**Before the Independent Hearing Panel appointed by the Canterbury Regional Council**

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

AND

**IN THE MATTER OF** Applications CRC222040, CRC222041 and CRC222043 by Canterbury Regional Council to discharge agrichemicals to air, land and water within or adjacent to all waterways within the Canterbury Region for exotic weed control.

# Summary Statement of Rebecca Beattie

## Introduction

My full name is Rebecca Hope Beattie. I have been working as a consultant resource management/environmental planner at Pattle Delamore Partners (PDP) since August 2021.

My qualifications and experience are as stated in my s42A report.

I have been involved with this project since July 2022 (eight months after the applications were lodged) taking over from another consultant planner from PDP who went on parental leave.

While not required for a Council hearing for a resource consent application, I have read the Code of Conduct for Expert Witnesses in giving evidence to the Environment Court. I agree to comply with that code when giving evidence to the Hearing Panel in this matter. Other then where I state that I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

This statement is a summary of the findings of my Resource Management Act 1991 (RMA) Section (s) 42A officer’s report and also responds in part to submissions heard and the evidence presented by the Applicant at the hearing on 25 and 26 March 2024.

I acknowledge the evidence presented by the Applicant and the Submitters, including their respective responses to the Hearing Commissioner’s questions, which has resolved or reduced the outstanding areas of contention with my RMA s42A report. Notably, this includes the conferencing on the draft condition consent.

Fundamentally, the applicant and the s42A reporting officer’s agree that necessity and significant importance of the need to control nuisance weed control for flood control, protection of communities, biosecurity and indigenous biodiversity in the Canterbury Region, and that the application of agrichemicals is one of the most effective tools currently available in Aotearoa New Zealand to achieve the outcomes required of the applicant. All parties agreed that the positive effects of agrichemical use can greatly outweigh the negative, if used in accordance with appropriate and robust effects management measures. These positive effects and necessary mitigation measures have been discussed throughout all evidence and the hearing.

However, it would be remiss to ignore the considerably different socio-political and environmental landscape and discourse that surrounds the use of agrichemicals for weed control globally, and in New Zealand, compared to when the original consents were processed. This comes as a result of increasing body of research into the adverse effects of using herbicides, like that proposed, and the recent international legal proceedings and banning of specific herbicide use. This changing landscape and discourse is reflected in the submissions and evidence of the s42A officer’s evidence, and formed a backdrop for the recommendations on conditions, duration and ultimately whether the consents should be granted or declined.

My recommendations and conditions also reflect the need for more accountability and transparency from the Applicant regarding these operations which was a common theme expressed throughout the submissions and in the s42A reporting officers evidence. These two principles, and the need for meaningful engagement on, and evaluating of, the proposed activities formed the basis for my draft conditions of consent (attached as Appendix 2 of my s42A report) and my recommended duration of 15 years.

In this summary, I will discuss the following which are either matters that require formal clarification for the Hearings Commissioners or are remaining areas of contention with the Applicant’s evidence:

* 1. Resource consent required under the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES-F);
	2. Points of Clarification
	3. Inclusion of Other, Unnamed Herbicides Approved by the EPA
	4. Cultural Effects
	5. Comparison of the s42A reporting officer’s conditions and applicant’s proffered conditions
	6. Duration

## Resource consent required under NES-F;

On 22 March 2024, Ms Irvine (on behalf of the applicant) submitted supplementary evidence to her substantive evidence dated 11 March 2024. This evidence seeks to update Ms Irvine’s advice in her substantive evidence and the requirement for resource consent under the NES-F.

In summary, the applicant is no longer seeking resource consent under the NES-F for vegetation clearance by the application of agrichemicals within, or within 10 metres, of a natural inland wetland[[1]](#footnote-1).

The reasons for Ms Irvine’s updated position is detailed in Paragraph 6 of her supplementary evidence.

CRC222040, CRC222041 and CRC222043 were publicly notified on 28 June 2023 on the following basis:

* 1. CRC222040 – a discharge permit under RMA s15 to discharge agrichemicals into surface water, land where they may enter water to control exotic weed species. This discharge permit seeks to replace CRC981580 and CRC041535;
	2. CRC222041 – a coastal permit under RMA s15 to discharge agrichemicals into the Coastal Marine Area to control exotic weed species; and
	3. CRC222043 – a discharge permit under RMA s15 to discharge agrichemicals to air associated with the spraying within or adjacent to waterways for the control of exotic weeds.

After notification of the application and when preparing my RMA s42A report, I requested (under RMA s92) the applicant provide a reassessment of the application against the relevant NES-F regulations as I considered that the original assessment in the AEE was incomplete and that a re-assessment of the NES-F regulations was necessary as the relevant regulations in the NES-F have been amended since the consent application was lodged.

The applicant’s reassessment of the relevant NES-F regulations relating to vegetation clearance within, or within 10 metres of a natural inland wetland (Regulation 46) determined a land use consent under RMA s9 was required due to non-compliance with Regulation 46 of the NES-F and the applicant recommend that this additional resource consent under the NES-F was added to the existing resource consents.

I accepted the applicant’s re-assessment and consequently considered a land use consent was required under Regulation 39 of the NES-F (as biosecurity is a ancillary purpose of the proposed agrichemical discharge and resulting vegetation clearance within or near wetlands). From this further information, I also identified a RMA s13 land use consent was required under Rule 7.2 of the Waimakariri River Regional Plan (WRRP) as this rule relates to vegetation clearance (via the application of agrichemicals) within the Waimakariri River Catchment where it will occur in wetlands in this catchment.

I considered it appropriate and pragmatic to include these new land use consents under CRC222040, as it did not affect the activity status of the consents and would avoid the applicant having to obtain separate land use consents for these activities at a later time. The applicant did not provide any disagreement to this inclusion at this time.

Therefore, my RMA s42A report and draft conditions were prepared on the basis that these consents were included as part of CRC222040, CRC2220401 and CRC222043.

However, if the hearing commissioners are accepting of the applicant’s proposed removal/withdrawal of the s9 and s13 land use consents for vegetation clearance within, or within 10 metres, of natural inland wetlands and within the Waimakariri River Catchment, I recommend the following condition is added to my draft condition set:

“*There must be no discharge of agrichemicals within, or within 10 metres of, a natural inland wetland that results in vegetation clearance unless:*

1. *the discharge and resulting vegetation clearance are for the purposes of the maintenance and operation of specified infrastructure and other infrastructure, or biosecurity; and*
2. *the consent holder can demonstrate the discharge and vegetation clearance can comply with all the permitted conditions in the relevant regulations of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (or any successor legislation).”*

All other references in my draft conditions to the discharge of agrichemicals or vegetation clearance within, or within 10 metres, of a natural inland wetland should also be removed.

## Point of Clarification

I disagree with Ms Irvine’s statement in Paragraph 48 of her evidence that Rule 7.77 and Rule 7.79 of the CARP only applies to the discharge of agrichemicals from aerial methods such as helicopters and Unmanned Aerial Vehicles (UAV or drones), as any discharges from handheld or ground-based vehicle methods are not a ‘discharge to air’. Ms Irvine has based this opinion on a review of the decision makers’ report for the CARP but has not cited the exact report or part of the report where she has obtained this information.

I have also reviewed the RMA s32 and s42A reports, and the final Report and Recommendations of the Hearing Commissioners for the CARP. I cannot find any specific determination or conclusion about the intended application of Rule 7.77 and 7.79 of the CARP that Ms Irvine is referring to in her evidence. Ms Irvine’s rule interpretation is also not formalised in the CARP in any manner. I am also not aware of any caselaw about the intended interpretation and application of Rule 7.77.

Therefore, I consider that Rule 7.77 of the CARP applies to the discharge of agrichemicals to air from all methods (aerial and ground based) and a discharge permit is required under Rule 7.79 of the CARP for all agrichemical discharge methods.

I would also like to clarify Ms Irvine’s comments throughout the hearing regarding the threshold for the trigging of a resource consent under the CARP for agrichemical spraying.

Rule 7.77 of the CARP states:

1. *“The discharge* ***does not have an adverse effect*** *on vegetation or fauna beyond the boundary of the target location; and*

*The discharge* ***does not have an adverse effect*** *on any sensitive activity, non-target crops, or organic farming systems, wāhi tapu, wāhi taonga or place of significance to Ngāi Tahu that is identified in an Iwi Management Plan.”*

1. As shown by my added emphasis, the CARP just seeks does not have an adverse effect not “no discharge at all” in these listed areas as previously discussed by Ms Irvine.

## Inclusion of Other, Unknown Herbicides Approved by the EPA

1. Based on the information and discussions since the commencement of the hearing, I could be of the mind to change my position on the inclusion of other, future agrichemicals that could be come approved for use in New Zealand.

However, I seek further discussions with the applicant on the proposed review process and how to cover this in a robust condition(s) of consent.

## Cultural Effects

I refer to Paragraphs 411 and 412 of my RMA s42A report for my reasoning about cultural effects. These conclusions are supported by my assessment of the application against the Iwi Management Plans (IMP) and Policy Statements (IPS) applicable to the application. I cannot speak on behalf of iwi and Runanga and hoped they would be here to speak to their submission and to assist this decision making process.

I consider these IMP and IPS to be an expression of the iwi, rūnanga or hapū’s values that can be used as an assessment tool for resource consent applications, alongside consultation with iwi, rūnanga or hapū groups.

My assessment of the relevant IWP and IPS are in Paragraphs 476 – 494 of my RMA s42A report.

For the reasons outlined in my report, I still consider the proposed discharges are, on balance, consistent with these IMP and IPS noting their opposition to the use of agrichemicals but conversely the seeking of restoration and improved outcomes for waterways and indigenous biodiversity.

I consider further engagement by the applicant with iwi and Runanga is required to determine the level of engagement they seek on these consents and the proposed management plans. I also acknowledge and refer to the existing partnership the applicant has with these Runanga and iwi groups for further understanding of their positions on the proposed activity and how to reach a resolution on appropriate effects management measures.

## Comparison of the s42A reporting officer’s conditions and applicant’s proffered conditions

As requested, Table 2 provides a comparison between the applicant’s proffered conditions from Ms Irvine’s evidence and my recommended draft conditions from Appendix 2 of the s42A report. I acknowledge the extensive discussion on these conditions throughout the hearing, including the agreements reached with the applicant in conferencing this morning. I welcome continuing to work with the applicant to reach agreement on as many of these conditions as practicable to the extent that this would assist the commissioners.

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| --- | --- | --- | --- |
| **Condition No.** | **Applicant Proposed Condition** | **Eq. s42A condition no.**  | **S42A Draft Conditions** |
|  | **Definitions, abbreviations and reports**Agrichemical: means any substance, or mixture of substances, (including approved adjuvants), whether inorganic or organic, man-made or naturally occurring, modified or in its original state that is used to eradicate, or control flora and fauna. It excludes oral nutrition compounds, vertebrate pest controls and fertilisers.Community Drinking Water Supply Abstraction Point: is defined as a publicly or privately owned drinking-water supply that provides no fewer than 25 people with drinking water for not less than 60 days each calendar year or is listed in Schedule 1(a) of the Canterbury Land and Water Regional Plan, or any successor document. Natural Inland Wetland: has the same meaning as defined in the National Policy Statement for Freshwater Management 2020 (or any equivalent definition in any successor document).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 |  | Community Drinking Water Supply Abstraction Point: is defined as a publicly or privately owned drinking-water supply that provides no fewer than 25 people with drinking water for not less than 60 days each calendar year or is listed in Schedule 1(a) of the Canterbury Land and Water Regional Plan, or any successor document.Manager: the Canterbury Regional Council Regional Leader Compliance Monitoring. Natural Inland Wetland: has the same meaning as defined in the National Policy Statement for Freshwater Management 2020 (or any equivalent definition in any successor document). 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 |
|  | **ACTIVITY** |  | **LIMITS** |
|  | The activities authorised under these resource consents are limited to:1. the discharge of agrichemicals to air,
2. the discharge of agrichemicals to surface water or land where the agrichemical may enter water;
3. the discharge of agrichemicals to riverine environments within the Coastal Marine Area (CMA); and
4. the clearance of vegetation within, and within 10metres of, wetlands;

within the Canterbury Region, as shown on attached ‘Plan’, which forms part of this consent.Advice Note: This Discharge Permit authorizes the described discharge of agrichemicals where there is a requirement for Resource Consent. Not all spraying operations undertaken by the Consent Holder requires Resource Consent, and may be undertaken as a Permitted Activity. | 1.  | The activities authorised under these resource consents are limited to the discharge of agrichemicals to air, surface water and land where the agrichemical may enter water, and riverine environments within the Coastal Marine Area (CMA) within the Canterbury Region. |
|  | The discharge of agrichemicals must only be discharged via the following methods:1. Aerial: Spraying from a fixed wing aircraft or helicopter fitted with a spray bar system which is adjustable to provide optimal flow and direction for agrichemical discharge. The aircraft shall have GPS tracking for flight paths and spray zones.
2. Drone: Spraying from an Unmanned Aerial Vehicle (UAV or ‘drone’) fitted with a spray bar system which is adjustable to provide optimal flow and direction for agrichemical discharge. The drone shall have GPS tracking for flight paths and spray zones.
3. Ground-based: vehicle mounted guns, booms and knapsacks or other handheld means (including stump painting).
 | 7. | The discharge of agrichemicals must only be discharged via the following methods:1. Aerial: Spraying from a fixed wing aircraft or helicopter fitted with a spray bar system which is adjustable to provide optimal flow and direction for agrichemical discharge. The aircraft shall have GPS tracking for flight paths and spray zones.
2. Drone: Spraying from an Unmanned Aerial Vehicle (UAV or ‘drone’) fitted with a spray bar system which is adjustable to provide optimal flow and direction for agrichemical discharge. The drone shall have GPS tracking for flight paths and spray zones.
3. Ground-based: vehicle mounted guns, booms and knapsacks or other handheld means (including stump painting).
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|  | The discharge of agrichemicals, including adjuvants, shall be in accordance with the requirements set under the Hazardous Substance and New Organism Act (HSNO), or any successor legislation, including manufacturers instructions, safety data sheets and the product label requirements. The agrichemicals authorized to be discharged under this consent are listed in Schedule 1, and includes:1. formulations of glyphosate;
2. formulations of triclopyr;
3. adjuvants
4. formulations of other agrichemicals that have been approved through the criteria set out in condition 4.
 | 2 | The discharge must only be of agrichemicals registered for use in or onto water, or onto land where it may enter water, under the Hazardous Substances and New Organisms Act 1996 (HSNO), or any successor legislation. |
| 3 | * 1. The discharge must only be of proprietary formulations containing glyphosate and triclopyr as the active ingredient.
	2. Additives to these herbicide formulations must only be adjuvants or surfactants added in accordance with the manufacturer’s instructions.
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|  | **SCHEDULE OF AGRICHEMICALS TO BE USED** |  |  |
|  | To add additional agrichemicals to Schedule 1, the consent holder shall complete the following assessment to demonstrate the added agrichemical is fit for purpose and has improved outcomes compared to glyphosate and triclopyr:1. 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.
2. A review of the EPA conditions of approval and set operational requirements and instructions to ensure that these conditions of approval are met.
3. 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 32 below.
4. The consent holder shall prepare a report summarising the findings of clause (a), (b) and (c) of this condition, and provide that report to Canterbury Regional Councils (CRC) Science Manager, CRC Compliance Monitoring Manager and papatipu rūnanga. These parties shall be invited to, within one month of being provided that report, respond in writing to the consent holder:
	1. That they do not object to the new agrichemical being added to Schedule 1.
	2. Of any concerns they have, or further information or assessment they require, prior to the new agrichemical being added to Schedule 1;
5. The agrichemical can only be added to Schedule 1 if all those provided the report under clause (d) above have:
	1. confirmed they do not object to the new agrichemical being added to Schedule 1 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
	2. all concerns or further information or assessment required under (b)(ii) have been addressed by the consent holder and the party subsequently confirms they do not object to the new agrichemical being added to Schedule 1.
6. 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 selected from the approved decision makers list.
7. Any amendments to Schedule 1 shall be provided to those parties listed under Condition 5, within one week of those changes being made.
 | N/A | No equivalent s42A conditions.  |
|  | ***ANNUAL REPORTING*** |  |  |
|  | **AGRICHEMICAL STRATEGIC MANAGEMENT PLAN** |  |  |
|  | The consent holder must prepare an Agrichemical Strategic Management Plan (ASMP) within the first six (6) months of this consent being granted. This ASMP must be available to any party on request. It must include at a minimum:1. The purpose and scope of the ASMP and these resource consents;
2. 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 for the required purpose;
3. A review of current practices regarding agrichemical uses and alternative agrichemical formulations that could be used;
4. An assessment of alternatives to agrichemical spraying to achieve the purposes of these resource consents, and identification of sites where these alternatives can be employed;
5. Methods and actions for the progressive expansion of areas where alternatives to agrichemicals is employed with a goal of decreasing agrichemical reliance over the duration of the consent;
6. Monitoring and reporting on progress made for extending areas where alternatives to agrichemicals were used, and the effectiveness of the actions listed in the ASMP for reducing agrichemical use under these resource consents;
7. A record of consultation undertaken for the development of this ASMP. At a minimum the following parties must be consulted with:
	1. Te Rūnanga o Ngāi Tahu;
	2. Papatipu Rūnanga within whose rohe spraying is proposed;
	3. The Department of Conservation area conservancies within which the discharge will occur;
	4. The Councils of Fish and Game New Zealand within whose regions the discharge will occur;
	5. The Canterbury Branches of the Royal Forest and Bird Protection Society of New Zealand (Forest and Bird);
	6. Apiculture New Zealand – Canterbury Hub;
	7. Te Whatu Ora Health New Zealand – Waitaha Canterbury; and
	8. The territorial authorities within whose districts the discharges will occur.
8. A record of any reviews and amendments made to the ASMP;
 | 9 | The consent holder must prepare and submit an Agrichemical Strategic Management Plan (ASMP) for certification by Canterbury Regional Council Attention: Regional Leader – Compliance Monitoring (the Manager) within the first six (6) months of this consent being granted. This ASMP must be available to any party on request. The ASMP must include, but is not limited to:1. The purpose and scope of the ASMP and these resource consents;
2. Details of how the consent holder will comply with the conditions of these resource consents and minimise the potential adverse effects of the discharges of agrichemicals;
3. Identify alternative methods to agrichemicals for managing pest plants and how these alternative methods will be considered for use before using agrichemicals.
4. A register of any culturally significant areas where agrichemical discharges must be avoided or stricter management measures used, as advised by Papatipu Rūnanga;
5. Methods for identifying important ecological habitats and values and other sensitive receptors, such as internal Geographic Information Systems (GIS) databases, how this information will be kept up to date, and how these important ecological values and sensitive receptors will be accounted for and protected during any agrichemical discharge operations;
6. Methods and actions for the progressive reduction in the overall area sprayed with agrichemicals during the duration of these resource consents;
7. Monitoring and reporting on progress made for reducing areas sprayed by agrichemicals, and the effectiveness of the actions listed in the ASMP for reducing agrichemical use under these resource consents;
8. Methods for how surface water and benthic invertebrate monitoring undertaken as part of Conditions (48) to (50) will be assessed against the purpose of this ASMP;
9. A record of consultation completed for the development of this ASMP. At a minimum the following parties must be consulted with when preparing the ASMP:
	1. Te Rūnanga o Ngāi Tahu;
	2. Papatipu Rūnanga within whose rohe spraying is proposed;
	3. The Department of Conservation area conservancies within which the discharge will occur;
	4. The Councils of Fish and Game New Zealand within whose regions the discharge will occur;
	5. The Canterbury Branches of the Royal Forest and Bird Protection Society of New Zealand (Forest and Bird);
	6. Apiculture New Zealand – Canterbury Hub;
	7. Te Whatu Ora Health New Zealand – Waitaha Canterbury;
	8. The territorial authorities within whose districts the discharges will occur; and
	9. Any other party the applicant has arranged to consult with regarding the ASMP; and
10. A record of any amendments made to the ASMP.

***Advice note:*** *Should any party listed in Condition (9)(i) choose not to take up the offer of consultation, or if no comment is received within twenty (20) working days of receiving the invitation for consultation from the consent holder, this does not constitute a non-compliance on this consent condition.*  |
|  | **PROPOSED ANNUAL SPRAY PROGRAMME** |  |  |
|  | The consent holder must prepare a “Proposed Annual Spray Programme” (The Annual Programme) at least once per year. The Annual Programme must include for the period 1 October to 30 September:1. The proposed agrichemical discharge areas;
2. The proposed dates of agrichemicals discharges;
3. Method(s) and chemicals to be used.
 | 10 | The consent holder must prepare and submit an “Annual Programme for Agrichemical Discharge” (The Annual Programme) for certification by the Manager by 20 August annually. The Annual Programme shall be for the period 1 October to following 30 September, and must include, but is not limited to:1. Identification of the proposed agrichemical discharge areas, including maps, at a scale that the locations are identifiable;
2. The proposed dates of agrichemicals discharges;
3. Method(s) and chemicals to be used;
4. The proposed water and benthic invertebrate sampling locations, timings, and methods as required by Conditions (48) to (50);
5. A Habitat Restoration Plan (HRP) which details proposed indigenous planting to restore lost or damaged habitat and riparian plantings within areas sprayed by agrichemicals, and for reducing agrichemical use in accordance with the ASMP; and

How The Annual Programme aligns with the intentions of the ASMP and the Canterbury Regional Council’s Rivers Handbook for Spraying (required by Condition (21)). |
|  | The ‘Annual Programme’ prepared under Condition (6) shall, by 20 August each year, shall be made publicly available on the consent holders website and be provided to:1. Canterbury Regional Council Compliance and Monitoring Section;
2. Te Rūnanga o Ngāi Tahu;
3. Papatipu Rūnanga within whose rohe spraying is proposed;
4. The Department of Conservation area conservancies within which the discharge will occur;
5. The Councils of Fish and Game New Zealand within whose regions the discharge will occur;
6. Forest and Bird Canterbury Branches;
7. Apiculture New Zealand – Canterbury Hub;
8. Te Whatu Ora Health New Zealand – Waitaha Canterbury;
9. The territorial authorities within whose districts the discharges will occur; and
10. Any other party the consent holder has arranged to consult with on these resource consents or The Annual Programme.

With each party invited to:1. Provide feedback in writing within 15 working days; **and**
2. Confirm they want to meet with the consent holder for the purposes set out in Condition (8).
 | 11 | 1. The consent holder must send a copy of The Annual Programme to the following parties by 20 August every year:
	1. Te Rūnanga o Ngāi Tahu;
	2. Papatipu Rūnanga within whose rohe spraying is proposed;
	3. The Department of Conservation area conservancies within which the discharge will occur;
	4. The Councils of Fish and Game New Zealand within whose regions the discharge will occur;
	5. Forest and Bird Canterbury Branches;
	6. Apiculture New Zealand – Canterbury Hub;
	7. The territorial authorities within whose districts the discharges will occur; and
	8. Any other party the consent holder has arranged to consult with on these resource consents or The Annual Programme.

These parties must be invited to provide comments on the Annual Programme within fifteen (15) working days of the Annual Programme being issued to them.  |
|  | If a party listed in Condition (7) confirms they want to meet the consent holder, a meeting shall be organized during October, or earlier, with the agenda to discuss:1. The circulated Proposed Annual Spray Programme for that year;
2. A review of the ASMP and any amendments that need to be made to it;
3. A review of the Register and any amendments that need to be made to it;
4. The previous years ‘Annual Spray Completion Report’ as required by Condition (60);
5. The results of the water quality ~~and benthic invertebrate~~ monitoring completed within the previous year;
6. Examples and extent of where alternatives to agrichemicals were used, and the outcome of that work.
 | 12 | The consent holder must invite the parties listed in Condition (11)(a) to an Annual Meeting to be held in September each year to discuss:1. The draft Annual Programme for that year;
2. The previous years ‘Annual Spray Completion Report’ as required by Condition (58);
3. Agrichemical use in the previous year, and proposed agrichemical use in the upcoming year;
4. Any new ecological mapping or identification of significant ecological areas that needs to be added to the consent holder’s mapping database;
5. Performance assessments and training needs of Canterbury Regional Council staff and contractors operating under these resource consents;
6. The results of the water quality and benthic invertebrate monitoring completed within the previous year; and

Progress made to reducing the overall area sprayed with agrichemicals. |
|  | If a meeting is held in accordance with condition (8), or feedback is received in accordance with condition 7(k), within 20 working days of the conclusion of that meeting, a **the consent holder shall prepare a** report that records:1. the matters discussed, dispute resolutions (if any), actions points, and any amendments required to be made to any document required by these conditions of consent; and
2. any written feedback received in accordance with condition 7(k).

A copy of this report shall be provided to CRC Attention: Regional Leader – Compliance Monitoring. | 13 | 1. An Annual Meeting Report must be completed within twenty (20) working days of the conclusion of the meeting held in accordance with Condition (12) to create a record of the matters discussed at the meeting. The report shall include:
2. Any feedback received by the Consent Holder on The Annual Programme within fifteen (15) working days of the provision of the Annual Plan as required by Condition (11);
3. Any feedback received by the Consent Holder on the Annual Programme after the fifteen (15) working day timeframe, or matters raised at the Annual Meeting required by Condition (12);
4. Any amendments required to be made to the Annual Programme or any documents required by these conditions of consent.
5. Any feedback on The Annual Programme, or any other documents required by these conditions, must be considered and, if not accepted, reasons provided in the Annual Meeting Report.

This Annual Meeting Report must be sent to all parties invited to attend the meeting in Condition (11)(a) (regardless of whether they attended the meeting or not), submitted to the Manager and included as part of the Annual Programme for which it relates.  |
|  | If there are any alterations made to The Annual Programme, prior to the commencement of any agrichemical discharges in that area, the consent holder will notify those parties listed in Condition (7) that have overlapping rohe or territory within the catchment the change relates to. | 15 | If any amendments are made to The Annual Programme as identified in Condition (13)(a)(iii), a copy of the amended Annual Programme must be sent to all parties listed in Condition (11)(a), prior to the commencement of any agrichemical discharges for that year.  |
|  | **REGISTER OF SENSITIVE, RESTRICTED AND NOTIFIABLE SITES** |  |  |
|  | The consent holder must establish and maintain a register of restricted and notifiable sites (the Register) to identify particularly sensitive sites that require a high level of protection, or particular pre-spray notification. The register:1. May be in the form of a written report or GIS records;
2. Shall be reviewed at least once per year and updated where relevant;
3. Shall include, at a minimum the sites and features listed in Schedule 2 that are within the identified setback for aerial or ground-based discharges.
 | N/A |  |
|  | ***OPERATIONS*** |  |  |
|  | **PRIOR NOTIFICATION** |  |  |
|  | At least 10 days prior to any agrichemical discharge operations, the consent holder must notify:1. Canterbury Hub of Apiculture New Zealand;
2. Any known bee keepers who may be operating hives in the proposed spray area;
3. Fish and Game Council for the areas where spraying may occur;
4. Papatipu Rūnanga within whose rohe spraying may occur;
5. Owners and occupiers of any known organic farms adjacent to the proposed spray area; and
6. Any other party that the consent holder has arranged to be notified.
 | 17 | 1. At least ten (10) days prior to any agrichemical discharge operations, the consent holder must notify the following parties:
2. Canterbury Hub of Apiculture New Zealand;
3. Any known bee keepers who may be operating hives in the proposed spray area;
4. Fish and Game Council for the areas where spraying may occur;
5. Papatipu Rūnanga within whose rohe spraying may occur;
6. All adjoining landowners and occupiers (where these are not the consent holder);
7. Owners and occupiers of any known organic farms adjacent to the proposed spray area; and
8. Any other party that the consent holder has arranged to be notified.

This notification must include a copy of the Operations Management Plan for the proposed discharge as required by Condition (20).  |
|  | Prior to any aerial spray operation, the consent holder shall place public notifications on their website and in local newspaper(s). | 16 | The consent holder must publicly notify The Annual Programme by 30 September each year to inform the public of the proposed agrichemical spraying for the upcoming year. The consent holder must:1. Place public notice advertisements in a newspaper(s) covering the area of the discharges, notifying the community of The Annual Programme;
2. Make The Annual Programme publicly available on a page of the consent holder’s website. The webpage must remain publicly available all year round and must be updated if there are any amendments made to The Annual Programme;
3. Provide a copy of the public notice and evidence that the notification required under Condition (16)(b) has occurred to the Manager within ten (10) working days of the notification in Condition (16)(a) and (b) occurring.

The notifications in Condition (16)(a) and (b) must include contact details for members of the public to contact for advice or information relating to The Annual Programme.  |
|  | **JOB PLANNING** |  |  |
|  | Agrichemicals shall only be discharged where there are no practical alternatives to vegetation management (as identified in the ASMP). | N/A |  |
|  | An Operations Management Plan (OMP) must be prepared, and adhered to, to plan ~~the~~ **and** deliver each individual spray operation undertaken by the consent holder or its contractors. The OMP must:1. Be prepared in accordance with the conditions of this resource consent and the following document(s), or any successor documents:
	1. NZS 8409:2021;
	2. The ASMP, as required by Condition (5); **and**
2. Identify and record:
3. The proposed area for spraying and the name of any waterbody affected, including a map and GPS location;
4. The proposed method(s) of spraying and agrichemicals to be used;
5. Dates and durations of the proposed discharge;
6. Proposed methods to reduce agrichemical spray drift;
7. The agency conducting the operation, including contact details of the person supervising the discharge;
8. Identification on the map created under clause (b)(i) of this condition, any sites from the Register that intersect or are within the setback described in Schedule 2 of the proposed discharge area;
9. A list of parties notified about the proposed agrichemical spray operation the OMP relates to, as required by Condition 12 and Condition 11, Schedule 2;
10. Details of methods and measures to avoid or manage the effects of agrichemicals spraying in these identified sensitive areas;
11. Assessment of alternatives to agrichemicals considered for this proposed discharge area;
12. The location and methods for any water ~~and/or benthic invertebrate~~ sampling required.
 | 19 | The agrichemicals must be discharged in accordance with the following documents, or any successor document(s):1. NZS 8409:2021;
2. The ASMP as required by Condition (9);
3. An Operations Management Plan, as required by Condition (20); and

The Canterbury Regional Council’s Rivers Handbook for Spraying, as required by Condition (21).  |
|  |  | 20 | An Operations Management Plan (OMP) must be prepared, and adhered to, for any discharges authorised by these resource consents. An OMP is required for each individual discharge of agrichemical (also known as a spray operation) undertaken by the consent holder or its contractors.This OMP must be in accordance with the ASMP, The Annual Programme, The Canterbury Regional Council’s Rivers Handbook for Spraying and any other conditions of these resource consents, and must include at least the following:1. The proposed area for spraying and the name of any waterbody affected;
2. The proposed method(s) of spraying and agrichemicals to be used;
3. Dates and durations of the proposed discharge;
4. Proposed methods to reduce agrichemical spray drift;
5. The agency conducting the operation;
6. A list of parties notified about the proposed agrichemical spray operation the OMP relates to, as required by Condition (17);
7. Contact name and details (phone number and email) of the person supervising the discharge;
8. A map identifying the location of Condition (20)(a) including Ground Positioning Satellite (GPS) co-ordinates;
9. Identification on the map from Condition (20)(h) any ecologically or culturally sensitive sites, or excluded locations listed under Conditions (31) – (47), that intersect or are within close proximity of the proposed discharge area;
10. Details of methods and measures to avoid or manage the effects of agrichemical spraying in these identified sensitive areas;
11. Assessment of alternatives to agrichemicals considered for this proposed discharge area; and
12. The location and methods for any water and/or benthic invertebrate sampling required (in accordance with the monitoring programme included within the ASMP and The Annual Programme).

The OMP must be held on site by the persons undertaking the discharge to which the OMP relates.  |
|  | **JOB DELIVERY** |  |  |
|  | OperatorsThe Consent Holder shall ensure all individuals involved in the handling and the discharging of agrichemicals authorised by these resource consents must:1. Meet the qualification requirements set by **the** EPA.
2. be provided with, and adhere to, the conditions of these resource consents, the OMP, and the Hazardous Substance Spill Avoidance and Response Plan (required by Condition (30)); and
3. be trained by a suitably qualified and experienced person(s) in the identification of:
	1. wetland areas,
	2. At Risk and Threatened indigenous vegetation,
	3. braided river indigenous bird nesting habitat and breeding behaviours, and
	4. indigenous lizards,
4. and cease spraying if these values are encountered ~~without~~ and the OMP has not addressed that value. Works may only resume once the value is addressed within the OMP.

***Advice Note:*** *‘Threatened’ or ‘At Risk’ are as defined in the New Zealand Threat Classification System (NZTCS), or any successor document.* | 22 | All individuals involved in the handling and the discharging of agrichemicals authorised by these resource consents must:1. Have a current herbicide applicator qualification issued by a nationally recognised training organisation that meet the qualification requirements listed in the Spraying Handbook;
2. be provided with, and adhere to, the conditions of these resource consents, the Spraying Handbook, and the Hazardous Substance Spill and Response Plan (required by Condition (29)); and
3. be trained by a suitably qualified and experienced person(s) in the identification of wetland areas, At Risk and Threatened indigenous vegetation, braided river indigenous bird nesting habitat and breeding behaviours, and indigenous lizards, and how to account for, avoid and protect these ecological areas, fauna and flora during agrichemical discharge.

***Advice Note:*** *‘Threatened’ or ‘At Risk’ are as defined in the NZTCS, or any successor document.* |
|  | SignagePrior to the discharge of agrichemicals, and for at least 24 hours afterwards, the consent holder must erect and maintain signs at places where people normally obtain access (pedestrian and vehicular) to the spray area. These signs must comply with the signage requirements of New Zealand Standard ‘Management of Agrichemicals’ 8409:2021 (NZS 8409:2021), or any successor document, and must state at a minimum:1. that spraying is in progress;
2. the proposed duration of the spraying, including starting and finishing dates and times;
3. the method(s) of spraying;
4. the active herbicide and adjuvant being used; and
5. Contact name and number for the person managing the operation.
 | 18 | Prior to the discharge of agrichemicals, the consent holder must erect and maintain signs at places where people normally obtain access (pedestrian and vehicular) to the spray area. These signs must comply with the signage requirements of New Zealand Standard ‘Management of Agrichemicals’ 8409:2021 (NZS 8409:2021), or any successor document, and must state at a minimum:1. that spraying is in progress;
2. the proposed duration of the spraying, including starting and finishing dates and times;
3. the method(s) of spraying;
4. the active herbicide and adjuvant being used; and

Contact name and phone number for the person managing the operation.  |
|  | Where there are publicly accessible edible plants or fruit that may be foraged by people, signs shall remain onsite for two weeks. | 40 | There must be no discharge of agrichemicals onto edible plants, fruit or berries between 1 October and the following 28 February inclusive.  |
|  | SetbacksThere shall be no discharge of agrichemicals within the listed setbacks for sensitive, restricted and notifiable sites identified within Schedule 2 unless:1. The required approval, as listed in Table 1 of Schedule 2, has been obtained and provided to CRC Compliance prior to spraying;

The required notification, as listed in Table 2 of Schedule 2, has occurred at least 10 days prior to spraying. | 32 | Community surface water abstraction points for supply of drinking water: 1. There must be no discharge of agrichemicals directly to surface water within a Community Drinking-water Protection Zone as set out in Schedule 1 of the Canterbury Land and Water Regional Plan, or any such zone determined in a successor document.
2. Where a community surface water abstraction point for supply of drinking water does not have a Drinking-water Protection Zone as set out in Schedule 1 of the Canterbury Land and Water Regional Plan (or any such zone determined in a successor document):
3. There must be no discharge of agrichemicals to water within 250 metres upstream or 100 metres downstream of these surface water community drinking water abstraction points;
4. There must be no discharge of agrichemicals via aerial or drone methods to land within 250 metres of these surface water community drinking water abstraction points; and
5. There must be no discharge of agrichemicals to land via land-based methods within 25 metres of these surface water community drinking water abstraction points.
6. Vehicles and machinery discharging agrichemicals must not enter river channels containing flowing water within 250 metres upstream or 100 metres downstream of any surface water community drinking water abstraction points.

Vehicles and machinery discharging agrichemicals must not travel on land within 25 metres of any surface water community drinking water abstraction points. |
|  |  | 33 | Surface water abstraction points (all other uses)1. There must be no discharge of agrichemicals directly to surface water within 250 metres upstream or 100 metres downstream of any surface water abstraction points that are used for irrigation, stockwater or any other purpose than community drinking water supply.

There must be no discharge of agrichemicals to land within 25 m of surface water abstraction points that are used for irrigation, stockwater or any other purpose than community drinking water supply. |
|  |  | 34 | Groundwater supply abstraction points (all uses): There must be no discharge of agrichemicals within 50 metres of any groundwater abstraction points that are less than 20 metres deep.  |
|  |  | 35 | There must be no aerial spraying of agrichemicals within 250 metres of any school, roof, or any other structure used as a catchment for water supply. |
|  |  | 36 | There must be no discharge of agrichemicals within 50 metres of any beehive. |
|  |  | 37 | There must be no discharge of agrichemicals within, or within 50 metres of, any culturally significant areas identified in the register to be included in the ASMP, as required by Condition(9)(d). |
|  |  | 39 | There must be no direct discharge of agrichemicals onto flood protection plantings, indigenous vegetation, or other vegetation planted for aesthetic purposes, such as for enhancement works, or planted for economic purposes, such as crops and forestry planting.  |
|  |  | 41 | There must be no discharge of agrichemicals within, or within 10 metres, of a natural inland wetland unless the discharge is for the purposes of the maintenance and operation of specified infrastructure and other infrastructure and/or is completed under the advice from a Canterbury Regional Council science staff member who is suitably qualified and experienced in fresh water ecology and wetland protection.  |
|  |  | 42 | There must be no discharge of agrichemicals within, or within 50 metres of, any Īnanga Spawning Zones as shown on the Canterbury Land and Water Regional Plan Planning Maps, or any such zones shown in any successor document, between 1 January and the following 1 June inclusive.  |
|  |  | 43 | 1. There must be no discharge of agrichemicals within, or within 50 metres of, any Salmon Spawning Sites, as shown on the Canterbury Land and Water Regional Plan Planning Maps, or any such zones shown in any successor document.

There must be no discharge of agrichemicals within, or within 50 metres of, any trout or non-migratory *galaxias* species habitats.  |
|  | Triclopyr and any other agrichemical approved for use under this consent with the Globally Harmonised System 7 Classification (or any successor classification system) of “hazardous to the aquatic environment acute Category 1” or “hazardous to the aquatic environment chronic Category 1” must not be discharged aerially within 8 metres of ponded or flowing surface water. | 5 | Triclopyr and any other agrichemical approved for use under this consent with the Globally Harmonised System (GHS) 7 Classification (or any successor classification system) of “hazardous to the aquatic environment acute Category 1” or “hazardous to the aquatic environment chronic Category 1” must not be discharged:1. over or into water; or
2. onto land within 20 metres of surface water.
 |
|  | TimingAgrichemicals must not be discharged on Sundays, public holidays, or weekends which immediately precede or follow public holidays, including regional holidays. | 31 | 1. Agrichemicals must not be discharged on Sundays, public holidays, or weekends which immediately precede or follow public holidays; and
2. Agrichemical discharges must not occur during the following holiday periods:
	1. Between Good Friday and Easter Monday, inclusive;
	2. The Canterbury Anniversary weekend; and
	3. The South Canterbury Anniversary Weekend.
 |
|  | The discharge of agrichemicals must be carried out using methods and equipment that minimizes spray drift beyond the target area and must include:1. Prohibiting spraying when rain is publicly forecast to occur before the manufacturers labelled drying times;
2. Prohibiting, or ceasing if the operation has started, spraying when adverse wind conditions that are likely to exacerbate spray drift are forecast to occur within a spraying location or time.
 | 24 | The discharge of agrichemicals must be carried out using methods and equipment that minimises spray drift beyond the target area to cause a hazard and which ensures public safety at all times, and must include: 1. Prohibiting spraying when rain is publicly forecast to occur before the manufacturers labelled drying times;
2. Prohibiting spraying when adverse wind conditions that are likely to exacerbate spray drift are forecast to occur within a spraying location or time; and

Ceasing spraying if adverse wind conditions that cause spray drift beyond the target area arise during any spray operation.  |
|  | Emergent macrophytesThere must be no direct discharge of agrichemicals to surface water, unless:1. The discharge is explicitly to target emergent aquatic vegetation (macrophytes); and
2. The consent holder has assessed the suitability of the site for other practicable options to control the macrophytes; and
3. Where the macrophytes cover is more that 90% of the surface of the waterway, those macrophytes may be sprayed in a single ‘pass-over’; or
4. Where the macrophytes is cover less than 90% of the surface of the waterway, spraying must be targeted to the plants only, to minimize agrichemical discharge to open water.
 | 44 | 1. There must be on direct discharge of agrichemicals to surface water, unless the agrichemical discharge is explicitly for the treatment of emergent aquatic vegetation and the consent holder has assessed, in accordance with the ASMP, there are no other practicable options for controlling these pest species.
2. When the agrichemical discharge is for the explicit purpose of controlling emergent macrophyte growth as described in Condition (45)(a), the following restrictions apply:
3. A ‘one-pass over’ the entire waterway with agrichemical sprayed by any method (UAV or ground-based) must only occur if the target macrophytes cover a minimum of 90% of the waterway to be sprayed.

If the macrophyte cover is less than 90% of the waterway to be sprayed, the agrichemical spraying must only occur from one side of the waterway at a time to reduce the risk to aquatic values from the discharge of agrichemicals over open water if the macrophyte cover is less than 90%.  |
|  | Backflow preventionThe operator discharging agrichemicals must ensure that:1. The filling of tanks to dilute concentrated agrichemicals is carried out in a manner that prevents back-flow of any agrichemical to the water source; and
2. The filling procedures and back-flow prevention devices and methods must comply with the Australian Standard/New Zealand Standard 2845.1:2022 ‘Water supply – Backflow prevention devices, Part 1: Materials, design and performance requirements’, or any successor document.
 | 28 | The operator discharging agrichemicals must ensure that:1. The filling of tanks to dilute concentrated agrichemicals is carried out in a manner that prevents back-flow of any agrichemical to the water source; and
2. The filling procedures and back-flow prevention devices and methods must comply with the Australian Standard/New Zealand Standard 2845.1:2022 ‘Water supply – Backflow prevention devices, Part 1: Materials, design and performance requirements’, or any successor document.
 |
|  | BeesDischarge shall only occur during the time of day, or during weather conditions, where there is a reduced number of exotic bees and other pollinators foraging on flowers, unless evidence has been published that the mixture to be applied is not toxic to bees and other pollinators. | 38 | There must be no discharge of agrichemicals onto plants in flower when there is evidence of bees or other pollinators foraging on those plants unless evidence has been published that the mixture to be applied has no effect on fauna in a field setting.  |
|  | BatsBetween 1 January and the following 31 March inclusive, and within any documented bat habitats, the discharge of agrichemicals must commence after sunrise and cease before 2pm. | 45 | 1. There must be no discharge of agrichemicals within, or within 50 metres of, any bat roosting areas.
2. Between 1 January and the following 31 March inclusive and within any bat habitats, the discharge of agrichemicals must commence after sunrise and cease before dusk to ensure the agrichemical has dried before dusk.
 |
|  |  | 46 | Within any bat habitats, any large trees sprayed must be left standing unless the dead standing tree(s) pose a risk to people or infrastructure. If a standing tree sprayed by agrichemicals under these resource consents is required to be removed, the consent holder must:1. Adhere to the Department of Conservation’s ‘Protocols for Minimising the Risk of Felling Bat Roosts Version 2’, or any successor document;
2. Replace any felled trees with locally sourced indigenous trees of species that are capable of maturing into large trees suitable for bat roosting; and
3. Place bat nesting boxes in areas where large trees have been removed.
 |
|  | BirdsPrior to any agrichemical discharge being carried out in the river fairway during the period 1 ~~August~~ **September** to 1 February inclusive each year, the consent holder must ensure that:1. Surveys of the proposed area of works have been carried out by a suitably qualified and experienced person no earlier than 10 working days prior to the commencement of the agrichemical discharges, to locate any nests, colonies or chicks of any Threatened or At Risk bird species present within the proposed discharge areas.
2. The person(s) who have carried 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 – Compliance Monitoring.
3. 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, or encountered on site that were not previously recorded in the bird survey reports. At a minimum, this must include maintaining an exclusion zone of 100 metres 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;
4. Any person(s) carrying out discharges authorised by these resource consents are informed of any bird breeding or nesting sites;
5. If the discharges 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 (d) of this condition; and
6. Where work ceases for more than eight days for any reason other than for a flood event, the site must be re-surveyed for bird breeding and nesting sites in accordance with parts (a) to (d) of this condition.

***Advice Notes:***1. *A “suitably qualified and experienced person” is defined as someone who has a minimum of 160 hours field experience locating and monitoring shorebird nests.*
2. *‘Threatened’ or ‘At Risk’ are as defined in the New Zealand Threat Classification System (NZTCS), or any successor document.*
 | 47 | Prior to any agrichemical discharge being carried out in the river fairway during the period 1 August to 1 March inclusive each year, the consent holder must ensure that:1. Surveys of the proposed area of works have been carried out by a suitably qualified and experienced person no earlier than ten (10) working days prior to the commencement of the agrichemical discharges, to locate any nests, colonies or chicks of any Threatened or At Risk bird species present within the proposed discharge areas;
2. The person(s) who have carried 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 Manager;
3. 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, or encountered on site that were not previously recorded in the bird survey reports. At a minimum, this must include maintaining an exclusion zone of 100 metres 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;
4. Any person(s) carrying out discharges authorised by these resource consents are informed of any bird breeding or nesting sites;
5. If the discharges 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 (d) of this condition; and
6. Where work ceases for more than eight days for any reason other than for a flood event, the site must be re-surveyed for bird breeding and nesting sites in accordance with parts (a) to (d) of this condition.

***Advice Notes:***1. *A “suitably qualified and experienced person” is defined as someone who has a minimum of 160 hours field experience locating and monitoring shorebird nests.*
2. *‘Threatened’ or ‘At Risk’ are as defined in the NZTCS, or any successor document.*
 |
|  | **ENVIRONMENTAL SAMPLING – WATER QUALITY** |  |  |
|  | Each year, samples of receiving waters must be taken from at least nine (9) locations, unless clause (b) of this condition applies, where there has been agrichemical discharge under these resource consents:1. The samples shall be from:
	1. at least three sites adjacent to, or overlapping with, any sensitive, restricted and notifiable sites identified within Schedule 2;
	2. at least three sites within the drainage network waterways; and
	3. at least three sites within rivers
	4. No sample is required from a site listed in (a)(i)-(a)(iii) of this condition if no spraying has occurred in that environment in that spray season.
 | 48 | 1. Each year, samples of receiving waters must be taken from at least twelve (12) locations where there has been agrichemical discharge under these resource consents. The samples must:
2. Be from at least six sites classified as having high aquatic values by any nationally recognized ecological values assessment standards and one of these sites must include a natural inland wetland area;
3. Be from at least three sites within the drainage network water courses; and
4. Be from at least three sites within rivers (not classified as artificial watercourses).
5. Notwithstanding (a) of this condition, no sample is required from a site listed in (a)(i) – (iii) of this condition if no spraying occurred in that environment in that year.

***Advice Note:*** *Each of the 12 samples required under this condition is known as a ‘sampling event’.*  |
|  | Samples for each ‘sample event’ required under Condition 28 shall be taken as follows:1. One sample must be taken from the spray reach immediately prior to spraying occurring (Sample 1);
2. One sample must be taken approximately 25 m downstream of the spray reach, after reasonable mixing, immediately after spraying has completed (Sample 2); and
3. One sample must be taken from the same location as Sample 2 two hours after the spraying is completed (Sample 3).
 | 49 | Samples for each sample event required under Condition (48) must be taken as follows: 1. One sample must be taken from the spray reach immediately prior to spraying occurring (Sample 1);
2. One sample must be taken within 25 m downstream of the spray reach immediately after spraying has completed (Sample 2); and
3. One sample must be taken from the same location as Sample 2, two hours after the spraying is completed (Sample 3).
 |
|  | Sample 2 shall be analysed for the agrichemicals discharged in that area by an accredited laboratory within two weeks of the sample being taken and results provided to CRC, Attention: Regional Leader – Compliance Monitoring. | 51 | The samples taken in accordance with Conditions (48) to (50) must be analysed for the agrichemicals discharged in that area by an accredited laboratory.  |
|  | If the Sample 2 test results exceed the limits set in Condition 32, the Consent Holder shall:1. Within one week, analyze Sample 1 and Sample 3, taken on the day of the agrichemical discharge, for those same agrichemicals and send those results to CRC, Attention: Regional Leader – Compliance Monitoring;
2. Within one day of receiving Sample 2 test results provide notice of the exceedance to the owners of any known:
	1. community water supply whose mapped protection zone (LWRP reference) overlaps with the discharge area
	2. surface water intake that is within 250m of the discharge area
	3. active bore owner within 250m, which is screened at a depth less than 20 metres below ground.
3. Within two days, return to site and take one (1) sample from the same location as Sample 2 (Sample 4). Sample 4 is to be analysed for those same agrichemicals if Sample 3 test result identifies an exceedance of the limits set in Condition 32 (below);
4. Within 15 days complete an investigation into the potential cause of the exceedance, which must at a minimum:
	1. investigating the weather conditions, flow conditions, agrichemical concentrations, mixing rates, application rates and volumes used;
	2. Condition of weed growth at the time of spraying;
	3. Operator handling; and
	4. Any spills or other relevant contributing factors including the results of Sample 1 and 2 (pre discharge testing).
5. Within 15 days report on the findings of the investigation undertaken in accordance with clause (d) and set out any learnings or change in practices required to minimise the risk of future exceedances. The report on these findings shall be submitted to the CRC, Attention: Regional Leader – Compliance Monitoring within 7 days of the completion of these documents.

Contact those parties listed under clause (b) on return of Sample 3, or if applicable Sample 4, and provide them the report created under clause (e). | 52 | 1. If the samples taken in accordance with Condition (48) and (49) have concentrations exceeding the levels given in Condition (54), the consent holder must, as soon as the results are known:
2. Notify the owners of any known public, private or community drinking water supply identified in the OMP for the spray operation;
3. Notify the Manager; and
4. Implement all practicable measures to reduce the concentration of the contaminant in the receiving environment. Such measures must include immediate cessation of activities that may have caused the excessive concentrations, or removal of contaminant source(s); and
5. Following the implementation of any measures undertaken in compliance with Condition (52)(a), the consent holder must carry out an investigation into the potential cause of the exceedance, which must include at a minimum:
6. Obtaining and analysing a second set of samples within the next 48 hours of the exceedance of the water quality limits being known;
7. Investigating the weather conditions, flow conditions, agrichemical concentrations, mixing rates, application rates and volumes used;
8. Condition of weed growth at the time of spraying;
9. Operator handling; and
10. Any spills or other relevant contributing factors including the results of Sample 1 (pre discharge testing).
11. After the completion of the investigation required by (b) of this condition, the consent holder must complete an improvement action plan that must include at a minimum:
12. Summary of the findings of the investigation required by clause (b) of this condition and setting out the improvements and learnings identified (if any); and
13. Implementation of all learnings set out in the improvement action plan across all persons operating under these resource consents within one month of completing the investigation.

The investigation report and improvement action plan from (b) and (c) of this condition must be submitted to the Manager within seven (7) days of the completion of these documents.  |
|  | **WATER QUALITY – THE LIMITS** |  |  |
|  | The water quality concentration limits for agrichemicals tested in the water samples are:1. 0.1g/m3 for glyphosate;
2. 0.01g/m3 for triclopyr;
3. The limit set for any other approved agrichemical as identified in Schedule 1.
 | 54 | 1. The concentration of glyphosate in receiving waters must not exceed 0.1g/m³ after reasonable mixing.
2. The concentration of triclopyr in receiving waters must not exceed 0.01g/m³ after reasonable mixing, if using the amine-based formulation of triclopyr.
3. If using the esther-based formulations of triclopyr, there must be no detectable amounts of triclopyr after reasonable mixing.

***Advice Note:*** *For the purposes of this condition, after reasonable mixing means at a point no greater than 25 metres downstream of the discharge area.* |
|  | **DAILIY SPRAY RECORDS** |  |  |
|  | The consent holder must ensure that the personnel carrying out the agrichemical discharges authorised by these resource consents keeps a daily record of:1. all agrichemicals applied during each spraying operation.
2. A location map of the areas of spray application and spray mixing locations and supporting GPS logs (if aerial or UAV methods used) or track logs (for ground based methods);
3. The types, rates and amounts of agrichemicals used;
4. Methods and equipment used;
5. Start and finish times and dates;
6. Target plant species;
7. Operators names and details of the agrichemical application qualifications;
8. Weather conditions (including details of wind speed readings taken at least at the start of the spray operation, and four-hourly thereafter until the completion of spraying that day);

The location of the water sources used for diluting agrichemical solutions and for cleaning spray equipment;1. A section confirming the ecological and cultural significant sites and sensitive sites (in list or map form) as identified in the OMP for the spray operation that have been avoided during the spray operation. This section must also include any additional ecological or cultural significant sites or other sensitive sites encountered (and avoided) that were not identified in the OMP;

Records of any water samples taken (if required in the OMP for the spray operation). | 55 | The consent holder must ensure that:1. The personnel carrying out the agrichemical discharges authorised by these resource consents keep daily records of any agrichemicals applied during each spraying operation.
2. These daily spray records must include at least the following:
3. A location map of the areas of spray application and spray mixing locations and supporting GPS logs (if aerial or UAV methods used) or track logs (for ground based methods);
4. The types, rates and amounts of agrichemicals used;
5. Methods and equipment used;
6. Start and finish times and dates;
7. Target plant species;
8. Names and qualification details of all persons discharging agrichemicals during that operation;
9. Weather conditions (including details of wind speed readings taken at least twice during the agrichemical discharges);
10. The location of the water sources used for diluting agrichemical solutions and for cleaning spray equipment;
11. A section confirming the ecological and cultural significant sites and sensitive sites (in list or map form) as identified in the OMP for the spray operation that have been avoided during the spray operation. This section must also include any additional ecological or cultural significant sites or other sensitive sites encountered (and avoided) that were not identified in the OMP;
12. Confirmation that those parties requiring notification of the spray operation (listed in the OMP) have been notified (by whom, method and when) and any responses received to this notification;
13. Confirmation that the agrichemical containers used during the operation have been triple rinsed and location of disposal of any empty containers (if required); and
14. Records of any water samples taken (if required in the OMP for the spray operation) and confirmation of compliance with the requirements for water quality sampling listed in the OMP.
 |
|  | **MIXING AND CLEANING** |  |  |
|  | The consent holder must ensure that all empty chemical containers are disposed of at an authorized disposal site | 25 | The consent holder must ensure that all empty chemical containers are disposed of at an authorised disposal site. |
|  | Any mixing or diluting of an agrichemical or rinsing or cleaning of containers or equipment, and the discharge of water used for rinsing or cleaning, shall not take place within:1. 10 metres of any ponded or flowing surface water, bore, known subsurface drainage infrastructure or stormwater system; or
2. The Christchurch Groundwater Protection Zone as shown on the Canterbury Land and Water Regional Plan Planning Maps or successor document, or a Community Drinking-water Protection Zone as set out in Schedule 1 of the Land and Water Regional Plan, or any such zone determined in a successor document, unless:
	1. The mixing or dilution takes place within a sealed, bunded system that will contain a volume of at least 110 percent of the largest spray tank to be filled; and
	2. The mixing or dilution is for a hand-held application technique or method authorised under Condition 6(b) and (c).

***ADVICE NOTE:*** *For the purposes of this consent only, stormwater system includes sumps, manholes, outfalls, soakage pits, or any system which may discharge to**surface water.* | 26 | Mixing or diluting of any agrichemicals or rinsing or cleaning of containers or equipment must not take place:1. Within 10 metres of surface water, bore or well, land containing a subsurface drainage system, or stormwater system; or
2. On land, or within 10 metres of land, where groundwater is less than 1 metre below ground level; or
3. Within the Christchurch Groundwater Protection Zone as shown on the Canterbury Land and Water Regional Plan Planning Maps or successor document, or a Community Drinking-water Protection Zone as set out in Schedule 1 of the Land and Water Regional Plan, or any such zone determined in a successor document, unless:
4. The mixing or dilution takes place within a sealed, bunded system that will contain a volume of at least 110 percent of the largest spray tank to be filled; and
5. The mixing or dilution is for a hand-held application technique or method authorised under Condition 7(c).

***Advice Note:*** *For the purposes of this consent only, stormwater system includes sumps, manholes, outfalls, soakage pits, or any system which may discharge to surface water.* |
|  |  | 27 | Water used to rinse or clean containers and equipment, and any runoff from this rinsing and cleaning must not be discharged:1. Into surface water; or
2. Onto land where it may enter ground water or surface water; or
3. Within the Christchurch Groundwater Protection Zone or Īnanga Spawning Zones as shown on the Canterbury Land and Water Regional Plan Planning Maps, or any such zones shown it a successor document, or a Community Drinking-water Protection Zone as set out in Schedule 1 of the Canterbury Land and Water Regional Plan, or any such zone determined in a successor document.
 |
|  | **SPILLS** |  |  |
|  | Vehicles and machinery discharging agrichemicals must not:1. enter river channels containing flowing water within 250 metres;
2. or travel on land within 25 metres upstream

of any community or papakāinga surface water supply abstraction point. | 32 (part) | Community surface water abstraction points for supply of drinking water: 1. There must be no discharge of agrichemicals directly to surface water within a Community Drinking-water Protection Zone as set out in Schedule 1 of the Canterbury Land and Water Regional Plan, or any such zone determined in a successor document.
2. Where a community surface water abstraction point for supply of drinking water does not have a Drinking-water Protection Zone as set out in Schedule 1 of the Canterbury Land and Water Regional Plan (or any such zone determined in a successor document):
3. There must be no discharge of agrichemicals to water within 250 metres upstream or 100 metres downstream of these surface water community drinking water abstraction points;
4. There must be no discharge of agrichemicals via aerial or drone methods to land within 250 metres of these surface water community drinking water abstraction points; and
5. There must be no discharge of agrichemicals to land via land-based methods within 25 metres of these surface water community drinking water abstraction points.
6. Vehicles and machinery discharging agrichemicals must not enter river channels containing flowing water within 250 metres upstream or 100 metres downstream of any surface water community drinking water abstraction points.

Vehicles and machinery discharging agrichemicals must not travel on land within 25 metres of any surface water community drinking water abstraction points. |
|  | A Hazardous Substance Spill and Response Plan (HSSRP) must be prepared by the consent holder which details measures and methods for avoiding the unwanted discharge of hazardous substances (including agrichemicals) to water or to land where it may enter water, and a response plan in the event that this unwanteddischarge occurs. | 29 | A Hazardous Substance Spill and Response Plan (HSSRP) must be prepared by the consent holder within three months of these resource consents being granted. The HSSRP must detail measures and methods for avoiding the unwanted discharge of hazardous substances (including agrichemicals) to water or to land where it may enter water, and a response plan in the event that this unwanted discharge occurs.  |
|  | The HSSRP must be prepared in accordance with the “Emergency Planning – Spills” section of NZS 8409:2021 (or any successor document) and the Spill Response portion of the HSSRP must include at least the following steps:1. Implement all practicable measures to reduce the contaminant in the receiving environment. Such measures may include cessation of activites that may have caused the excessive contaminant discharge or removal of the contaminant source(s).
2. Notify the owners or operators of any public, community or private drinking water supplies within 2 km of the spill;
3. Notify the Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring, as well as the respective Papatipu Rūnanga whose rohe the spill is located, and their associated environmental entity; and

Implement all practicable measures to prevent a reoccurrence of the spill event. | 30 | The HSSRP must be prepared in accordance with the “Emergency Planning – Spills” section of NZS 8409:2021 (or any successor document), and the Spill Response portion of the HSSRP must include at least the following steps:1. Implement all practicable measures to reduce the contaminant in the receiving environment. Such measures may include cessation of activites that may have caused the excessive contaminant discharge or removal of the contaminant source(s);
2. Notify the owners or operators of any public, community or private drinking water supplies within 2 km of the spill;
3. Notify the Manager, as well as the respective Papatipu Rūnanga whose rohe the spill is located, and their associated environmental entity; and

Implement all practicable measures to prevent a reoccurrence of the spill event.  |
|  | **ANNUAL COMPLETION REPORTS** |  |  |
|  | The consent holder must provide an “Annual Spray Completion Report” to the Canterbury Regional Council, Attention: Regional Leader - Compliance Monitoring and to the parties listed in Condition 7, by the 31 October of each year. This Annual Spray Completion Report is for the purpose of recording and reviewing the agrichemical discharge that has occurred under these resource consents in the previous twelve months and shall include:1. the areas of operation;
2. the agrichemicals used;
3. the amount of agrichemicals used;
4. spray methods used;
5. the dates of the operation;

the results, and an analysis of the results, of any water quality monitoring that has taken place; | 58 | The consent holder must provide an “Annual Spray Completion Report” to the Manager and to the parties listed in Condition (11), by 31 October of each year. This Annual Spray Completion Report is for the purpose of recording and reviewing the agrichemical discharge that has occurred under these resource consents in the previous twelve months and must include at a minimum:1. The areas of operation (in list and map form);
2. The agrichemicals used;
3. The amount of agrichemicals used;
4. Spray methods used;
5. The dates of the operations;
6. The results, and an analysis of the results, of any water quality monitoring and benthic invertebrate monitoring that has taken place;
7. The areas where habitat restoration or riparian planting has been undertaken;
8. A summary of all environmental, agrichemical spill, or non-target damage incidents that may have occurred, and the actions taken to address these incidents; and

A summary of any complaints received, and the actions taken to address these.  |
|  | The consent holder shall keep a register of any formal complaints received that list any direct actual or perceived impact on the complainant due to the discharge of agrichemicals under this Consent and provide that register to the CRC, Attention: Regional Leader - Compliance Monitoring by the 31 October each year. This complaints register shall include:1. the date and time the complaint was received;
2. the nature of the complaint;
3. the name, telephone number, and address of the complainant (if provided);
4. a link to the OMP and Daily Spray Log relevant to the complaint;
5. any remedial actions taken to address the complaint and prevent further incidents.

*Advice note: the intension of the complaints register is to record direct impacts on people’s health, assets or wildlife and does not set an expectation that all spray related commentary is recorded. Such incidents warranting a record include non-**target plant damage, damage to private enhancement or aesthetic plantings, observed wildlife deaths.* | 56 | The consent holder must keep a register of any complaints received about any discharge of agrichemicals authorised by these resource consents. This Complaints Registers must include:1. The date and time the complaint was received;
2. The nature of the complaint;
3. The name, telephone number, and address of the complainant if given by the complainant;
4. Weather information (wind speed and direction) at the time of the complaint;
5. Details of key operating parameters at the time of the complaint; and
6. The remedial actions taken to address the complaint and prevent any further incidents.

Complaints must be reported to the Manager verbally as soon as practicable to do so, and by written report within 72 hours of receipt of the complaint. The Complaints Register must be made available to the Canterbury Regional Council Compliance and Enforcement staff on request.  |
|  | **ADMINISTRATION** |  |  |
|  | The Canterbury Regional Council may annually on the last working day of May or November, pursuant to Sections 128, 129, 130, 131 and 132 of the RMA, serve notice of its intention to review the conditions of this resource consent for the purposes of:1. Dealing with adverse effect on the environment which may arise from the exercise of these resource consents, and which is not appropriate to deal with at a later stage; or
2. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment; or
3. Requiring the consent holder to carry out monitoring and reporting instead of, or in addition to, that required by these resource consents; or

To modify the conditions of this consent to ensure that it is consistent with the operative provisions of a regional plan. | 59 | The Canterbury Regional Council may annually on the last working day of May or November, pursuant to Sections 128, 129, 130, 131 and 132 of the RMA, serve notice of its intention to review the conditions of this resource consent for the purposes of:1. Dealing with adverse effect on the environment which may arise from the exercise of these resource consents, and which is not appropriate to deal with at a later stage; or
2. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment; or
3. Requiring the consent holder to carry out monitoring and reporting instead of, or in addition to, that required by these resource consents; or

To modify the conditions of this consent to ensure that it is consistent with the operative provisions of a regional plan.  |
|  | If this consent is not exercised before 30 June 2029, it must lapse in accordance with Section 125 of the Resource Management Act 1991. | 60 | If this consent is not exercised before 30 June 2029, it must lapse in accordance with Section 125 of the Resource Management Act 1991. |

1. Acknowledge two extra conditions from applicant but defer to Ms Drummond and Mr Thomas to comment on acceptability and necessity.
2. The following s42A conditions are not included within applicant’s proffered conditions. I have commented on these where relevant.
	1. 4. – Amine vs Esther triclopyr – acknowledge responses from Ms Drummond, and the applicant’s
	2. 6. - No discharge directly to groundwater. I accept the applicant’s removal of this as it is unnecessary/superfluous. Could be incorporated into spraying handbook.
	3. 16. - Notification requirements for annual programme.
	4. 21. - Spray Handbook – Applicant accepting that this condition should be added back in in generally the proposed form
	5. 23. – Growsafe RCA requirement
	6. 37. – Part of register – accepting of this
	7. 50. – Benthic macroinvertebrate monitoring – Laura

## Duration

1. I acknowledge the evidence and reasoning provided by the applicant in regards to their requested duration of 20 years, however, I still stand by my recommendation of a 15 year consent duration for the reasons detailed in Paragraph 574 of my s42A report.

In remaining of this opinion, I highlight the discharge permits granted by ECan to Waka Kotahi New Zealand Transport Agency and Selwyn District Council in May 2020 (CRC192924) and January 2021 (CRC201738) for the discharge of agrichemicals to air, land and water for weed control within their jurisdictions. Both of these consents were granted with a duration of 15 years and were processed on a non-notified basis.

I highlight that the SDC and Waka Kotahi consents:

* 1. Did not allow for any aerial spraying; and
	2. Allow spraying on a considerably smaller scale and in considerably less sensitive areas then the proposed consents.

As previously highlighted, the NZTA consent allowed for the discharge of any agrichemical approved by the HSNO for the intended purpose of the consent (including any unknown, future agrichemical) but the SDC consent did not. However, the SDC consent allowed for the discharge of Metasulfuron, diquat, Haloxyfop, and Terbuthylazine which have much higher degrees of ecotoxicity then triclopyr and glyphosate which is reflected in the HSNO classifications for the four chemicals. They have also greater potential for adverse effects on human health too.

## Conclusion

My overall recommendation to grant all the consent sought remains, however, my opinion and position on the matters of contention have changed throughout the hearing proceeding.

This changing position is to be reflected in changes to the draft conditions of consent to be workshopped with the applicant.

|  |  |  |  |
| --- | --- | --- | --- |
| Prepared by: |  | Date:  | 26 March 2024 |
| Name: | Rebecca Beattie*Consultant Planner* |  |  |

1. As defined in the National Policy Statement for Freshwater Management 2020. [↑](#footnote-ref-1)