**IN THE MATTER OF** the Resource Management Act 1991

**AND** 

IN THE MATTER OF Application CRC102944 by the Biosecurity

Section of Environment Canterbury to the Canterbury Regional Council for resource consent to discharge sodium fluoroacetate (1080) and pindone onto land in circumstances where

these contaminants may enter water.

# Decision of the Hearing Commissioners Barry Loe and Robin Delamore

## **Appointment**

1. This is the decision of hearing commissioners Barry Loe and Robin Delamore appointed by Canterbury Regional Council (CRC) to hear and decide the application for resource consent by the Biosecurity Section of Environment Canterbury (the Applicant) to discharge pesticides; sodium fluoroacetate (1080) and 2-pivaoylindane-1, 3-indandione (pindone), onto land in circumstances where the pesticides may enter water in areas of the Canterbury Region and onto land in the bed of a river or a lake.

# **Background to the Application**

- 2. The Biosecurity Section of Environment Canterbury manages a range of programmes to control the population of rabbits, wallabies and possums on land throughout the Canterbury region. These control measures include the distribution of pindone and 1080 pesticides impregnated into cereal baits and chopped carrots. The poison baits are distributed by ground-based methods and by aircraft. Other methods such as shooting, fumigation, trapping and dogs are also used in areas where and when these will provide or support effective control of the populations of these animal pests.
- 3. The Canterbury Regional Pest Management Strategy prepared under the Biosecurity Act 1993 provides for Canterbury Regional Council to address pest management issues in the region. Rabbits, wallabies and possums are pests subject to containment controls to ensure their populations remain at or below the threshold levels set in the Pest Management Strategy.
- 4. The Environmental Risk Management Authority (ERMA) authorises the use of hazardous substances, including 1080 and pindone, in New Zealand. In 2006 an application was made to the Authority by the Department of Conservation and the Animal Health Board for the use of 1080 to be re-assessed, and sought approval for the continued use of 1080 for control of pests including possums, rabbits, wallabies, stoats and rodents.
- 5. After an extensive inquiry that traversed the environmental and economic dilemma posed by these pests to New Zealand, but recognised the deeply held concerns of many people over risks of using 1080, the Authority's decision was to approve the continued use of 1080 for the time being, but apply more stringent conditions on the use of 1080, including a mechanism to monitor aerial application programmes.
- 6. Pindone continues to be approved for use in New Zealand, subject to conditions of use, imposed by ERMA.
- 7. Resource consent under the Resource Management Act 1991 is required for the discharge of a contaminant into water, or onto land where the contaminant may enter water, or onto land in the bed of a river or lake.

# The Application

- 8. The application is to discharge 1080 and pindone in impregnated cereal baits or carrot pieces onto land in river and lake beds, and in situations where the pesticides may incidentally enter water.
- 9. This application is made for a resource consent that, while held by Environment Canterbury, would be exercised by landholders, individually and in groups, operating under the direction and supervision of Environment Canterbury Biosecurity Section staff. A resource consent covering large areas of the region, and held by Environment Canterbury, would obviate the need for consents for pest control operations on individual or adjoining properties.
- 10. The application is for a 15 year period, to enable control operations to be repeated, as necessary, at 3 to 5 yearly intervals.

# Notification and the Hearing

11. The application was notified in newspapers throughout Canterbury and in the Otago Daily Times in May 2010, as:

CRC102944 - to discharge sodium monofluoroacetate (1080) and pindone agrichemicals onto land where there is a risk that they may enter water. The applicant proposes the spreading of pesticides in solid bait form to control rabbits, wallabies, and possums. Resource consent is sought for ground-based spreading within the dry beds of waterways, and aerial spreading using helicopters or fixed-wing airplanes. Buffer zones around flowing water will be established for all operations. The areas proposed for spreading are predominantly privately owned land, but may also include Crown-owned land within the boundaries of privately owned farms and unallocated land of the Crown (riverbeds managed by Land Information New Zealand), anywhere within the Canterbury Region. Licensed aerial operators will be required to undergo authorisation by the consent holder prior to undertaking operations via this consent.

A consent duration of 15 years is sought.

- 12. Following postponement of the Hearing due to the earthquake on 4 September 2010, we heard the application and submissions in Christchurch between 27 October and 1 November 2010. The hearing was closed on 14 February 2011. We did not undertake a site visit, as we are both sufficiently familiar with the Canterbury region to understand the nature of potential effects of the proposed discharge.
- 13. 77 submissions were received, 15 in support and 62 in opposition. 27 submitters originally requested to be heard. Seven submitters appeared at the Hearing, one of these via a phone conference.

#### Minutes Issued, Responses, Complaint & Legal Advice:

- 14. We issued two minutes during the course of the Hearing. The first Minute, issued on 3 November 2010, requested the Applicant to provide a revised set of proposed consent conditions. Within this request was an invitation to the Applicant to include in those conditions requirements for an operational management plan, and a monitoring plan addressing effects on native birds, waterfowl and deer.
- 15. The Applicant responded, providing a revised set of proposed conditions, but declined to include deer in the scope of the monitoring plan, stating they did not consider it appropriate for this application, and would address this further in their reply.
- 16. New Zealand Deerstalkers Association Inc (NZDA), a submitter to the application, wrote to us making a formal complaint that the Applicant, by declining to propose a condition relating to the monitoring of deer, was holding us and the minute "in

- contempt". NZDA then requested that we instruct the Applicant to provide the information.
- 17. We informed NZDA that we would deal with the matter in our decision. NZDA then objected to our response, and in correspondence stated they would 'take the matter further' if we did not respond in the manner they desired.
- 18. For the record, we were satisfied with the response of the Applicant to our Minute. The information sought was by request not direction, so any response to our request (including proposed monitoring conditions), was entirely at the discretion of the Applicant. Our decision can include conditions relating to any aspect of the application that we consider are necessary to manage the effects on the environment of the activity.
- 19. We found the complaint by NZDA to have no substance, and the continued correspondence on the matter from NZDA was inappropriate, at best.
- 20. We sought legal advice from an independent resource management lawyer, Mr Paul Rogers at Adderley Head, lawyers, about the scope of the application and amendments made to the scope. This advice was circulated to all parties with the second Minute, which we issued on 20 December 2010. In this Minute we requested the reply from the Applicant, to conclude the Hearing.
- 21. We sought further legal advice after receiving the reply, in relation to the impacts of the release of decisions on NRRP on this application, and the applicant's response to the matter of scope. We have incorporated this advice into the decision.

#### **Evidence & Information provided**

22. The extensive AEE that accompanied the application, the evidence and information in the form of reports and extracts for reports presented by the applicant and submitters is a matter of public record. Where evidence or information relates to the principle issues and our findings on these we have referred to it. It is not necessary to repeat the full extent of evidence here.

#### The Officer's report

23. The Officer's report of Mr Warwick Pascoe, a consultant to Environment Canterbury, is also a matter of public record. Our consideration of the application and evidence includes the advice provided in Mr Pascoe's report, and where it is relevant to our identification and analysis of the principal issues, we have referred to it.

# The Applicant's Right of Reply

24. The Applicant's reply was provided in writing, and addressed a range of matters that are included in the summary of the principle issues.

#### **Statutory provisions & Assessment**

# The Resource Management 1991

- 25. Section 30 of the RMA describes the functions of a regional council. These include;
  - (f) The control of discharges of contaminants into or onto land... or water.....
- 26. Section 13 of the RMA prevents the deposition of any substance in or on the bed of a river or lake unless it is expressly allowed by a rule in a regional plan and in a proposed regional plan or by resource consent. The bed of a river, for the purposes of this application, is defined in the RMA to be,...the space of land which the waters of the river cover at its fullest flow without overtopping its banks... The bed of a lake which is not controlled by artificial means, for the purposes of this application, is defined in the RMA to be,... the space of land which the waters of the lake cover at its

- highest level without exceeding its margin...and for an artificially controlled lake, ... the space of land which the waters of the lake cover at its maximum permitted operating level...
- 27. Section 15(1)(a) and (b) of the RMA control the discharge of any contaminant where it may enter water. A discharge cannot occur unless it is expressly allowed by a rule in a regional plan and in a proposed regional plan or by resource consent.
- 28. Section 15(2) of RMA prevents the discharge of a contaminant onto land in a manner that contravenes a rule in a regional plan or proposed regional plan unless authorised by resource consent.
- 29. Authority is not required from Canterbury Regional Council to discharge these pesticides onto land where the contaminants will not enter water, except onto land in the bed of a river or lake, because there is no rule in a regional plan which would be contravened by such a discharge. Authority to discharge onto land in the bed of a river or a lake is required under section 13 of the RMA.

# Canterbury Regional Council Statutory Instruments The Canterbury Regional Policy Statement

- 30. We have had regard to the objectives and policies of the Canterbury Regional Policy Statement (CRPS) as relevant to the application, particularly those provisions related to the use of hazardous substances, soil conservation, management of pests, and protection of aquatic ecosystems and indigenous biodiversity. We note that the Canterbury Regional Council, through the CRPS, has identified it has responsibility to control the use of land for the prevention or mitigation of any adverse effects on water quality from the use of specified hazardous substances, including pesticides, and to control the discharge of hazardous substances into or onto land and water (Chapter 17). Discharges of hazardous substances should only be authorised where adverse effects are prevented or mitigated (Policy 4).
- 31. We find that, subject to appropriate conditions, the proposed activity is in accordance with the objectives and policies of the Canterbury Regional Policy Statement.

# Regional Plans & the Activity Status of the Application

## The Transitional Regional Plans

32. The Transitional Regional Plans for Canterbury (excluding the Kaikoura district) and for Nelson-Marlborough (Kaikoura district only) do not contain any rules managing the discharges in the application. Therefore under RMA Section 87B(1)(b) the application is being treated as discretionary under these plans.

# The Waimakariri River Regional Plan

33. The Waimakariri River Regional Plan controls discharges onto land near water and into water in the catchment, and the deposition of a substance in the bed of a river or lake. It is unlikely that, after reasonable mixing of any pesticides in a water body, the water quality standards in the plan would be breached. Therefore the discharges in the application are discretionary activities.

#### The Opihi River Regional Plan

34. The Opihi River Regional Plan controls discharges onto land near water and into water in the Opihi River and its tributaries. Under the rules of this plan the discharges in the application are discretionary activities.

#### The Proposed Natural Resources Regional Plan

Proposed NRRP as notified

- 35. The proposed Natural Resources Regional Plan (NRRP) applies to the discharges in the application that will occur outside the areas of the Waimakariri River and the Opihi River regional plans.
- 36. Proposed NRRP Variation 1 was notified in July 2004. Chapter 4 'Water quality' has a rule that is relevant to this application. Chapter 6 'Beds and margins of lakes and rivers' does not have a rule authorising the deposition of the substance onto the bed of a river, but the rule in Chapter 4 encompasses this component of the activity.
- 37. Rule WQL16 in Chapter 4 authorises the discharge of agrichemicals, specifically identifying pindone and 1080, onto land in the bed of a river, and onto land where the contaminants may enter water, as a permitted activity if the relevant conditions of the rule are complied with. This application does not comply with all the relevant conditions of Rule WQL16. Rule WQL16 directs that an activity that does not comply with these conditions is a discretionary activity, subject to Rule WQL56 where the discharge is into water or onto land where it may enter water, or Rule WQL57 for discharge onto land in the bed of a river or lake.
- 38. Rule WQL56, however, has conditions that must be complied with for the discharge to be a discretionary activity. These include calculating a Zone of Non-Compliance in accordance with Part 2 of Schedule WQL1, and comparing the size of this 'default' zone to a specific zone for the discharge in which the water quality standards in Schedule WQL1 would not be achieved. Neither 1080 nor pindone appear in the list of toxicants in Table WQL19 of Schedule WQL1, therefore it is not possible to calculate the Zone of Non-Compliance in accordance with Part 2 of Schedule WQL1.
- 39. A discharge to water or onto land where it may enter water which does not comply with the conditions of Rule WQL56 relating to water quality standards, or the zone of non-compliance, is directed to be a non-complying activity.
- 40. Rule WQL57 makes the discharge of a contaminant onto land, including onto the bed of river or lake, a discretionary activity, except if the discharge occurs within a Community Drinking Water Supply Protection Zone for a well listed in Schedule WQL2. There may be wells listed in Schedule WQL2 that are within the areas proposed for discharge under this application. The exclusion zone of 100 metres proposed by the applicant around these wells or intakes may be smaller than the protection zone calculated for a particular well.
- 41. Therefore the conditions of Rule WQL57 could be complied with, except if the discharge occurred within a community drinking water supply protection zone. If this were the case, the discharge in that instance would be a non-complying activity. In all other locations the proposed discharge of 1080 and pindone onto land in the bed of river or lake would be a discretionary activity.
- 42. We have concluded that under proposed NRRP rules as notified, the proposed discharge of 1080 and pindone onto land in the bed of a river or lake is a discretionary activity or non-complying activity, and the discharge into water or onto land where 1080 and pindone may enter water is a non-complying activity. Overall the application under proposed NRRP rules as notified is a *non-complying activity*.

Amendments to proposed NRRP as a result of decisions on submissions

43. Decisions on submissions on Variation 1 were released on 23 October 2010, just prior to the commencement of the Hearing on 27 October 2010. The rules of the proposed NRRP that are relevant to this application have been considerably amended by the decisions. Rule WQL16 is renumbered, now Rule WQL17, and it no longer manages

- the discharge of 1080 and pindone. Rule WQL56 is now Rule WQL48, and Rule WQL57 has been deleted.
- 44. A new rule, Rule WQL18, has been inserted into proposed NRRP and this rule authorises, subject to conditions, the discharge of vertebrate toxic agents, such as 1080 and pindone onto land where it may enter water, or onto land in the bed of a river or a lake. Rule WQL18 is 'self-contained' and does not refer to other rules. A discharge can either be permitted, controlled or discretionary under Rule WQL18.
- 45. The appeal period for the decisions on proposed NRRP closed on 16 November 2010. The Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010 directed that appeals to the decisions could only be made to the High Court on a question of law.
- 46. The Hearing was in adjournment at the date appeals closed, following the presentation of the application, submissions and officer's report. We are advised by Environment Canterbury that no appeals to either of these rules were lodged.
- 47. Under RMA Section 86F the rules in proposed NRRP as amended by decisions, must be 'treated as operative'. Rule WQL18 is now the relevant rule and is operative in effect – although we note the regional plan is not yet operative. Rule WQL18 changes the status of much of the activity for which the application is made - from noncomplying to permitted, with some aspects of the activity possibly controlled or discretionary.
- 48. However, RMA Section 88A(1A) provides that, where an application for a resource consent has been made, and the status of an activity is altered as a result of a decision being notified, the application continues to be processed, considered and decided as an application for the type of activity that it was, or was being treated as, when the application was made.
- 49. Therefore we must continue to process that part of the application made under proposed NRRP rules as a non-complying activity.
- 50. This application has several component activities, and there are several regional plans with rules that manage these discharges. The status for the activities, under the plans in place at the time the application was lodged is either discretionary or non-complying so we are treating the entire application as **a non-complying activity**.
- 51. The applicant, in their reply, submitted that as a result of decisions on NRRP, Rule WQL18 was now the operative rule which now applies throughout the region. Therefore much of the application was now redundant, as the discharges in many circumstances would now be a permitted activity under by Rule WQL18. There will be only limited circumstances when consent would be required, and our decision should now be limited to authorising the discharge under those circumstances.
- 52. As we have stated above, while Rule WQL18 is to be treated as operative, we must continue to decide the application as it was when it was lodged.
- 53. In terms of where Rule WQL18 applies in the region, the applicant, in reply, pointed out that the rule would now apply throughout the region because neither the Waimakariri River nor Opihi River regional plans 'expressly authorised' the discharge, as was required under Rule WQL18.
- 54. Environment Canterbury, on 11 February 2011, under RMA Schedule 1 Clause 16(2), made a 'minor change' to Rule WQL18 in respect of the information about where the rule applies. This change amends the information and removes the requirement for the Waimakariri River and Opihi River regional plans to 'expressly authorise' the discharge of a vertebrate toxic agent, replacing this with where the discharge is 'controlled by' these regional plans.

55. We consider that this amendment means that the NRRP rule does not apply in the areas of these plans.

#### Objectives and Policies of Regional Plans

- We have had regard to the objectives and policies of the Proposed Natural Resources Regional Plan (NRRP), the Opihi River Regional Plan and the Waimakariri River Regional Plan, as relevant to the application.
- 57. Each of these plans set outcomes, in either objectives, polices or rules, for the water quality of surface water bodies in their respective areas. Where rivers in the areas of the NRRP or the Waimakariri Regional Plan are identified as natural state, the outcome sought by each plan is to ensure the water quality in the rivers remains in this state. For other rivers, water quality standards are set in each plan to manage the effects of discharges to water or to land where contaminants in the discharge may enter water, to ensure that the outcomes sought are achieved.
- 58. NRRP Policy WQL2 (now Policy WQL3 as a result of decisions) aims to prevent the discharge of certain contaminants into surface water, including hazardous substances. An exception is provided where the discharge is necessary to control plant or animal pests, provided the substance is of low toxicity to non-target aquatic species, is not persistent in the environment, and is used in accordance with conditions of use set by the manufacturer, ERMA and any resource consent, and is used by an approved handler. The proposed activity meets these criteria and is consistent with Policy WQL3.
- 59. The proposed discharges, undertaken in accordance with appropriate conditions, should not alter the quality of the water in rivers or lakes to any significant extent or for any significant period. Any alteration to water quality should prevent the outcomes of these plans being achieved. Overall, the proposed activity is consistent with the regional plans.

## The Permitted Baseline

- 60. RMA Section 104(2) provides the discretion for decision-makers to disregard an effect of the activity on the environment if <u>the plan</u> permits such an effect. The applicant, in reply, submitted that, as the decisions on NRRP have made the discharge of 1080 or pindone a permitted activity in many circumstances, we should disregard many of the potential adverse effects of the discharges proposed in the application.
- 61. RMA Section 43AA defines 'regional plan' to mean 'an operative plan approved by a regional council...'. The decisions on NRRP, including the amendments to the rules, are changes made to a proposed plan. While the rules may be 'treated as operative' the plan itself will not be operative until the Canterbury Regional Council approves the plan. This has not occurred yet.
- 62. The effects that may be disregarded in respect of this application are those that are permitted by the operative plans the transitional regional plans and the Waimakariri River and Opihi River regional plans.
- 63. These operative regional plans do not have rules that permit an effect that could be expected from the discharge to land where 1080 or pindone may enter water, or the discharge to land in a river or lake bed. Therefore we cannot exercise discretion to disregard any effect of the discharge on the environment from the proposed discharges because there is no plan which permits such effects.

Section 88A(2) & Section 104(1)(b) - weighting of the NRRP provisions

64. The release of decisions on proposed NRRP, and the limited scope and number of appeals to the plan means that most of provisions of the proposed plan are now

- beyond challenge. This means that we must give considerable weight to the proposed NRRP as amended by decisions, over the proposed NRRP as notified.
- 65. While the effect of RMA Section 88A(1A) means we must continue to process the application as the non-complying activity it was at the time the application was lodged, RMA 88A(2) directs us in our decision-making, under Section 104(1)(b), to have regard to any plan or proposed plan which exists when the application is considered.
- 66. The proposed plan, as amended by decisions, has now significantly reduced the level of scrutiny required for a discharge of 1080 or pindone, in those areas where NRRP applies. In many circumstances resource consent may not be required, however there are elements of the application that would require consent under Rule WQL18, as does the whole activity outside the area of NRRP.
- 67. Notwithstanding Rule WQL18 we are still bound to decide the application as a non-complying activity, and there are adverse effects identified in the AEE and in the evidence of the applicant and submitters that need to be managed through consent conditions. The application is also for a global consent to authorise discharges over a wide range of environments and land types throughout the region and also to discharge to water in specified circumstances.
- The applicant has continued with the application and proposed an extensive range of conditions, even though Rule WQL18 can be treated as operative.
- 69. We have given the NRRP and Rule WQL18 considerable weight in our consideration of the decision on the application, but have continued to address the management of potential adverse effects of the proposed discharge as identified through the AEE and evidence to the hearing.

# Principle issues in contention and main findings

#### Area to which application applies

- 70. A jurisdictional issue arose in respect of amendments that were made during the course of the hearing to the scope of the application. The applicant sought to extend the scope of the application to cover new categories of lands not identified in the original application, including crown pastoral leases, and conservation land subject to special grazing leases.
- 71. This gave rise to three related issues:
  - (i) Whether the proposed changes constitute an increase in scale of the activity to the extent that this would not be within the scope of the original application.
  - (ii) Whether inclusion of these categories of land was within the scope of the application, and whether the public notice adequately described the activity now proposed by the applicant.
  - (iii) Whether there were persons who did not make a submission, but who may have done so had the activity been described in the notice to include Crown pastoral land and Department of Conservation land used for farming.
- 72. A legal opinion was sought from Mr Paul Rodgers of Adderley Head on these issues, and whether they would materially affect the outcome of the hearing. Mr Rogers considered the public notice to be adequate in that it accurately described what is proposed in the application and satisfies the test of enabling a reasonable member of the public to understand where the proposed activity will occur. However, he considered that there was a clear change between the location now proposed for the application and that which was originally applied for, as the conditions now proposed by the applicant would enable discharges to all Crown pastoral land, and DoC land

- subject to special farming leases. This raised the issue of whether the proposed change is within the scope of the original application.
- 73. The issue of whether consent can be granted for an activity on land not the subject of the original application has been recently considered by the Environment Court in *Gray Cuisine Ltd v South Waikato District Council* [ENV 2009–WLG-000102]. The Court considered relevant case law (including the leading Supreme Court authority). Whether an amendment is permissible is a question of degree that depends on the scale, intensity and effects of the change, and potential prejudice to other persons. The Environment Court in *Gray* made a distinction between cases where the detail of the application is amended, and those where the location has changed, which the Court considered a much more fundamental issue. At paragraph 9 the Court stated:

Accurate identification of the location of the proposed activity is a fundamental requirement of Form 9 and is an obligation imposed on applicants.

The Court held that it did not have jurisdiction to grant consent to undertake an activity on land that was not the subject of the original application.

- 74. Mr Rogers, in his opinion to us, considered that the principle established in Gray should be followed, and that we do not have jurisdiction to approve the application on the proposed conditions, as this would allow the activity on land that was not the subject of the original application. On this basis, our consideration and determination of the application is limited to the locations specified in the original application.
- 75. Mr Rogers' legal opinion was made available to the parties. In their right of reply the applicant agreed that consent can only be granted for a property if that property is the subject of the original application, but argued that there has been no extension of land where the discharge can occur. Based on the definitions of "private land" under the Walking Access Act 2008, the Trespass Act 1980, and the Treaty of Waitangi Act 1975, it was the applicant's position that Crown pastoral land is Crown owned land, but because it is subject to a lease or licence granted to the holder by the Crown it becomes private land. The applicant also argued that these definitions are consistent with the public perception of Crown pastoral land being treated as private land as the lease holder has the right to exclude others and trade the interest in the land on the open market.
- 76. The applicant's reply does not mention several other acts that contain contrary definitions of "private land". The Land Act 1948 and the Reserves Act 1977 both define private land as any land which is for the time being held in fee simple by any person other than Her Majesty. Crown pastoral land does not fall within this definition of private land, as the fee simple title is still held by the Crown. It is our understanding that where there are competing definitions in legislation, the weight to be placed on them should be determined by reference to the purpose of the relevant Act. The primary purpose of the Land Act 1948 (as stated in the short title) is to consolidate and amend certain enactments...relating to lands of the Crown in New Zealand. In contrast, the enactments referred to in the applicants right of reply only deal with land as a secondary purpose.
- 77. The public notice and the AEE application form both refer to *privately* <u>owned</u> <u>land</u>, and only the AEE summary uses the term <u>private</u> <u>land</u>. We consider there is an important distinction between the two terms, because even if the applicant's interpretation of private land could be supported (and on balance we do not consider that it can), the reference to privately owned land in both the application form under section 88 of the Act and the public notice would clearly exclude Crown owned pastoral lease land from the application. Both terms would also appear to exclude Department of Conservation land subject to a special lease, a matter which was not commented on in the applicant's right of reply.

- 78. We also consider that any reasonable person reading the application and public notice could reach the same conclusion, given the relatively high profile of Crown pastoral land within Canterbury and the ongoing debate and publicity around these lands during processes such as tenure review. We accept that some submitters, including Federated Farmers, assumed that that Crown pastoral land was included in the application, and that this may have been the original intent of the parties involved in developing the application. As the Court did in *Gray*, we acknowledge that this is unfortunate, but it is simply not within our jurisdiction to grant consent for the activity on land that was not identified in the original application.
- 79. We find that the public notice was adequate in that it accurately described what was proposed in the original application. This satisfied the test of enabling a reasonable member of the public to understand where the proposed activity would occur. However, there has been a clear change between the location originally applied for and that now proposed by the applicant, as their proposed conditions would enable discharges to all Crown pastoral land, and DoC land subject to special farming leases. This would not satisfy the above test, and we do not have jurisdiction to grant consent for discharges over these additional lands.
- 80. We find that the area to which application applies is restricted to; privately owned farmland within Canterbury, public roads and areas of Crown owned land within the boundaries of these farms, and crown owned river bed or lake bed and waterway margins. These areas were all identified in the Public Notice, application form or AEE. For avoidance of doubt, we also find that where waterway margins and river bed or lake bed land are within the boundaries of privately owned farmland these lands can be considered to fall within the application. All other lands are excluded from the application.

# **Duration and global nature of application**

- 81. The applicant sought a region wide consent for privately owned and some public land, with 15 year consent duration. These provisions were supported by Federated Farmers, the Canterbury Pest Liaison Committee, Department of Conservation, the Animal Health Board, and Forest and Bird. A number of individual submitters including Kaikoura District Council, New Zealand Deerstalkers Association (NZDA), and Farmers against 1080 opposed the global nature of the consent, and the length of the consent term. The Section 42A Reporting Officer also proposed a shorter consent term of 10 years.
- 82. Reasons put forward in the submission and evidence for opposing the proposed duration and/ or the global nature of the consent included:
  - Public opposition to 1080 generally.
  - Uncertainties regarding both short and long term effects of 1080 and pindone.
  - Locking in the continued use of 1080 and discouraging the necessary consideration and funding of alternatives.
  - Use of the consent by various landowners and contractors with differing standards and beliefs about land use will encourage poor use of poisons.
  - Difficulties with enforcement.
  - Applications should continue be applied for on a case by case basis to reflect changes in population, land use and knowledge improvements in regard to toxins, animal management, and pest populations.
  - A small group of land holders would gain private benefit from a consent, aspects of which will be paid by ratepayers.
  - Uncertainty over the extent of the application.
  - The proposed term would not allow for regular review.

- Impinges on options and choices for the future, particularly district councils decisions about use of 1080 in their area.
- Poisons likely to be banned before consent period is up.
- 83. The reasons put forward by the applicant and submitters in support of the global nature of the consent and the proposed 15 year term included:
  - 15 years allows for the best practice aerial poisoning return period, and avoids truncating multi-year programmes.
  - Needs to be a long enough term to make the expense of obtaining a global consent worthwhile.
  - Allows for longer periods between poisoning operations in particular areas.
  - More cost effective: a reduction in individual costs, time and delays for landholders.
  - More timely delivery, large scale programmes can be undertaken swiftly and successfully.
  - Allows land owners to accurately plan programmes, without facing delays.
  - Ensures operational best practice through consistent conditions for handling and application of 1080/ pindone.
  - "User pays/ user does" (as opposed to a global consent) coupled with the high costs of large scale pest control provides an environment and incentive to compromise on operational best practice.
  - Balances least-cost, expedient and co-ordinated pest management against minor environmental risks.
- 84. We find that there are valid reasons for both the 15 year term sought, and the global nature of the consent. On the basis of the evidence, there does not appear to be viable alternatives to 1080 and pindone that are or will be available in the short to medium term for the control of rabbits and wallabies in situations where there are high populations of these species. These pesticides are both approved for aerial and ground-based use in New Zealand. We heard no evidence that 1080 was likely to be banned during the term of the consent, or that its continuing use would limit research into alternatives, or constrain options for the future.
- 85. On the basis of the evidence and subject to the conditions we have imposed, we consider there are unlikely to be effects arising from the exercise of the consent that would require us to set a shorter term. There is adequate scope to assess the exercise of the consent and take into account any changes in the status of 1080 or pindone (or any other issues that arise) through the review conditions. We find that the 15 year term is appropriate, taking into account the best practice return period, the effectiveness and efficiency of implementing the consent, and the fact that a longer term could have been sought.
- 86. We also find that a global consent will be more effective and efficient due to; the potential for cost and time savings for individual land holders operating under the consent, the ability to undertake large scale co-ordinated programmes across boundaries involving multiple properties, and the application of consistent conditions across operations. Overall we consider that a global consent would provide more effectively for the management of pest animals throughout the region.

# **Need for the application**

87. Some submitters sought a ban on aerial discharges of 1080, or questioned the use of 1080 and pindone for pest management generally. It was also submitted that alternative methods (such as shooting or trapping) or other poisons were either available (as substitutes), or would be developed.

- 88. It was the view of the applicant's witnesses that discharges of 1080 and pindone were necessary for rabbit and wallaby control on both biological and cost effectiveness grounds. The applicant contended that alternative methods were not effective once rabbit and wallaby densities reached a certain level.
- 89. In relation to rabbit control, it was Mr Roger Lough's evidence that (para 58):

  For higher density rabbit populations, beyond the reach of secondary control methods and susceptible to RHD, primary poisoning with 1080 or pindone is the last defence against rabbit damage to productive and environmental values. There is no other proven means of regaining control.
- 90. Mr Lough also considered that rabbit populations are steadily increasing on some properties, in some cases to levels that can only be reduced by broad scale aerial or ground applications of 1080 or pindone (para 60). He considered that a well conducted primary poisoning operation, by removing 99% of rabbits, provides a means for controlling rabbits that are immune to RHD. Mr Lough's opinions were supported in the evidence of Mr Pawsey and Mr Sullivan.
- 91. Mr Steve Palmer also outlined in his evidence the circumstances where aerial application of bait/ toxin may be required (as opposed to ground-based controls). Both Mr Palmer and the witnesses for Federated Farmers and the Animal Health Board (AHB) demonstrated that aerial application of 1080 or pindone was more economical than ground application in many circumstances.
- 92. For wallaby control it was Mr Warburton's evidence that recreational shooting did not reduce numbers sufficiently to protect biodiversity values, while dogging and shooting was only effective when wallaby numbers were low. The cost of ground hunting with dogs was in excess of \$50 per hectare, while the aerial application of 1080 baits was in the order \$25-\$35 per hectare. He considered that aerial application provided the only cost-effective option for controlling high wallaby numbers over all habitats.
- 93. It was also Ms Todd's evidence that the control of pests is consistent with the relevant provisions of the Regional Policy Statement, the regional plans, and the RMA.
- 94. We consider that the evidence provided by the applicant and some submitters demonstrates that control methods such as shooting and trapping are not capable of controlling populations of rabbits and wallabies when these increase beyond a certain level. While we heard evidence from the applicant and one submitter that research is being undertaken to develop alternatives to 1080 and pindone, submitters in opposition were unable to demonstrate that alternative methods were available that could adequately substitute for the use of these poisons.
- 95. We find that there is a proven need for aerial and ground applications of 1080 and pindone to control rabbits and wallabies which are significant animal pests within the Canterbury region. We also accept that there are circumstances where the aerial application of 1080 or pindone is more effective and/ or efficient than ground based poisoning operations and is a necessary "tool" for controlling pest populations.

#### Effects on water and on human health

96. A number of submitters raised concerns about the potential adverse effects of discharges of 1080 on water bodies, and on human health through exposure to contaminated water (particularly water supplies) and from contact with baits. Some submitters also raised issues about the potential for people to consume contaminated meat from game which had consumed non-lethal levels of toxins. New Zealand Deerstalkers were critical of the proposed buffer distances around waterways, noting that they did not take into account factors such as profile, soil types, land-uses and runoff, or flying distances.

- 97. Several submitters in support of the application (including the AHB) stated that 1080 is rapidly broken down and/ or diluted to undetectable levels in waterways.
- 98. Mr Steve Palmer told us that only a small number of operators are likely to be involved in aerial control operations, and these operators were both generally very accurate in their application of poisons due to the use of GPS, and conservative in terms of flying distances from water bodies.
- 99. The only expert evidence on the effects of 1080 (and pindone) on water bodies and human health was provided by Dr Charles Eason, a research scientist who specialises in toxicology. Mr Eason noted that fluoracetate, the active ingredient in 1080, occurs naturally in some plants. It is highly water soluble. Research indicates 1080 is biodegraded by aquatic plants and micro-organisms in biologically active water in 2-6 days, and does not persist in aquatic plants (para 45). Results of initial research and subsequent monitoring after 1080 aerial operations demonstrated that there has been no evidence of 1080 in reticulated water supplies, or significant or prolonged contamination in surface waters. When 1080 was found in monitoring samples, it was at very low concentrations, typically in small steams in remote locations. Often baits were seen nearby. Contamination was transient, and not usually found in repeat samples (para 46). Research indicates that when contamination does occur, only low concentrations are detected, and only for a short period (para 48). Both dilution and biodegradation reduce 1080 residues in waterways to undetectable and toxicologically insignificant amounts - dilution is more immediate and profound (para 49). Even where streams were deliberately "spiked" with 1080 baits as part of a research project, observed concentrations were below Ministry of Health (MoH) guidelines (para 47).
- 100. It was Dr Eason's opinion that the "transient residue concentrations" that are found rarely after 1080 use are consistently well below those that will impact on aquatic organisms (para 51). On the basis of toxicity tests both overseas and in NZ he considered that there should be no toxic effects on aquatic invertebrates or fish arising from the application, or effects on people from eating aquatic plants exposed to 1080 operations.
- 101. In relation to effects on people, Dr Eason considered that exposure of individuals or communities to amounts of 1080 that have the potential to kill or cause sub-lethal effects is most unlikely, and that risks can be minimised by ensuring exposure does not occur. There have been no recorded deaths of humans in NZ from accidental 1080 poisoning. Animal toxicology studies have been used to define conservative noeffect levels and tolerable daily intake (TDI) values for humans, but these are of more relevance to those manufacturing or handling baits.
- 102. In relation to concerns about people consuming contaminated meat, it was Dr Eason's opinion that 1080 does not accumulate in fatty or other tissues of animals, and is comparatively rapidly eliminated from living animals (para 64, 65). Human exposure could occur if meat was procured from game or livestock within a relatively short time after an animal has eaten baits. He was of the view that consent conditions and notification of operations should minimise this risk.
- 103. It was Dr Eason's evidence that pindone has low solubility in water, and is more slowly leached from baits than 1080 (para 107). Water sampling of a catchment where pindone baits were used did not detect any pindone residues (para 111). There should be low risk to aquatic species and humans where safety procedures and good baiting practices occur (para 111). Laboratory testing indicates that pindone is toxic to some aquatic invertebrates and fish. Dr Eason considered that these results are not relevant to normal baiting operations where significant contamination of waterways with pindone is unlikely (para 113).

- 104. Dr Eason was unable to locate much toxicology data relating to the potential carcinogenicity or teratogenicity of pindone. There is also little information specifically relating to the toxicity of pindone to humans, although it is likely pindone has quite low acute toxicity (para 132).
- 105. On the basis of Dr Eason's evidence (which was uncontested) we find that that the aerial and ground spreading of 1080 is unlikely to give rise to any significant adverse effects on water quality, aquatic organisms or human health, particularly if there are adequate setbacks from water supplies and other water bodies, and comprehensive public notification procedures. We are satisfied that if adequate set-backs and operating conditions are imposed, poisoning operations in most circumstances will not result in baits entering water bodies. Even where there is a risk that some 1080 baits might enter water bodies, dilution and biodegradation will be sufficient to ensure that there any adverse effects on aquatic organisms or human health are no more than minor.
- 106. We are less confident about the potential effects of pindone on water bodies and aquatic organisms. On Dr Eason's evidence, there is limited toxicological data available both on the effects of pindone on aquatic ecosystems, and on human health. Because there is a degree of uncertainty about the effects of pindone, and the circumstances when or where it will be used, we consider t a more precautionary approach should be adopted than might otherwise be the case if poisoning operations were restricted to the use of 1080. We have taken this into account through the setbacks from water bodies and the requirements for the Operational Management and Wildlife Monitoring Plans that we have imposed in the conditions.
- 107. We also find that there may be a potential risk for people arising from the consumption of contaminated meat from animals (particularly game animals) that have ingested sub-lethal amounts of 1080 or pindone. However we consider the notification and consultation requirements we have imposed in the conditions will minimise this risk.

# Effects on non-target species

- 108. Potential impacts on non-target species raised by submitters included lethal and non-lethal effects on non-target animals such as domestic and hunting dogs, livestock, water fowl and indigenous bird species. Hunters and hunting groups (including the NZDA) opposed the application (partly) on grounds that included the potential by-kill or contamination of valued game species. The potential for prey-switching by mammalian predators from rabbits to native animals (particularly birds) after poisoning operations was also raised as an issue by Forest and Bird.
- 109. The applicant's AEE and evidence confirmed that, without adequate safeguards, some non-target animals are at risk. In particular, dogs are extremely susceptible to 1080 poisoning (particularly secondary poisoning from carcasses) and there is no known cure. We heard evidence from Federated Farmers that working dogs on properties subject to poisoning operations can be managed and trained to avoid risks from poisoning. A risk remains for hunting and domestic dogs, particularly where these are on properties adjacent to poisoning operations, or brought onto public lands where pest control operations have been carried out and poisoned carcasses may be present. This risk can potentially be addressed through poisoning exclusion areas, notification procedures, and through warning signage.
- 110. In relation to potential impacts on livestock, it was clear from the evidence that 1080 and pindone poisoning operations must be integrated with farm management, and stock withheld from poisoning areas until it is safe for them to be returned. No evidence was presented about stock losses that have arisen as a result of 1080 or pindone poisoning operations in Canterbury. However, Dr Eason's evidence noted that where livestock deaths have been reported, it has generally been due to animals

- being returned too early to areas that have been poisoned (para 55). Farmers Against 1080 did table some material about cattle deaths in the Taupo area which they linked to possible effects of 1080 poisoning. As there was no way of determining the veracity of the material tabled or the views expressed in it, we must treat this as hearsay.
- 111. Dr Eason's evidence confirmed that 1080 is toxic to birds. He considered that changes to baits and to the way poisoning operations are carried out means that fewer birds are now killed as a result of these operations. Populations of threatened species are most at risk as these have poor ability to recover from additional mortality. Monitoring results indicate that, while bird deaths do occur, 1080 poisoning operations do not generally result in population level mortality which threatens the viability of species (para 74). The evidence from both Dr Eason, and Ms Vallance, for Forest and Bird, tended to confirm that 1080 poisoning operations may in some instances enhance breeding success by reducing predation pressure. Ms Vallance was also of the view that monitoring of the effects of poisoning operations on non-target species was necessary to ensure a wide picture of the impacts of agrichemicals.
- 112. Dr Eason's evidence also identified mortality in native reptiles and birds from pindone operations. In his view, some mortality in birds of prey must be expected (para 124). Bird species killed included black backed gulls, harrier hawks, and wrybill, a threatened river bed species. Long term population level effects have not been studied, but are considered unlikely (para 128). During questioning Mr Pascoe indicated that there was a need to be cautious in relation to pindone, and identified effects on river bed birds as an information "gap" in the AEE and evidence.
- 113. Deer kill arising from 1080 operations was also identified by Dr Eason, with up to 93% mortality recorded in red deer after an aerial operation in Pureora, and 66-75% mortality in fallow deer in the Blue Mountains. Deer density may be an important factor in mortality. Dr Eason considered that deer by-kill can be avoided or substantially reduced by including deer repellent in bait. However, Mr Sullivan did not favour the use of deer repellent as he considered it would add considerable cost to an operation. In his view it was also unnecessary as deer are unlikely to be present on rabbit prone land. No evidence was provided on the effects of pindone on deer.
- 114. Ms Vallance raised the issue of prey-switching at the hearing. As we understand it, the term refers to predators such as stoats and ferrets switching their attention to native species when rabbit numbers reduce after pest control operations. The extent to which this is a potential issue is not clear, particularly as we also heard evidence from Ms Vallance, Dr Eason and Mr Walker which indicated that pest control may reduce predator numbers, as a result of a direct loss of prey (such as rabbits) but also possibly through indirect poisoning. Ms Vallance indicated that integrated pest management may be an appropriate action in areas of high conservation value. We take this to mean that that some form of co-ordinated predator control may be necessary when pest control operations are carried out in or adjacent to areas where threatened native species are present
- 115. We find that that there are likely to be impacts on non-target species, including domestic and hunting dogs, indigenous birds, waterfowl and deer, from the proposed 1080 and pindone poisoning operations.
- 116. We consider that the risk to dogs can be largely addressed by poisoning operation notification procedures, and setbacks from non-participating property boundaries, and have imposed conditions in relation to these matters.
- 117. While there does not appear to be a significant risk to indigenous birds, waterfowl and deer populations from 1080 operations, we do consider there is sufficient uncertainty about the local impacts of poisoning operations that additional information and notification and consultation procedures are necessary in some circumstances,

- particularly where threatened species may be present or areas are used for recreational hunting or wild meat recovery. While we accept that deer are unlikely to be found in rabbit prone areas, this may not be the case with the wallaby control area.
- 118. We have also reached the view that in situations where threatened indigenous species and water fowl may be adversely affected by discharge events, monitoring of a representative sample of poisoning operations and habitats should form part of the conditions of this consent. This would assist in establishing baseline effects, enable poisoning operations to be adapted to reduce or eliminate impacts on non-target species where necessary, and inform subsequent reviews of the consent.
- 119. We accept that the use of pindone may be necessary in some situations, for example where bait shyness to 1080 has developed amongst target pest populations. However we consider the limited amount of information presented to the hearing about the effects of pindone means that there is some uncertainty about the nature and scale of effects on non-target species, and on aquatic ecosystems. We have taken this into account through the setbacks from water bodies and in the requirements for the Operational Management and Wildlife Monitoring Plans that we have imposed in the conditions.
- 120. We find that there is the potential for prey switching to occur as a result of pest control operations, but there is uncertainty about the outcome for populations of native species. Because of this uncertainty, we consider that a precautionary approach is required where populations of threatened species may be at risk. We consider that the best way to address this is through the Operational Management Plan and the monitoring conditions. If monitoring demonstrates that prey switching is having significant adverse effects, remedial action could then be addressed through the review provisions of the consent.

# Management of consent

- 121. It is proposed that the consent will be held by the Biosecurity Section of Environment Canterbury, but poisoning operations would be carried out by individuals or groups of landholders under the overall supervision of the Biosecurity Section. Several submitters raised concerns about how the consent would be implemented, and how the Biosecurity Section would ensure that individual poisoning operation would be carried out appropriately and in accordance with the consent conditions.
- 122. In particular, NZDA were concerned that the consent would be prohibitively expensive to enforce, with "myriad" land-owners and contractors needing to be monitored. In his oral evidence, Mr Lark noted the lack of criteria-based decision tools in the conditions to guide the implementation of the consent. Specifically, NZDA were critical of an absence of criteria or indicators which would guide when aerial operations should occur, as opposed to ground-based ones.
- 123. Mr Donald Aubrey for Federated Farmers considered that it was vitally important that details of any proposed operations are made available to adjoining landowners, persons who have permission to enter private lands, and general public in relation to public areas. Neighbours need to be notified of proposed operations so that they can identify any water supply on adjoining land, risks to their health, animals' health or their own business. Public land managers also need to notify adjoining land owners of any proposed operations, particularly along rivers.
- 124. Ms Elain Curin and Mr Harry Lowe raised concerns about the potential for poisoning operations on adjoining properties to contaminate Pukaki Downs Station which is in the process of being converted to organic status, and also the potential risk to the rabbiting dog on the property.

- 125. For the applicant, Mr Graham Sullivan outlined how the consent will be exercised. If landowners or occupiers wish to exercise the consent, they will need to make written application. The application will need to include a control plan, and details of the operator, the discharge type, area and discharge rates, the baits and sowing rate, and the proposed date of the work. Contractors will be from a pool identified by the Biosecurity Section of Environment Canterbury. The Biosecurity Section will not authorise the exercise of the consent unless satisfied that all conditions will be complied with, and best operational practice used. The decision to allow a landholder to utilise the consent will be made by the Biosecurity Manager, who will be responsible for advising Environment Canterbury Compliance Monitoring staff of this approval to exercise the consent. The Biosecurity Section will provide the landholder with information about what needs to be complied with in exercising the consent. This will include the relevant requirements under other legislation and regulations which govern the use of 1080 and pindone.
- Mr Steve Palmer outlined how existing aerial operations are generally carried out, and Mr James Tricker from the Environment Canterbury Compliance Monitoring section explained how compliance with the conditions of the consent would be monitored.
- 127. The applicant provided a set of amended conditions which included provision for the preparation of an Operational Procedures Manual (OPM). This would address the matters identified by Mr Sullivan by setting out the requirements for a person seeking authorisation to exercise the consent, and also criteria for determining when pindone or 1080 is the best option in a poisoning operation. A Monitoring Plan in relation to effects on waterfowl was also provided for in the draft conditions offered by the applicant.
- 128. We find that, because this would be a global consent held by one party and carried out by others, there are potential issues around the management of the consent, and how conditions would be implemented at the operational level. In particular, the proposed draft conditions lack the necessary guidance and criteria to ensure appropriate choices are made in terms of best practice at the operational level, and that adverse effects are avoided, remedied or mitigated.
- 129. We think that the OPM is a good starting point, but the following additional matters need to be incorporated in that document:
  - 1) Criteria for determining when aerial or ground based operations will be the most appropriate discharge method for a poisoning operation.
  - Consultation and notification requirements, and in particular consultation with adjoining land holders where there is a potential risk to health, livestock business or land status.
  - 3) Notification and consultation procedures where risks may arise for activities such as hunting or other recreational activities on operational areas or adjoining lands (particularly public lands) which are not part of the operation.
  - 4) Identification of habitats of threatened native species which may be adversely affected by poisoning operations, and ways of mitigating these effects.
  - 5) Operational setback requirements where these are not specified in the conditions (e.g. from property boundaries).
  - 6) Any monitoring requirements associated with individual operations.
- 130. In addition, we consider that the conditions should set out the purpose of both the OPM and the Monitoring Plan, so that it is clear to those administering the consent what these documents are intended to achieve.

# Section 104

# The effects on the environment

- 131. The actual and potential effects on the environment of allowing the activity that we must have regard to are:
  - Positive effects on agricultural productivity, soil conservation, indigenous ecosystems and biodiversity;
  - Potential adverse effects from the poisons entering water including effects on water quality, aquatic ecosystems and human health and well-being;
  - Potential adverse effects from the poisons on land including effects on soil and terrestrial ecosystems; biodiversity; human health and well-being, and non-target species, including domestic animals.

#### Positive effects

132. The control of rabbit, wallaby and possum pests is a matter of regional significance, and the protection of significant habitats of indigenous flora and fauna is a matter of both regional and national importance. The discharge of 1080 or pindone impregnated baits to poison pest animals is an effective primary means of rapidly reducing pest populations. Aerial application complements ground-based poisoning and other pest control methods and will assist in protecting and restoring agricultural productivity, and aid soil conservation. It is also likely to assist the protection of indigenous ecological and biodiversity values in Canterbury by reducing or removing browsing pressure on native plants and indirectly lowering predator populations. Overall, there will be significant positive effects from pest animal control, and both aerial and ground-based applications of poisons are needed to achieve this.

# Adverse effects on water quality and aquatic ecosystems

133. We have discussed these effects under the issues and findings above. We consider that the actual and potential adverse effects on water quality, aquatic ecosystems and human drinking water of the proposed activity, undertaken in accordance with the suite of imposed conditions, will be minor.

#### Adverse effects on river beds, terrestrial ecosystems and non-target species

134. We have discussed these effects under the issues and findings above. The actual and potential effects from the aerial discharge of 1080 and pindone on riverbeds, terrestrial ecosystems and non-target species in the application area are expected to be no more than minor. While there is a degree of uncertainty about the effects on non-target species, we are confident that that any potential adverse effects that may arise can be addressed through the proposed operational procedures, monitoring provisions and review clauses in the conditions. These conditions will ensure that individual poisoning operations can be adapted in response, if needed, over the duration of any consent.

#### Conclusion on effects on the environment

Overall, we consider that, subject to the conditions we have imposed, the application will give rise to a number of positive effects, and that any adverse effects will be no more than minor.

# Section 104D of the Act - Non-complying activities

136. In respect of this application the discharge of 1080 or pindone poison baits onto land where contaminants may enter water is a non-complying activity. Therefore we must be satisfied that either the adverse effects of the activity on the environment will be minor, or the activity will not be contrary to the objectives and policies of the relevant plans and relevant proposed plan.

137. We conclude that, subject to the conditions imposed, the adverse effects on the environment of the discharge to water will be minor so Section 104D is satisfied. For the record, we consider that, overall the activity is not contrary to objectives and policies of the relevant plans and is in specific accord with the objectives and polices of the proposed plan.

# Section 105 of the Act

- 138. As the application is for a discharge to the environment regard must be had to the criteria in Section 105(1) of the Act, which are:
  - a) the nature of the discharge and the sensitivity of the receiving environment to adverse effects;
  - b) the applicant's reasons for the proposed choice; and
  - c) any possible alternative methods of discharge, including discharge into any other receiving environment.
- 139. We have reached the conclusion that the effects on the receiving environment will be no more than minor, and are satisfied that the applicant has provided adequate reasons for the proposed discharges.
- 140. Case law requires the consent authority to establish whether, in proposing a discharge of contaminants, the applicant has given adequate consideration to alternatives that would avoid, remedy or mitigate the effects of the discharge of contaminants, and then made a reasoned choice.
- We are satisfied that this is the case for the discharge of 1080 and pindone poison baits to land where they may enter water, and onto land in a riverbed.

#### Section 107 of the Act

- We must also have regard to the standards in Section 107 of the Act, which apply to all discharges to water or to land where a contaminant may enter water.
- 143. In respect of this proposal, the discharge of 1080 or pindone is not likely to result in any of the effects listed in Section 107 therefore there is no impediment to granting the discharge permit under this section.

# Part 2 of the Act

#### Section 5

- 144. In the Act, sustainable management is defined as "managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while
  - "(a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonable foreseeable needs of future generations; and
  - (b) Safeguarding the life supporting capacity of air, water, soil and ecosystems; and
  - (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment"
- 145. By controlling pests the application would enable landholders and rural communities to provide for their social and economic well being and would safeguard the life supporting capacity of soil and ecosystems, and assist in sustaining their potential for future generations. Adverse effects (other than minor effects) arising from the activity on the natural environment and on the cultural well being of people and communities and their health and safety, would be able to be avoided, remedied or mitigated through the imposed conditions.

# Sections 6, 7 and 8

- 146. Section 6 of the Act lists matters of national importance that must be recognised and provided for in this decision. This includes Section 6(a) that requires the protection of significant areas of indigenous vegetation and habitats of indigenous fauna.
- 147. By reducing or removing browsing pressure on native plants and indirectly lowering predator populations, the control of pest animals would assist in the protection of significant indigenous flora and fauna habitat in terms of section 6(c). There is a degree of uncertainty as to whether poisoning operations could also give rise to adverse effects on significant indigenous fauna in particular circumstances, but we are confident that any potential significant adverse effects would be able to be avoided, remedied or mitigated through appropriate operational, monitoring and review procedures.
- 148. Section 7 of the Act lists matters to which we must have particular regard. Three are relevant in this case; Section 7(c) the maintenance and enhancement of amenity values; Section 7(d) intrinsic values of ecosystems and Section 7(f) the maintenance and enhancement of the quality of the environment.
- 149. While the application may have some short term effects on amenity values associated with restrictions on recreational access and hunting in terms of Section 7(c), control of pests may enhance overall amenity values and the overall quality of the environment in the longer term through a reduction in browsing pressure on vegetation, reduced soil erosion and an indirect reduction in predator numbers. Subject to the conditions we have imposed, we consider that these factors will also result in the intrinsic values of ecosystems being maintained, and the quality of the environment enhanced.
- 150. In relation to Section 8 of the Act, the information provided through the AEE and at the hearing indicates that there has been an appropriate level of consultation with tangata whenua and the relevant runanga and this is reflected in the conditions. In addition provision has been in the conditions for further site based cultural monitoring and a consultation with runanga.
- 151. We note that the decision of ERMA on the controls for 1080, identified a particular matter to be addressed was, to provide for better engagement with iwi/Maori to achieve improved outcomes in terms of the management of taonga species and resources and will be looking for this to be ensured as far as possible when permissions are granted for the aerial use of 1080. The application and imposed conditions establishes on-going consultation with runanga throughout the period of consent.

#### **Part 2 Conclusions**

Overall, we consider that, subject to the conditions proposed, the application is consistent with the sustainable management purpose and Sections 5, 6, 7 and 8 of the RMA.

#### Decision

- 153. Having considered all of the relevant matters under Section 104 and Part II, as discussed above, it is our decision that the application can be granted for a duration of 15 years, subject to conditions.
- 154. The reasons for this decision are:
  - The activity will give rise to a number of positive effects;

- Any adverse effects on the environment of the activity can be managed through the imposed conditions, and will be less that minor;
- The activity is in accord with the objectives and policies of the Regional Policy Statement, and the regional plans; and,
- The activity is consistent with Part II of the RMA.

# **Conditions**

- 155. Section 14 of the AEE contained a set of suggested consent conditions. In his section 42A Report, the reporting officer proposed a number of additional mitigation measures that could be imposed as conditions. Many of these matters were incorporated in the revised draft conditions that the applicant presented at the hearing. During the adjournment of the hearing we requested a further set of conditions from the applicant that took into account issues which had arisen at the hearing. The applicant complied with this request. There was a high degree of agreement between the reporting officer and the applicant over these conditions.
- 156. In their right of reply the applicant provided another set of draft conditions that reflected their proposition that much of the application was now a permitted activity. The main changes between this and the preceding version of conditions was the deletion or amendment of some setback and monitoring requirements, and the insertion of new notification conditions.
- 157. Although we find that many of the proposed conditions put forward by the applicant are reasonable and appropriate, we have also made a number of changes and additions in order to reflect our findings above. The main amendments we have made to the proposed conditions are set out below. Except where stated, the numbers all refer to those in our final conditions.

## **General**

- 158. Condition 2 has been amended to reflect our findings in relation to the lands that the application applies to. These are principally privately owned lands in Canterbury, but includes crown owned roads, waterway margins, and riverbeds and crown land within private land. Other Department of Conservation land and pastoral leases and licences fall outside the application, and have been deleted from the conditions.
- 159. We have included a requirement in a new Condition 3 that the consent holder make available on the Environment Canterbury website an online interactive map that will allow the identification of all land that is the subject of the application. No maps or other information were presented to the hearing that would allow the easy identification of specific areas where poisoning operations may be carried out. Because of the region wide nature of the consent, we consider that better information is required to provide a reasonable level of certainty to the public about which areas of land may be affected by the application.
- 160. Condition 4 has been amended to make it clear that persons living on a property are required to have the necessary authority before they can be considered to be occupiers and therefore grant permission for a discharge event on that land.
- 161. We have added a number of additional exclusion areas to Condition 7. These largely relate to drinking water supply sources, and reflect Ministry of Health requirements, and the need to protect these water supply sources from contaminants.
- 162. In Condition 7 we have extended the application of the 20 metre setback for aerial discharges from water bodies over 3 metres wide to all water bodies visible from the air. This is because we consider that there is no basis for distinguishing between water bodies that are greater or less than 3 metres in width in terms of potential adverse ecological effects from the pesticides entering water. It is also possible that

- smaller water bodies may potentially be at greater risk from contamination because of their lower volume and/or flow. As there may be practical difficulties in avoiding smaller water bodies that are not visible during aerial operations, only water bodies less than 3 metres in width that can be seen from the air have been included in Condition 7. We have addressed potential effects on water bodies not covered by this condition by retaining in amended form Condition 8. This requires all practicable measures be undertaken to avoid discharging pesticides into a flowing or standing water body less that 3 metres in width that is not visible from the air.
- We consider that, where poisoning is necessary adjacent to water bodies, this can be adequately carried out through ground-based operations. On the basis of the evidence we are satisfied that these operations can be carried out in reasonable proximity to water bodies without baits entering water. For these reasons we have amended Condition 10 so that the setback for ground-based operations (which was originally 20 metres from water bodies over 3 metres in width) is now 5 metres for all water bodies. We prefer a 5 metre setback to the 3 metres sought in the applicant's latest proposed conditions as we agree with the Investigating Officer that 3 metres may not be sufficient to prevent baits being washed in to a waterway. Condition 10 has also been amended so that the exclusion areas for water supply sources are the same for ground-based operations as those for aerial operations, as we feel that it is important that the integrity of these sources is safeguarded.
- 164. We have deleted the applicant's proposed Condition 9, which provided that there be no discharge of pesticides when rain is forecast of when rivers are likely to be in flood. We considered that the wording of the condition was not sufficiently certain to be enforceable, and was this was unlikely to be addressed through amendments. We were also of the view that cost and the potential risk of failure was likely to be a significant constraint on carrying out poisoning operations prior to or during these events.

#### **Notification**

165. Condition 13 now includes a requirement that the public notice under Condition 12 state whether a poisoning operation will be aerial or ground-based. Condition 14 has also been amended to require warning notices to include a map in order to more clearly illustrate the boundaries of the proposed discharge area, as well as those of any exclusion areas. Warning notices are also to be erected at access points to public lands that adjoin the discharge area. This is to ensure that adequate warning is given to persons accessing these lands who may subsequently venture onto other areas affected by poisoning operations, or where the effects of operations may spill over and have implication for hunters or other recreational users of adjacent public lands (for example through the presence of baits or poisoned animals that may place dogs or people at risk).

#### Operations

- 166. Condition 24 has been amended to clearly state the purpose of the Operational Procedures Manual, and to include additional information requirements. To ensure best practice is followed by landholders undertaking poisoning operations these include criteria and reasons for adopting particular poisons and discharge methods, and a requirement for maps of the proposed discharge areas to be provided. We have also required that additional notification and consultation procedures be included to address situations where poisoning operations would give rise to a significant risk to wild meat recovery and hunting or other recreational activities within discharge areas, or on adjoining public lands.
- 167. Condition 24 also now requires that the Manual identify and address potential environmental impacts arising from individual poisoning operations, and in particular

effects on threatened indigenous species. Evidence presented to the hearing indicated that by-kill of non-target species (including threatened indigenous species) can occur as a result of poisoning operations. The potential for poisoning operations to give rise to impacts on threatened species from prey switching by predators in some circumstances was also raised. While we think that there is a low probability of these impacts occurring, and a degree of uncertainty about the outcome, there may be a potential high risk for threatened species in some circumstances. We therefore consider that a precautionary approach is required, and this is reflected in the condition.

# **Monitoring**

168. Conditions 34 and 35 now set out additional requirements for a Wildlife Monitoring Plan, including a timeframe and recipient for the Plan, and a clear statement of purpose. To ensure that the Plan is scientifically valid, there is also a requirement that it be prepared by a person with the relevant expertise in the wildlife monitoring. Under Condition 35 we have decided to include a specific requirement for impact monitoring of a representative sample of discharge areas that contain or adjoin water bodies, or habitat of threatened bird species. This is to ensure that the monitoring is robust, and that if significant adverse effect on native birds and waterfowl arise, sufficient information is available to develop measures to avoid, remedy or mitigate these effects in future discharge events. Under Condition 38 we have also introduced a requirement that the carcass of any native bird or waterfowl that is found and suspected to have been killed as a result of a discharge event it should be made available to the consent holder for analysis.

## Reporting

169. Condition 39 now includes a requirement for the annual report to include information about the method and area of each discharge event.

#### Advice notes

- 170. As discussed, the use of 1080 and pindone is also subject to conditions in HSNO regulations. The conditions of the HSNO regulations are not the same for both 1080 and pindone, as the 2007 decision by ERMA on the review of the use of 1080, amended and extended the conditions of use for 1080, particularly for aerial applications. The conditions of this consent recognise those conditions imposed under HSNO that are relevant to the resource consent, but do not include conditions which do not relate to aspects of the poisoning operation that are not within the jurisdiction of Canterbury Regional Council. Where the conditions relate to the same area of control as HSNO regulation, we have, as far as possible and as appropriate, made the conditions of this consent consistent with HSNO regulations.
- 171. We have decided not to include the wide range of advice notes proposed by the applicant that referred to other statutes and regulations that may have to be complied with. These do not form part of this consent and it is not the role of this consent to provide such detail. We have retained two advice notes alerting that other statutes and regulations may also need to be complied with.

# **Resource Consent**

To:

Discharge contaminants onto land in a river bed or lake bed, and onto land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water.

Location:

Everywhere in the Canterbury Region excluding those areas identified in Condition 2.

Duration:

15 years

#### **CONSENT CONDITIONS**

#### General

- 1. The discharge shall be only the following pesticides applied as pellets, or carrot or cereal bait for the control of rabbits, wallabies or possums:
  - a. sodium monofluoroacetate, referred to as 1080; or
  - b. 2-Pivalyl-1,3-Indandione, referred to as pindone.
- 2. The discharge of pesticides shall not occur on any land:
  - a. administered by the Department of Conservation or otherwise owned by the Crown, except where that land is:
    - i. a public road which passes through private land; or
    - ii. along the margins of a water body; or
    - iii. the bed of a river or a lake; or
    - iv. located within the boundaries of private land.
  - b. zoned for residential purposes in a district plan.
- 3. The consent holder shall maintain and make available on the Canterbury Regional Council website an online interactive map at a scale that will allow the identification of all land which has been and may be subject to discharges permitted under this application.
- 4.
- a. The discharge of pesticides shall not occur on land without the written permission of the land occupier, or occupiers.

b. The consent holder shall retain a copy of the land occupier's permission for twelve months from receipt, and shall provide a copy within five working days to the Canterbury Regional Council, Attention RMA Compliance and Enforcement Manager, upon request.

For the purposes of this condition the land occupier is defined as the person(s) living on that property who has the authority to grant permission, or where there is no-one living on the property, the owner(s) of the property or a duly authorised agent.

- 5. Apple shall not be used as bait.
- 6. Mixing, loading or temporary storage of pesticides shall not occur in a location where the pesticides may enter surface water or groundwater
- 7. There shall be no aerial discharge of pesticides which would result in pesticide baits being present on land within:
  - a. 100 metres of any dwelling or any hut used for public accommodation.
  - b. 200 metres of any well used for a community drinking water supply;
  - c. 400 metres upstream and 200 metres in any other direction, from an intake from a river used for community drinking water supply;
  - d. 200 metres from the edge of a lake or reservoir used for a community drinking water supply;
  - e. 50 metres of any well used for a domestic water supply;
  - f. 200 metres upstream and 50 metres in any other direction, from an intake from a river used for a domestic water supply;
  - g. 50 metres from the edge of a lake or reservoir used for a community drinking water supply;
  - h. 10 metres of a formed public road;
  - i. 20 metres of any flowing or standing water body that is:
    - i. in excess of three metres wide, or
    - ii. less that three metres wide and visible from the air:
  - j. 20 metres of the boundary of the area of a discharge event...

For the purposes of Conditions 7 and 10 a community drinking water supply is defined as a publicly or privately owned drinking water supply that serves 500 or more people at least 60 days of the year, but does not include a rural water scheme established solely to provide water for livestock.

- 8. For all aerial discharge of pesticides, all practicable measures shall be undertaken to avoid discharging pesticides into a flowing or standing water body which is less than three metres wide and not visible from the air.
- 9. There shall be no discharge to water from the ground-based discharge of pesticides.
- 10. There shall be no ground-based discharge of pesticides which would result in pesticide baits being present on land within:
  - a. 5 metres of any flowing or standing water body.
  - b. 50 metres of any well used for a community drinking water supply;

- c. 50 metres, and extending 100 metres upstream, from an intake from a river used for community drinking water supply;
- d. 50 metres from the edge of a lake or reservoir used for a community drinking water supply;
- e. 20 metres of any well used for domestic water supply;
- f. 20 metres, and extending 50 metres upstream, from an intake from a river used for a domestic water supply;
- g. 20 metres from the edge of a lake or reservoir used for a domestic water supply.
- 11. There shall be no more than five aerial discharge events onto any area of land within the duration of the consent.

#### **Notification**

- 12. The person authorised to exercise this consent shall notify the following persons at least ten working days, but not more than 2 months, prior to the proposed discharge event:
  - all occupiers, owners and lawful administrators of all properties adjoining land onto which the discharge will occur;
  - ii. all persons who hold authority to take water from a well or surface water intake located within the area of the proposed discharge event:
  - iii. the RMA Compliance and Enforcement Manager at Canterbury Regional Council;
  - iv. the owners of land in or adjacent to the bed of a river or a lake within the area of the proposed discharge event.
- 13. A notice required by Condition 12 shall include:
  - i. the approximate date on which the discharge is expected to commence, and the expected duration of the discharge event;
  - ii. the name and nature of the substance to be discharged;
  - iii. whether the discharge will be aerial or ground-based;
  - iv. a description of the area over which the substance will be discharged, including a map showing;
    - 1. the boundaries of the area of discharge;
    - 2. exclusion areas around water supply sources and water bodies; and
  - v. the name, address and contact phone number of the person authorised to exercise this consent.
- 14.
- a. At least two working days prior to the discharge, warning signs shall be erected at every place where people normally obtain access to the discharge area, or to public land adjoining the discharge area.

- b. The warning signs shall be repaired and/or replaced within 24 hours of discovery or notification of damage or theft.
- c. The signs shall state:
  - i. The nature of the operation;
  - ii. The pesticides to be applied;
  - iii. The bait the pesticides will be applied in;
  - iv. The date the pesticides are scheduled to be discharged;
  - v. A contact name and telephone number for enquiries.
- d. The signs shall:
  - i. Show the boundaries of the discharge area;
  - ii. Include advice warning the public not to take animals into the discharge area;
  - iii. Be capable of being read from a public area at a distance of at least five metres from the sign; and
  - iv. Include a description or photograph of the baits.
- e. The signs shall remain in place:
  - i. Until all poisoned bait and carcasses have completely broken down as demonstrated by bait and carcass monitoring; or
  - ii. For a minimum period of six months following every 1080 discharge event and eight months following every pindone discharge event;

whichever is the longer period of time.

- 15.
- a. The person authorised to exercise the consent shall advertise its programme for an aerial discharge event in the public notices of the Christchurch Press and any other relevant local newspaper for that area at least 10 working days, but not more than 2 months, in advance of the aerial event.
- b. The advertisement shall identify:
  - i. The nature of the discharge event;
  - ii. The area of the discharge event:
  - iii. The type of pesticide to be used;
  - iv. The type of bait to be used, e.g. carrots, cereal;
  - v. The date(s) the poisoned baits are scheduled to be discharged; and
  - vi. A contact name and telephone number for enquiries.

c. The RMA Compliance and Enforcement Manager at the Canterbury Regional Council shall be notified of the intended time and location of an aerial discharge event at least two working days prior to the event commencing.

#### Consultation

- 16. Prior to any 1080 or pindone discharge event commencing on any land which is not private land, the Consent Holder shall notify the Papatipu Runanga whose rohe it is, of the proposed operation at least 20 working days prior to the commencement of the discharge event.
- 17. The Consent Holder shall, at least once per year, give Te Runanga o Ngai Tahu representatives the opportunity, through a written invitation, to attend an annual meeting to discuss:
  - i. A summary and review of 1080 and pindone discharge events which have occurred in the previous year under this consent.
  - ii. 1080 and pindone discharge events proposed for the following year.
  - iii. The results of any monitoring or studies carried out on the effects of 1080 and pindone.
- 18. At each meeting Te Runanga o Ngai Tahu shall be given the opportunity to give a presentation about cultural issues relating to the discharge of 1080 and pindone, to any persons authorised to exercised this consent.

# **Operations**

- 19.
- a. The pilot of any aircraft used to discharge pesticides shall hold an agricultural rating issued in accordance with Part 61 of the Civil Aviation Authority Rules.
- b. The boundaries of the discharge area, including exclusion areas and separation distances, shall be shown to the pilot by the person authorised to exercise the consent.
- c. The aircraft used to discharge a substance shall be guided by an on-board differential global positioning system, and the flight paths shall be:
  - recorded by the on-board differential global positioning system and this record shall be maintained for at least 12 months following the discharge and made available to Environment Canterbury upon request; and
  - ii. checked to ensure that no substance has fallen outside the discharge area.
- 20. An aircraft that is carrying out a discharge event shall not, when flying to or from the discharge area, fly over:
  - i. 100 metres upstream of an abstraction point for a water supply for human consumption;

- ii. a dwelling, farm building, recreational hut, or other building used for accommodation.
- 21. The equipment used to discharge the pesticides from the aircraft shall:
  - i. be of an appropriate capacity to match the aircraft and loading equipment;
  - ii. be designed for distributing the pesticides being discharged;
  - iii. have a proven reliable system for the pilot to start and stop the discharge; and
  - iv. be operated in a manner which ensures there is no discharge of pesticides outside of the discharge area.
- 22. If a pesticide is discharged outside the boundary of the discharge area for a discharge event, or is lost or spilt, Canterbury Regional Council shall be notified as soon as possible, but within 12 hours, with details of the nature and quantity of the pesticide and the location, date and time of the discharge, loss or spill.
- 23. An Operational Procedures Manual shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, within six months of the consent being issued, and prior to the consent being first exercised.
- 24. The purpose of the Operational Procedures Manual is to set out the procedures to be followed before authorising another party to exercise this consent, and to provide an overall framework for implementing and monitoring pesticide discharges made under this consent. The Operational Procedures Manual shall include, but not be limited to:
  - a. the process of, and criteria for, assessing the appropriateness of a proposed pest control operation, including the reasons for adopting particular poisons and discharge methods.
  - b. the information to be provided by any persons applying to exercise the consent, including maps of a scale sufficient to identify the discharge areas;
  - c. the requirements for consultation with adjoining land holders, particularly where there is a potential risk to health, livestock business or land status.
  - d. additional notification and consultation procedures where a significant risk may arise for wild meat recovery, hunting or other recreational activities within discharge areas, or on adjoining public lands.
  - e. operational setback requirements where these are not specified in the conditions (e.g. from property boundaries).
  - f. the circumstances where additional information and actions may be required to manage the potential effects of a particular discharge event, including:
    - i) the identification of habitats of threatened indigenous species that may be adversely affected by discharge event;
    - ii) situations where there is the potential for prey switching to have significant adverse effects on threatened indigenous species; and

- iii) the mechanisms to be used to minimise these effects.
- g. other legislation, best practice guidelines or any other procedures to be followed when exercising this consent;
- h. monitoring and reporting requirements for any persons exercising this consent; and
- contact details for the Canterbury Regional Council Biosecurity Manger or other person responsible for managing and authorising all persons exercising this consent.
- 25. Within 30 days of any update of the Operational Procedures Manual, the consent holder shall forward a copy of any updated version to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager.
- 26. A copy of the latest version of the Operational Procedures Manual shall be held by the consent holder at all times.
- 27. A copy of this resource consent shall be given to the person(s) responsible for exercising this consent in each 1080 or pindone discharge event, prior to the discharge event commencing.
- 28. The Consent Holder shall ensure that all persons undertaking activities authorised by this consent are aware of the consent conditions prior to the discharge event commencing.
- 29. The Consent Holder shall keep records of the date, location, application rate and concentration of all pesticides discharged, and this shall be made available to the Canterbury Regional Council RMA Compliance and Enforcement Manager upon request.

# **Monitoring**

- 30. For any discharge of 1080 or pindone in a public area, the Consent Holder shall facilitate cultural monitoring by ensuring that:
  - i. Where requested by Te Runanga o Ngai Tahu or Papatipu Runanga, the Consent Holder shall provide an opportunity for a representative of the appropriate Papatipu Runanga to visit the discharge area after the aerial discharge of 1080 or pindone to view the result of the operation (referred to as 'cultural monitoring').
  - ii. A report on the cultural monitoring shall be provided to the Canterbury Regional Council upon request.
- 31. Representative samples of surface water shall be taken by an appropriately qualified person from a representative site or range of sites on one or more water bodies. These sites should be located where pesticides discharged within 200 metres of a domestic or community water supply may enter water. The sites shall be identified in consultation with the Canterbury Regional Council Director Investigations and Monitoring before a discharge event commences. Samples shall be taken at each site within:

- i. 4 to 8 hours after the discharge event has ceased; or
- ii. As determined by the Medical Officer of Health. In the event that the Medical Officer of Health determines that no water sampling is required, then Condition 30 shall not apply in respect of 1080 discharges, but shall still apply for discharges of pindone.
- 32. Water samples shall be analysed for the substance discharged, either sodium fluoroacetate (1080) or 2-Pivalyl-1,3-Indandione (pindone), using the most appropriate scientifically recognised and current method by a laboratory accredited for the method of analysis by International Accreditation New Zealand, or an equivalent authority.
- 33. A report that provides an analysis of the results of the water sampling undertaken in accordance with Condition 30 shall be provided to the Canterbury Regional Council Attention: RMA Compliance and Enforcement Manager within one month of the analyses being received by the Consent Holder. Where either sodium fluoroacetate (1080) or 2-Pivalyl-1,3-Indandione (pindone) is detected in the water samples the report shall explore the reasons for the presence of the substances in the water, and describe the steps the Consent Holder will take to reduce the risk of formulated substances entering water in future discharge events.
- 34. A Wildlife Monitoring Plan shall be prepared by the Consent Holder and shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager within six months of the consent being issued and prior to the consent being first exercised.
- 35. The purpose of the Wildlife Monitoring Plan is to set out the methodology and processes to be used in a monitoring programme to assess adverse effects of 1080 or pindone discharges authorised by this consent on native birds and waterfowl, and the procedures to be following in the event of such effects being discovered. The Wildlife Monitoring Plan shall be prepared by a person or persons with relevant expertise in wildlife monitoring and impact assessment and shall include, but not be limited to:
  - a. Best practice guidelines or other procedures to be followed in the selection of the methodologies to be used in the monitoring programme.
  - b. Relevant linkages to complementary monitoring and research programmes undertaken by the Canterbury Regional Council or other Local Authorities, the Department of Conservation, the Ministry of Health, Crown Research Institutes, State Owned Enterprises or any other relevant organisations.
  - c. A requirement to carry out an appropriate level of baseline and impact monitoring within at least the first 5 years of the exercise of the consent, including, but not limited to, impact monitoring of a representative sample of discharge events in the following areas:
    - Where a discharge area contains or adjoins a waterway, lake, wetland or riverbed; and
    - ii. Where a discharge area contains, is within, or is immediately adjacent to, an area that has been identified as habitat of threatened native bird species. .

- d. Any procedures in addition to Condition 38 to be followed by the Consent Holder in the event of a discharge of 1080 or pindone causing any significant impact on native birds or waterfowl and steps to be taken to mitigate such effects during future discharge events.
- e. A framework for reporting results to Canterbury Regional Council and other relevant organisations.
- 36. The consent holder shall forward a copy of any updated version of the Wildlife Monitoring Plan within 30 days of completing a review to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager.
- 37. A copy of the latest version of the Wildlife Monitoring Plan shall be held by the consent holder at all times.
- 38. Where a native bird or waterfowl death has occurred in the discharge area and is suspected to have been caused by 1080 or pindone poisoning, the carcass should be made available to the Consent Holder, and, if made available, the Consent Holder shall:
  - Have the carcass analysed for cause of death using the most appropriate scientifically recognised and current method by a laboratory that is certified for that method of analysis by an appropriate independent accreditation authority; and
  - ii. Provide the results of the analysis to the landowner, Fish and Game New Zealand, Canterbury Conservancy Department of Conservation, Te Runanga o Ngai Tahu, and the Papatipu Runanga for that area within 10 working days of the receipt of results.

#### Reporting

- 39. The consent holder shall, by 30 October each year, provide the Canterbury Regional Council RMA Compliance and Enforcement Manager with an annual report summarising all 1080 and pindone discharge events for the preceding year carried out under this consent. The report shall include:
  - i. The date and location of the 1080 and pindone discharge events.
  - ii. The method and area of each discharge event.
  - iii. The rate of application of 1080 or pindone for each discharge event.

#### Review

- 40. The Canterbury Regional Council may, once per year, on any of the last five working days of October, serve notice of its intention to review the conditions of this consent for the purposes of:
  - Dealing with any adverse effect on the environment which may arise from the exercise of this consent and which it is appropriate to deal with at a later stage; or

b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

# **Advice Notes**

- 1. The Consent Holder and all persons undertaking activities authorised by this consent are advised that the discharge of 1080 or pindone are subject to other regulatory requirements which may include, but are not necessarily limited to:
  - a. Hazardous Substances and New Organisms Act (HSNO) Act 1996;
  - b. Hazardous Substances (Classes 6, 8 and 9 Controls) Regulations 2001;
  - c. ERMA controls for formulated substances containing sodium fluoroacetate (1080) pursuant to the Hazardous Substances and New Organisms (HSNO) Act 1996;
  - d. Summary of Approvals of Substances transferred under the Hazardous Substances (Vertebrate Toxic Substances) Transfer Notice 2004;
  - e. Conditions on permissions issued by the Medical Officer of Health;
  - f. Health Act 1956;
  - g. Civil Aviation Act 1990 and Civil Aviation Rules; and
  - h. The Canterbury Regional Pest Management Strategy.
- 2. This consent is issued under the Resource Management Act 1991 and does not remove the need to comply with all other applicable Acts (including the Property Law Act), regulations, Bylaws, and rules of law. Note that this consent does not give the right to enter onto or above private land to exercise the consent.

**Hearing Commissioners** 

22nd day of March 2011