

Appendix 9: Draft proposed conditions

SCOPE

- 1) The discharges shall only be agrichemicals used for the purpose of vegetation clearance within and near waterways across the Canterbury Region.

For the purpose of this consent:

- i. vegetation clearance is the removal of vegetation within and near waterways for the purpose of flood and drainage management, biodiversity improvements and biosecurity.*
- ii. The term agrichemical includes herbicides any required adjuvants.*

- 2) Agrichemicals may be discharged:
 - a) To water;
 - b) To land where they may enter water;
 - c) To air; and
 - d) To riverine environments within the coastal marine area.

For the purpose of this consent, riverine environments within the coastal marine area means the typical river environment, and connected fresh and brackish water environments, where that river connects to the coastal marine area as it exits to the sea, as described in clause B of the definition of the coastal marine area in the Resource Management Act 1991.

SCHEDULE OF AGRICHEMICALS TO BE USED

- 3) All agrichemicals able to be used under this consent shall be included in Schedule CRCXXXXXX.
Agrichemicals included in Schedule CRCXXXXXX:
 - a) Shall be approved by the Environmental Protection Agency of New Zealand for the intended use; and
 - b) May be any agrichemicals included subject to condition 6 and 7 below.
- 4) Schedule CRCXXXXXX may be updated at any time, subject to condition 5 and 7 below, with all updates provided to Canterbury Regional Council Science Manager and Compliance Monitoring prior to any new agrichemical being used.
- 5) Where agrichemicals included on Schedule CRCXXXXXX are no longer approved by the Environmental Protection Agency of New Zealand for the intended use:
 - a) They are no longer able to be used under this consent; and
 - b) Must immediately be removed from Schedule CRCXXXXXX.
- 6) Agrichemicals may be included in Schedule CRCXXXXXX where they are formulations containing the herbicides glyphosate or triclopyr as the active ingredient and adjuvants.
- 7) For agrichemicals other than those captured by condition 6 above, they may be only included in Schedule CRCXXXXXX where they are assessed as being fit for purpose and having improved

outcomes compared to glyphosate and triclopyr. This assessment shall include, but not be limited to:

- a) An assessment of the potential risks to human health and the environment from the use of the proposed substance, and measures to reduce these risks.
 - b) A review of the EPA conditions of approval and set operational requirements and instructions to users to ensure that these conditions of approval are met.
 - c) A determination of appropriate water quality limits for the proposed substance to ensure that, after reasonable mixing, the product does not adversely affect water quality, including quality for human and animal consumption, and aquatic ecology. This limit will be used for water quality monitoring in accordance with Condition 42 below.
 - d) The consent holder shall prepare a report summarising the findings of clause a), b) and c) of this condition, and provide this report to Canterbury Regional Councils Science Manager, Compliance Monitoring Manager and papatipu rūnanga. These parties shall be invited to, within one month of being provided that report, inform the consent holder in writing:
 - i) That they do not object to the new agrichemical being added to Schedule CRCXXXXXX.
 - ii) Of any concerns they have, or further information or assessment they require, prior to the new agrichemical being added to Schedule CRCXXXXXX;
 - e) The agrichemical can only be added to Schedule CRCXXXXXX if all those provided the report under clause d) above have:
 - i) confirmed they do not object to the new agrichemical being added to Schedule CRCXXXXXX or if no response is received, the Consent Holder has made two follow up attempts to receive a response from each party and no response was forthcoming; or
 - ii) all concerns or further information or assessment required under 8)a) have been addressed by the consent holder and the party subsequently confirms they do not object to the new agrichemical being added to Schedule CRCXXXXXX.
 - f) If (e)(ii) cannot be satisfied within three months of the report being circulated, the consent holder may choose to organise a decision making panel which will include one representative from the consent holder, one representative from the group raising concerns and a mutually agreed independent representative.
- 8) Any amendments to Schedule CRCXXXXXX shall be provided to those parties listed under Condition 20, within one week of those changes being made.

AGRICHEMICAL STRATEGIC MANAGEMENT PLAN

- 9) The consent holder shall prepare an Agrichemical Strategic Management Plan within the first year of this consent being granted and review that plan annually thereafter. This Plan must be available to any party on request. It shall include, but not be limited to:
 - a) A review of current agrichemicals in use to determine if there have been changes to the hazard classification, controls or approvals required for that substance to be used in New Zealand.
 - b) A review of current practises regarding agrichemical use and alternative agrichemical compounds that could be used.
 - c) A review of any areas listed as a Significant Natural Area (SNA) in the relevant District Plan within areas that may be subject to agrichemical discharge. All SNAs must be identified and spraying must only proceed within any identified SNAs where the risks to indigenous

biodiversity are controlled in accordance with advice from a suitably qualified Terrestrial Ecologist.

- d) An assessment of alternatives to agrichemical spraying to achieve flood and drainage management, biodiversity improvements and biosecurity, and identifying sites where these alternatives can be employed.
 - e) Committing to progressively extending the areas where alternatives to agrichemicals spraying is employed with a goal of decreasing agrichemical use over the duration of the consent.
- 10) Where the Agrichemical Strategic Management Plan, and subsequent reviews identify changes to the types and use of agrichemicals or alternative vegetation control techniques, these will be notified to the parties listed in Condition 19 of this consent and incorporated into the following documents:
- a) Schedule CRCXXXXXX
 - b) Rivers Handbook for Spraying

GENERAL MANAGEMENT

- 11) Agrichemical discharge shall be conducted in accordance with:
- a) The NZ Standard 8409 and any subsequent versions
 - b) The latest version of the Canterbury Regional Council Rivers Handbook for Spraying
 - c) The Agrichemical Strategic Management Plan; and
 - d) All manufacturers and EPA recommendations on mixing and application rates
- 12) Agrichemical may only be discharged via the following methods:
- a) Aerial
 - b) Unmanned Aerial Vehicle (“Drone”)
 - c) Ground based handgun, spray boom or mist blower
 - d) Knapsack or other handheld means (including stump painting)
- 13) Agrichemical discharge shall only be carried out where there are no practical alternatives to vegetation management (as identified in the Agrichemical Strategic Management Plan).
- 14) All persons discharging agrichemical under the authorisation of this consent shall:
- a) hold the required relevant qualification for the agrichemical and method of discharge;
 - b) be provided with a copy of this Resource Consent and the Rivers Handbook for Spraying;
 - c) understand operational practices required to ensure consent compliance; and
 - d) be trained in the identification of wetland areas, native vegetation and braided river bird nesting habitat and breeding behaviours.
- 15) All practical measures must be taken to reduce the risk of spray drifting beyond the target application area, which may include but not be limited to ceasing spraying when wind speeds exceed 15kph.
- 16) Triclopyr and any other hazardous substance with the GHS7 Classification (or equivalent/replacement classification system) of “hazardous to the aquatic environment acute

Category 1” or “hazardous to the aquatic environment chronic Category 1” shall not be discharged directly over or into water.

- 17) The consent holder shall notify, as soon as is reasonably practicable, the owner of any relevant community supply well and the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, if an event occurs due to the exercise of this consent that may have a significant adverse effect on the quality of the water in a community supply well.

Advice Note: Such an event may be, but not limited to, an incident within the well protection zone of a community supply well that may contaminate the water supply from that well; such as accidental release of agrichemicals, combined with the saturation of soil beyond the water retaining capacity.

MIXING

- 18) All mixing of chemicals used for the discharge shall be greater than 10 metres from any surface water or shallow ground water so that any accidental spillage of chemicals does not discharge into water.
- 19) Backflow prevention must be fitted to any device use for pumping water for mixing spray.

ANNUAL PLANNING OF WORKS

- 20) Annually, the consent holder shall prepare by the 31st August a “Proposed Plan for Agrichemical discharge”. The Proposed Plan shall identify application areas, proposed dates, herbicides to be used and method of application for the period 1 October to 30 September. This Plan shall be forwarded to the following parties by 1 September each year:
- a) Canterbury Regional Council Compliance
 - b) Papatipu Rūnanga within whose rohe spraying may occur
 - c) Te Rūnanga o Ngai Tahu
 - d) Canterbury Hub of Apiculture NZ
 - e) Fish and Game Council for the areas where spraying may occur
 - f) Territorial Authorities for the areas where spraying may occur
 - g) Canterbury District Health Board
 - h) Department of Conservation local conservancy office for the areas where spraying may occur
 - i) Forest and Bird
- 21) The parties listed in Condition 19 shall, within 15 working days of receiving the “Proposed Plan for Agrichemical discharge”, be invited to:
- a) provide feedback on the proposed spray programme.
 - b) confirm they want to meet with the Consent Holder for the purposes set out in Condition 21.
- 22) The Consent Holder shall invite the parties listed in condition 19 to an annual meeting to discuss:

- a) The draft Proposed Plan for Agrichemical discharge, prepared in accordance with condition 19
- b) Spraying practices
- c) Monitoring results
- d) Current and predicted Agrichemical use
- e) Contractor performance assessments
- f) Specific agrichemicals proposed to be used
- g) Any actions taken to reduce herbicide use

Upon completion of this meeting, the Proposed Plan for Agrichemical Discharge will be finalised for that year taking into account any final points raised at the meeting.

- 23) If Agrichemical use is required outside of what was identified in the “Proposed Plan of Agrichemical discharge” due to the need not being foreseen prior to 31st August, then the parties listed in Condition 19 shall be notified 10 days prior to the discharge occurring.

NOTIFICATION PRIOR TO WORKS

- 24) At least 10 Days prior to any agrichemical discharge operations the Consent Holder must notify the following parties:
- a) Canterbury Hub of Apiculture NZ
 - b) The New Zealand American Foul Brood Agency
 - c) Any known local bee keepers who may be operating hives in the proposed spray area.
 - d) Fish and Game Council for the areas where spraying may occur
 - e) Papatipu Rūnanga within whose rohe spraying may occur
- 25) Prior to any aerial spray operation public notices must be advertised online and in the local newspaper.
- 26) Prior to spraying agrichemical the consent holder shall erect and maintain signs at places where people normally obtain access to the spray area. The notices shall be capable of being read from a distance of five metres and shall be maintained for the duration of the spraying. The notices shall state:
- a) that spraying is in progress,
 - b) the proposed duration of the spraying, including starting and finishing dates,
 - c) whether it is aerial or ground-based spraying; and
 - d) the active Agrichemical and adjuvant, if any, being used.

RESTRICTED ACTIVITIES AND EXCLUDED LOCATIONS

- 27) Agrichemical shall not be discharged on Public Holidays, Sundays or weekends that fall either side of a public holiday.
- 28) Community and papakāinga water supply abstraction points:

- a) There shall be no aerial discharge of herbicides within 250 metres of any community or papakāinga surface water supply abstraction point.
- b) There shall be no land-based discharge of herbicides within 25 metres of any community or papakāinga surface water supply abstraction point.
- c) Vehicles and machinery discharging herbicides under this consent shall not enter river channels containing flowing water within 250 metres upstream of any community or papakāinga surface water supply abstraction point.
- d) Vehicles and machinery discharging herbicides under this consent shall not travel on land within 25 metres of any community or papakāinga surface water supply abstraction point.

For the purpose of this consent a community drinking water supply abstraction point shall be defined as a publicly or privately owned drinking-water supply (via surface water, infiltration gallery, or shallow well) that is recorded in the drinking-water register maintained by the Chief Executive of the Ministry of Health (the Director General) under 69J of the Health Act 1965 that provides no fewer than 25 people with drinking-water for not less than 60 days each calendar year or is a site listed in Schedule 1(a) of the Land and Water Regional Plan.

- 29) There shall be no discharge of agrichemical within 25 m of surface water intakes that are used for irrigation, stockwater or any other purpose than community or domestic drinking water supply.
- 30) There shall be no discharge of agrichemical within 25 m of groundwater bores that are used for irrigation, stockwater or any other purpose than community or domestic drinking water supply.
- 31) There shall be no aerial spraying of agrichemical within 250 metres of any school or dwelling.
- 32) There shall be no discharge of agrichemicals within 50 metres of any beehive.
- 33) There shall be no discharge of Agrichemicals onto plants in flower when there is evidence of bees or other pollinators foraging on those plants where there is published evidence that the substance is toxic to bees or other pollinators.
- 34) Spraying of native vegetation must be avoided.

NESTING BIRDS

- 35) No spray operations in the active river fairway may occur within 100 metres of colonies of birds nesting or rearing chicks.
- 36) No spray vehicles may operate within 50 metres of nesting birds.
- 37) Prior to any agrichemical discharge being carried out in the river fairway during the period 1 September to 1 February, if the proposed work area does not meet one of Environment

Canterbury's exemption criteria as detailed in "Attachment CRCXXXXXXA", attached to and forming part of this consent, the consent holder shall ensure that:

- a) a suitably-qualified and independent person surveys the proposed area of works, no earlier than eight working days prior to any works being carried out, to locate any nests, colonies or chicks of any 'Nationally Threatened' or 'At Risk' bird species present. Surveys must be conducted according to the standard methodology detailed in "Attachment CRCXXXXXB" attached to and forming part of this consent;
- b) the person carrying out the survey prepares a report that identifies all the located bird breeding or nesting sites and provides copies of that report to the consent holder and the Canterbury Regional Council, attention Regional Leader - Monitoring and Compliance at ecinfo@ecan.govt.nz. Reports must be prepared using the standard template detailed in "Attachment CRCXXXXXC" attached to and forming part of this consent;
- c) the report clearly states what measures the consent holder will take to avoid, minimise or mitigate adverse effects on any bird breeding or nesting sites identified in accordance with parts (a) and (b) of this condition. At a minimum, this shall include maintaining an exclusion zone of 50m between breeding or nesting sites and spray vehicles, noting short-duration disturbance caused by work activities may be adopted where provided for by the bird survey report recommendations;
- d) any person carrying out works authorised by this consent are informed of any bird breeding or nesting sites;
- e) if works are disrupted by a major flood event (bank to bank flooding), and do not resume within eight days of peak flood flows, the site will be re-surveyed for bird breeding and nesting sites in accordance with parts (a) to (e) of this condition; and
- f) where work ceases for more than eight days for any reason other than for a flood event, the site shall be re-surveyed for bird breeding and nesting sites in accordance with parts (a) to (d) of this condition.

Advice Notes:

A "suitably-qualified person" is defined as someone who has a minimum of 160 hours field experience locating and monitoring shorebird nests.

'Nationally Threatened' or 'At Risk' are as defined in the New Zealand Threat Classification System (NZTCS).

Irrespective of whether the exemption criteria detailed in "Attachment CRCXXXXXXA" are met, the consent holder is still required to ensure they comply with their responsibilities under the Wildlife Act 1953 to not disturb, harm, kill etc any river nesting birds (or other protected wildlife).

WATER QUALITY MONITORING AND MANAGEMENT

- 38) Each year, samples of receiving waters must be taken from at least **6 locations** where there has been Agrichemical discharge to an area of greater than 0.5ha. The samples shall:
- a) Be from at least **three** sites within the **drainage network water courses**
 - b) Be from at least **three** sites within **rivers**

Each of the 6 samples is known as a 'sampling event'

39) Sampling must be completed as follows for each sampling event:

- a) One sample shall be taken from the spray reach immediately prior to spraying occurring "Sample 1"
- b) One sample shall be taken within 25m downstream of the spray reach immediately after spraying has completed "Sample 2"

40) The samples shall be analysed as follows:

- a) Each sample must be analysed for the presence of the active ingredient(s) used in the spray operation.
- b) Sample 2 shall be analysed by an accredited laboratory for the presence of the relevant Agrichemical.
- c) Sample 1 shall only be analysed if the results from Sample 2 are greater than the limits set by condition 41.

41) In addition to the sampling required in conditions 37-39, when a new Agrichemical is being used for the first time, there shall be at least two locations where the new substance has been discharged sampled in accordance with conditions 37 to 39 and samples analysed to determine if any residues of that substance are detected in receiving waters within the limit set out in condition 41(c).

42) WATER QUALITY LIMITS:

- a) The concentration of **glyphosate** in receiving waters must not exceed 0.1g/m³ after reasonable mixing.
- b) The concentration of **triclopyr** in receiving waters must not exceed 0.01g/m³ after reasonable mixing
- c) The concentration of **any other approved substance** must not exceed the limit determined during the approval process set out in condition 7.

For the purposes of this condition, after reasonable mixing means at a point no greater than 25m downstream of the discharge area.

43) If sample results exceed the limits set in Condition 41, the following actions shall be taken:

- a) Process "Sample 1" to determine if herbicide residues were present prior to the spray event occurring
- b) Notifications:
 - i) Notify any known public, private or community water supply downstream of the same area as soon as the results of "Sample 2" are known.
 - ii) Notify the Compliance Monitoring Section as soon as the results of "Sample 2" are known.
- c) Investigation:
 - i) Carry out an investigation into the potential cause of the exceedance, which may include but is not limited to, investigating the weather conditions, flow conditions, Agrichemical concentrations, mixing rates, application rates and volumes used, condition of weed growth at the time of spraying, operator handling, any spills or other relevant contributing factors including the results of Sample 1 (pre discharge testing).
- d) Improvement action plan:

- i) Summarise the findings of the investigation required by clause (c) of this condition, into an investigation report and set out the improvements and learnings identified (if any) into an improvement action plan.
- ii) Implement all learnings set out in the improvement action plan across all staff and contractors operating under this Consent within one month of completing the investigation.

44) The concentration of dissolved oxygen in any waterbody as a result of the exercise of this consent shall not fall below 70%. If background dissolved oxygen concentration prior to spraying is less than 70% then the exercise of this consent must not alter dissolved oxygen concentration by more than 25%.

ANNUAL SPRAY COMPLETION REPORTING

- 45) The consent holder shall provide a "Spray Completion Report" to the Canterbury Regional Council Attn: Compliance Monitoring and to the parties listed in Condition 19, by the 31 October of each year. This report shall identify the Agrichemical use that has taken place in the previous twelve months, 1 October to 31st, September including:
- a) the areas of operation;
 - b) the Agrichemical and adjuvant used;
 - c) the amount of Agrichemical used;
 - d) spray method used;
 - e) the dates of the operation;
 - f) and the results, and an analysis of the results, of any water quality monitoring that has taken place

ADMINISTRATION

- 46) The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, 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 the consent.
- 47) If this consent is not exercised before [date five years after issue], it shall lapse in accordance with Section 125 of the Resource Management Act 1991.