:

- Charming Creek Road
- De Malmanches Road
- Karamea Highway
- Karamea Kohaihai Road
- Kongahu Swamp Road
- Mokihinui Seddonville Road
- Nikau Road (Highway 67)
- Oparara Road
- South Terrace Road
- Any publicly accessible unnamed roads in the operational area.

Warning signs shall be placed at each of the roads before the VTA(s) are laid in adjoining areas and shall remain in place until the VTA(s) are no longer toxic.

#### **CONDITION 13: Exclusion from Dwellings**

No VTA shall be applied within 150 metres of (or within a different distance if mutually agreed in writing with the occupiers), and not be visible from, any dwellings or built-up areas.

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#### **CONDITION 14: Exclusion from Schools and Early Childhood Centres**

No VTA shall be applied within 400 metres of (or a greater distance if mutually agreed in writing with the occupiers), and not where it is visible from, the following school(s), kindergartens, kōhanga reo and early childhood centres:

- Karamea Area School
- Granity School

#### **CONDITION 15: Aerial Exclusions**

An aircraft that is carrying out an aerial application must not, when flying to or from the area where the VTA is applied, fly over the following 'no fly' areas:

- Public drinking water supplies
- Within 100 metres upstream of a drinking water intake.

Aircraft carrying VTAs may pass over the Karamea Highway provided that the operator's staff are present at the crossing point to warn motorists.

#### **CONDITION 16: Aerial Applications to Tracks and First Clearances**

The applicant may aerially apply 1080 to the following walking and vehicle tracks but not during or within 24 hours of the start of school holidays, public holidays or public holiday weekends:

- Big Rimu Tree Track
- Fenian Track
- Lake Hanlon Walk
- Karamea Gorge Route
- McCallums Mill/Oparara Arch Road
- Mount Stormy Route
- Wangapeka Track

Immediately prior to the application of 1080 to the above listed tracks, they shall be closed temporarily by means of warning tape and signage at each end of the affected section until first clearances have taken place. In addition, in the case of McCallum's Mill/Oparara Arch Road and the Wangapeka Track, VFML staff will be stationed at each end of the affected sections until first clearance has taken place. For Lake Hanlon Walk, VFML staff will be stationed at the start of the track until first clearance has taken place.

If the applicant aerially applies 1080 to any of the above tracks, they shall inspect those tracks as soon as possible and not more than 24 hours after the VTA application and make reasonable efforts to find and remove all bait and, if encountered, animal carcasses.

#### **CONDITION 17: Second Clearances**

The applicant shall undertake a second inspection of the following walking and vehicle tracks and make reasonable efforts to find and remove all bait and, if encountered, animal carcasses:

- Fenian Track
- Lake Hanlon Walk
- McCallums Mill/Oparara Arch Road
- Wangapeka Track

The second inspection shall be made within 7 days of the VTA application. It should be limited to take place either:

- Immediately after the occurence of strong winds; or
- Immediately before the weekend or commencement of school holidays or public holidays; whichever occurs first.

#### **CONDITION 18: GPS Track Logs**

A GPS log shall be recorded and maintained for each track clearance and made available to the Health Protection Officer at Community & Public Health (West Coast) on request.

#### **CONDITION 19: Sign Contents**

All warning signs must include an international symbol for toxic substances (e.g. skull and crossbones) and a statement advising that children and pets should not be allowed to wander (e.g. 'WATCH CHILDREN at all tes').

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#### **CONDITION 20: Sign Maintenance**

The applicant will ensure that warning signs are placed at the locations listed below and as generally shown in the maps in Schedule 3 immediately prior to the toxic phase of the operation.

During the period in which the baits remain toxic, warning signs at the locations listed below shall be inspected immediately before the commencement of school holidays, public holidays or public holiday weekends:

#### Huts, campsites and shelters

- Belltown/Manunui Hut
- Heaphy Hut and campsite
- Kahurangi Keeper's house
- Katipo Creek shelter
- Kohaihai shelter and campsite
- Lewis Hut
- McKay Hut
- Scotts Beach campsite

#### Carparks and amenity areas

- Charming Creek Track carpark
- Heaphy Track entrances
- Lake Hanlon Walk carpark
- Fenian Caves

#### Walking tracks and routes

- Big Rimu Tree Track
- Fenian Track
- Heaphy Track
- K-Road Mountain Bike Track (Oparara Basin)
- Karamea Gorge Route
- Kohaihai Zigzag Track
- Lake Hanlon Walk
- Mount Stormy Route
- Nikau Walk
- Wangapeka Track

#### Publicly accessible roads

- Arapito Road
- Baker Creek Road
- Blue Duck Road
- Captains Creek Road
- Charming Creek Road
- De Malmanches Road
- Fenian Road
- Glasseve Road
- Granite Creek Road
- Hargreaves Road
- Karamea Highway
- Karamea Kohaihai Road
- Kongahu Swamp Road
- McCallums Mill/Oparara Arch Road
- Mokihinui-Seddonville Road
- Nikau Road (SH67)
- Oparara Road
- South Terrace Road
- Sunset Height Road
- Umere Road
- Wangapeka Road
- Waverley Street
- Any road entrances to private roads, walking or 4WD tracks leading into the operational area.
- Any road entrances to publicly accessible camping sites, picnic areas, boat launching sites or river access points in the operational area.

Any signs that are damaged, vandalised or otherwise become illegible shall be replaced within 2-hours of discovery of the damage.	4

#### **CONDITION 21: Sign Vandalism**

During the period in which the bait remains toxic, warning signs shall be inspected weekly in the following locations:

#### Carparks and amenity areas

- Charming Creek Track carpark
- Heaphy Track entrances
- Lake Hanlon Walk carpark
- Fenian Caves

#### Walking tracks and routes

- Big Rimu Tree Track
- Fenian Track
- Heaphy Track
- K-Road Mountain Bike Track (Oparara Basin)
- Karamea Gorge Route
- Kohaihai Zigzag Track
- Lake Hanlon Walk
- Mount Stormy Route
- Nikau Walk
- Wangapeka Track

#### Publicly accessible roads

- Arapito Road
- Baker Creek Road
- Blue Duck Road
- Captains Creek Road
- Charming Creek Road
- De Malmanches Road
- Fenian Road
- Glasseye Road
- Granite Creek Road
- Hargreaves Road
- Karamea Highway
- Karamea Kohaihai Road
- Kongahu Swamp Road
- McCallums Mill/Oparara Arch Road
- Mokihinui Seddonville Road
- Nikau Road (SH67)
- Oparara Road
- South Terrace Road
- Sunset Height Road
- Umere Road
- Wangapeka Road
- Waverley Street
- Any road entrances to private roads, walking or 4WD tracks leading into the operational area.
- Any road entrances to publicly accessible camping sites, picnic areas, boat launching sites or river access points in the operational area.

Any signs that are damaged, vandalised or otherwise become illegible shall be replaced within 24 hours of discovery.

#### **Contamination of water supplies**

#### **CONDITION 22: Domestic Water Supply: Notification**

The applicant shall notify the intended operation to all people who:

- Source their domestic water supply from within the operational area; or
- Source their domestic water supply within 200 metres or 3 km of the operational area where the water source is a surface waterway that flows through or rises within the operational area.

The notice must be given sufficiently prior to, but within two months of, the proposed application of the VTA(s).

If requested by the person notified, notification shall be repeated at a mutually-agreed time before the proposed application.

#### **CONDITION 23: Domestic Water Supply:Location**

The applicant shall verify the location of water supplies with all people who:

- Source their domestic water supply for within the operational area; or
- Source their domestic water supply within 200 metres or 3 km of the operational are, where the water source is a surface waterway that flows through or rises within the operational area.

A GPS waypoint file of water supply intakes shall be recorded and made available to Health Protection Officer at Community & Public Health on request.

#### **CONDITION 24: Domestic Water Supply: Exclusions**

No VTA shall be ground laid within 20 metres of domestic water supply intakes that source water within the operational area. For flowing surface watercourses, the 20 metres exclusion shall extend for a length of 50 metres upstream from the point of intake.

#### **CONDITION 25: Domestic Water Supply: Mitigation**

For an aerial application of 1080, applicants must provide mitigation to all households that: -

- Source water from inside the operational area; or
- Source domestic water supply within 3km of the operational area where the water source is a surface waterway that flows through or rises within the operational area if mitigation is requested by household occupiers

Mitigation shall involve either or both of the following:

- i. No 1080 shall be applied within 80 metres of the water supply intakes. For flowing surface waterways, the 80 metre exclusion shall be extended for a length of 200 metres upstream from the point of intake.
- ii. Domestic water supply shall be temporarily disconnected until such time as water testing finds no detectable 1080 levels in the source water. If no temporary water source is available an adequate alternative potable water supply (to be used for drinking and cooking) will be provided to affected households; the amount per day to be agreed with the household, until testing is completed.

#### **CONDITION 26: Water Supply Testing**

The water testing shall conform to the protocols of Centox Laboratory, Landcare Research Limited

Where water testing reveals VTA contamination, the alternative potable water supply shall be maintained until such time as a repeat test confirms VTA contamination is undetectable.

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#### **CONDITION 27: Public Water Supplies: Notification**

The applicant shall notify the details of the intended operation to all managers of public water supplies who:

- Source their public water supply from within the operational area; or
- Source their public water supply within 200 metres or 3 km of the operational area where the water source is a surface waterway that flows through or rises within the operational area.

The notice must be given sufficiently prior to, but within two months of, the proposed application of the VTA(s).

If requested by the person notified, notification shall be repeated at a mutually-agreed time before the proposed application.

#### **CONDITION 28: Public Water Supplies: Location**

The applicant shall mutually verify the location of public water supply intakes with all water supply managers who:

- Source their public water supply from within the operational area; or
- Source their public water supply within 200 metres or 3 km of the operational area where the water source is a surface waterway that flows through or rises within the operational area.

A GPS waypoint file of water supply intakes shall be recorded and made available to the Health Protection Officer at Community & Public Health West Coast on request.

#### **CONDITION 29: Public Water Supplies: Exclusions**

No VTA shall be ground laid within 50 metres of public water supply intakes that source water within the operational area. For flowing surface watercourses, the 50 metre exclusion shall be extended to 100 metres upstream of the point of intake.

#### **CONDITION 30: Public Water Supplies: Mitigation**

For an aerial application of 1080, applicants must provide mitigation to all public water supplies that:

- Source their public water supply from within the operational area; or
- Source their public water supply within 200 metres or 3 km of the operational area where the
  water source is a surface waterway that flows through or rises within the operational area.

Mitigation shall be mutually agreed in writing between the applicant and water supply managers and involve either or both of the following:

- No 1080 shall be applied within 200 metres of the water supply intakes. For flowing surface watercourses, the 200 metres exclusion shall be extended to 400 metres upstream of the point of intake
- ii. If an interim water supply is available, the affected water supply shall be temporarily disconnected until such time as water testing finds that 1080 is undetectable in the source water.

#### **CONDITION 31: Water Supply Mitigation: Reporting**

The applicant shall maintain a list of water mitigation measures provided under Conditions 25 and 30, which shall be available, on request, to the Health Protection Officer at Community & Public Health (West Coast).

#### **CONDITION 32: Water Supply Testing: Reporting**

The applicant shall provide, or arrange for the provision of, the outcome of all water testing to Health Protection Officer at Community & Public Health (West Coast) within 24 hours of receipt of the testing results.

In the event that water testing reveals any detectable levels of VTA contamination, the applicant shall discuss any further proposed mitigation measures with Health Protection Officer at Community & Public Health and continue testing in accordance with the requirement for monitoring to establish compliance with the Drinking-Water Standards of New Zealand.

#### **Additional Conditions**

#### **Condition 33: Operators Log**

An operator's or report must be compiled of activities associated with the aerial application and a copy of this log is to be forwarded to the Health Protection Officer at Community & Public Health (West Coast) within four weeks of the date of the vertebrate toxic agent being laid.

#### The log shall include:

- i. Time, date and place of the application
- ii. Amount of vertebrate toxic agent applied and its formulation
- iii. List of supervising operators
- iv. Names of subcontractors with services provided
- v. Name, address and rating number of pilot(s)
- vi. Any incidents that occurred and problems that arose during the operation, including the investigation undertaken and where necessary the remedial actions taken
- vii. Any involuntary transgressions of the conditions in this approval, including an explanation of each transgression and the remedial actions taken
- viii. Copy of GPS printouts of toxic flight lines

#### **Condition 34: Trickle Bucket**

If a trickle bucket is to be used the applicant must supply a map of the area that 1080 is planned to be aerially applied to before the operation commences. If any additional areas are treated by trickle bucket on the day(s) of the operation, a GPS flight line print out from the helicopter showing all areas treated by trickle bucket must be supplied as soon as possible after the operation is completed.

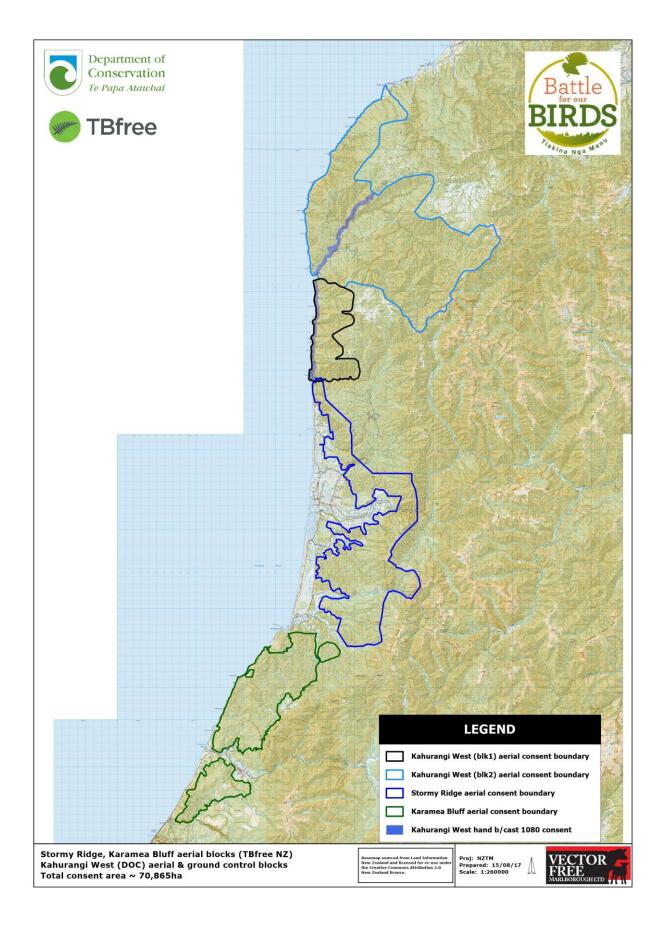
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### PERMISSION CONDITIONS: SCHEDULE 3 (Maps)

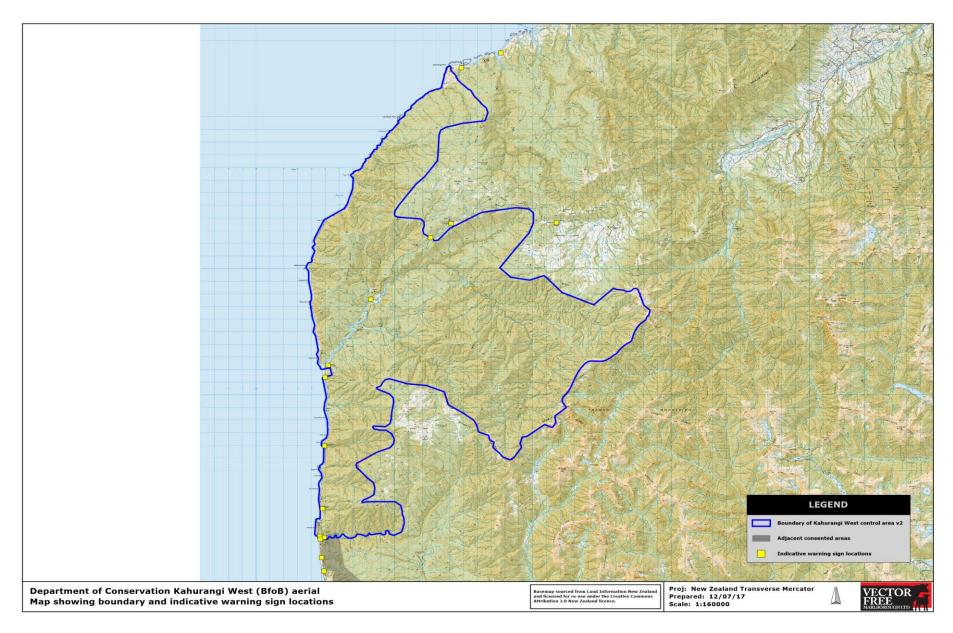
Application Identification Code: 17/056/CB/GRYPH

Application Location: 70,834 ha of land in Karamea Bluffs, Stormy Ridge and Kahurangi West.

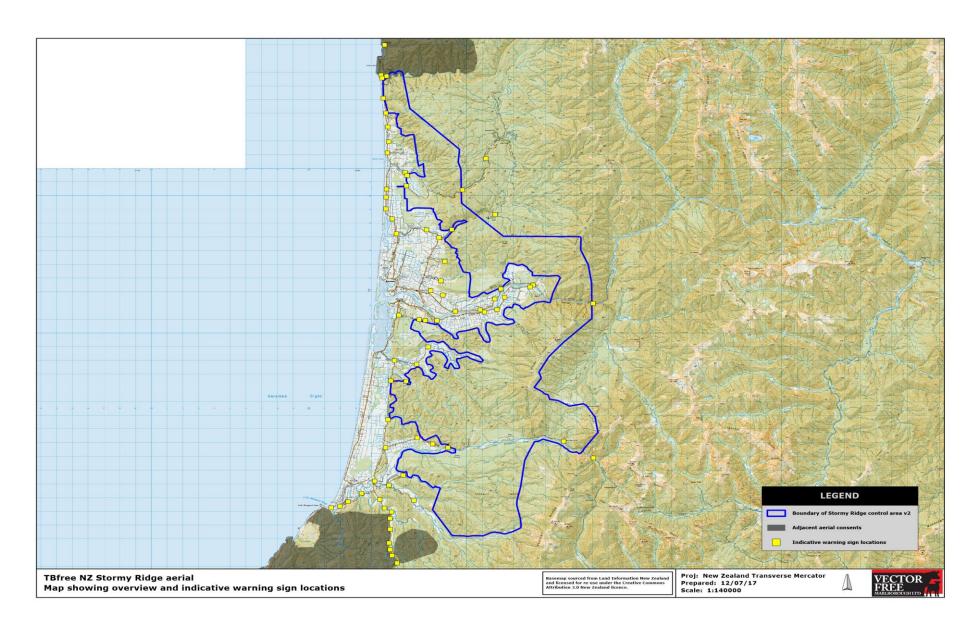
- Map 1 Overview Operational Boundaries and Blocks
- Map 2 Kahurangi West: Boundaries and Indicative Warning Sign Locations
- Map 3 Stormy Ridge: Boundaries and Indicative Warning Sign Locations
- Map 4 Karamea Bluffs: Boundaries and Indicative Warning Sign Locations



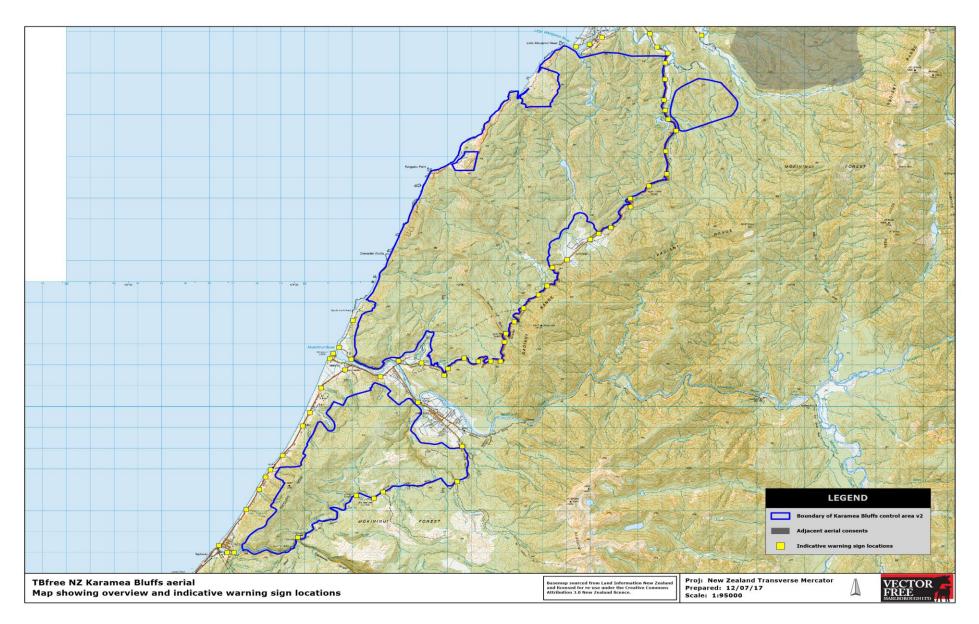
Map 1 Overview Operational Boundaries and Blocks



Map 2 Kahurangi West: Boundaries and Indicative Warning Sign Locations



Map 3 Stormy Ridge: Boundaries and Indicative Warning Sign Locations



Map 4 Karamea Bluffs: Boundaries and Indicative Warning Sign Locations



## NOTICE OF AMENDMENT OF CONDITIONS OF PERMISSION TO USE VERTEBRATE TOXIC AGENT(S)

Pursuant to section 95A (7) of the Hazardous Substances and New Organisms Act 1996

To I

Of Vector Free Marlborough Limited Private Bag 1007 Blenheim

Application Identification Code 17/056/CB/GRYPH

I, acting under powers delegated by the Environmental Risk Management Authority (the Authority), AMEND pursuant to section 95A(7) of the Hazardous Substances and New Organisms Act 1996 the CONDITIONS of the permission to use issued/granted on 23<sup>rd</sup> August 2017, by substituting the attached SCHEDULE of conditions for the schedule attached to the original permission.

Signed (

Name Dr Cheryl Brunton

Title Medical Officer of Health Date 22<sup>nd</sup> December 2017

Notes: Section 95A(7) allows the Authority (or its delegate) to "add or delete any conditions or otherwise vary any condition" imposed on a permission so amendments recorded on this form must do one of these three things.

Section 125 (1A): A person may appeal to the District Court against a decision of the Authority, under section 95A, about the terms and conditions of a permission held by the person.

Section 127 Notice of appeal: Before or immediately after the filing and service of a notice of appeal, the appellant shall serve a copy of the notice on the Authority, and every other party to the proceedings, and any other person who made a submission to the Authority.

Original Copy

This amendment is issued by: Community and Public Health PO Box 443 Greymouth

# SCHEDULE 1 AMENDED CONDITIONS PERMISSION FOR USE OF VERTEBRATE TOXIC AGENT(S)

Hazardous Substances and New Organisms Act 1996

Application Identification Code 17/056/CB/GRYPH

All those conditions set out in the application and its attachments shall be fully met, except as amended below.

#### **Changed conditions:**

The End Date of the permission is amended to 23<sup>rd</sup> August 2018