Record Number: CRC981580 Record Type: Renewal

Permit Type: Discharge Permit

Record Holder: Canterbury Regional Council (Regional

Record Status: Engineer)
File Number: Issued - Active
Previous Record(s): CO6C/03139

Next Record(s): CRC921342, CRC921345

Location:

Description: Rivers, Streams And Creeks Within

Canterbury, DEFINED BY CRC

BOUNDARIES

to spray chemicals for the control of

exotic vegetation.



Customer Services

P. 03 353 9007 or 0800 324 636

PO Box 345 Christchurch 8140 P. 03 365 3828

www.ecan.govt.nz

F. 03 365 3194 E. ecinfo@ecan.govt.nz

Key Dates:

EventDateCommencement Date26 Mar 2002Given Effect To26 Mar 2002Lapses26 Mar 2007Expires21 Feb 2022

Workflow (Only shows if workflow has open tasks):

Task Name Task Status Task Status Date

Conditions:

No	Text
1	The herbicides and surfactants shall be discharged in accordance with the:(i) "Quality Control Plan for the Discharge of Herbicides to Control Fairway Vegetation"; and(ii) "Safety Procedures and Contingency Plan", attached to this consent.
2	(a) The discharge shall only be of proprietary formulations containing the herbicides glyphosate or triclopyr as the active ingredient.(b) Additives to these herbicide formulations shall only be surfactants added in accordance with the manufacturers' instructions.
3	There shall be no discharge of surfactant onto plants in flower where honey bees are likely to be present, if it has been demonstrated in field or laboratory tests and reported in published material that the surfactant is toxic to honey bees when discharged in accordance with the manufacturer's instructions.
4	The application rate and concentration of any herbicides and surfactants discharged shall not exceed the chemical manufacturers' recommended rate for the product.
5	Only herbicides that are currently registered for the purpose of weed control under the Hazardous Substances and New Organisms Act 1996 or any succeeding legislation shall be discharged.
6	Triclopyr shall not be discharged over water.
7	The concentrations of herbicides in surface waters within 25 metres downstream of spray zones shall not exceed the following:(i) Glyphosate 0.1 grams per cubic metre(ii) Triclopyr 0.01 grams per cubic metre
8	Herbicide shall be discharged in a manner that complies with the "Agrichemical User's Code of Practice and Appendices", NZS8409: 1999, or any versions of that document current at the time of discharge.

(a) The consent holder shall identify, prior to discharging herbicide in a spray zone, the location of all community drinking water supply draw-off points located within 250 metres of the spray zone.(b) There shall be no aerial discharge of herbicides within 250 metres of any community surface water supply draw-off point.(c) There shall be no land-based discharge of herbicides within 25 metres of any community surface water supply draw-off point.(d) Vehicles and machinery discharging herbicides under this consent shall not enter river channels containing flowing water within 250 metres upstream of any community surface water supply draw-off point.(e) Vehicles and machinery discharging herbicides under this consent shall not pass within 25 metres of any community surface water supply draw-off point.(f) For the purpose of this consent a community drinking water supply draw-off point shall be defined as a publicly or privately owned drinking-water supply (via surface water, infiltration gallery, or shallow well) which serves more than 25 people per year for at least 60 days per year. There shall be no discharge within the hatched area shown on the attached plan "CRC981580 - Rangiora Water Wells". 11 There shall be no discharge on public holidays or on any weekends that immediately precedes or follows a public holiday. There shall be no aerial spraying of herbicide within 250 metres of any school or dwelling. 13 A copy of this resource consent shall be given to all persons undertaking activities authorised by this consent prior to commencing works.NOTIFICATION OF SPRAY PROGRAMME (a) Annual spray programmes for all areas to be sprayed in the following year shall be prepared by 1 August each year. The spray programmes shall detail the: · areas of operation; · chemicals to be used; . spray methods to be used; · likely starting date and duration of the spraying; and · contact person and telephone number for enquiries.(b) By 1 September of each year the consent holder shall submit a copy of the annual spray programme to: The Compliance Monitoring Section of the Canterbury Regional Council; the relevant territorial authorities; \cdot the Runanga within whose rohe spray operations will occur; the Te Ngai Tuahuriri Resource Management Committee; Crown Public Health; Fish and Game New Zealand - North and South Canterbury; the Canterbury Beekeepers Association; and the relevant Eel Management Committee for the area (Te Waihora, South Canterbury/Waitaki or North Canterbury/Marlborough). The consent holder shall notify the Te Taumutu Runanga at least five working days prior to the commencement of each spraying event in the riverbeds of the following rivers or their tributaries: · Selwyn River: · Rakaia River: · Main Branch of Ashburton River: and · North Branch of Ashburton River. The consent holder shall notify the Waimakariri District Council at least five working days prior to the commencement of any herbicide spraying event within 250 metres of the public supply bores identified on the attached plan "CRC981580 - Waimakariri Public Supply Wells". Prior to spraying herbicide 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: that spraying is in progress, the proposed duration of the spraying, including starting and finishing dates, whether it is aerial or ground-based

spraying; and · the active herbicide chemical and surfactant, if any, being used.

- The consent holder shall provide a report to the Canterbury Regional Council by the 31st May of each year. This report shall identify the herbicide spraying that has taken place in the previous 12 months including: the areas of operation; the type of chemicals used in each area including herbicides and surfactants; the spray method used; the dates of operations; location of water quality monitoring sites, and the results and an analysis of any monitoring of the operation that has taken place.
- Samples of water shall be taken from at least five areas each year in the vicinity of which herbicide spraying has been undertaken over an area of at least 0.5 hectares. Samples shall be taken from at least two areas where triclopyr has been discharged and at least two areas where glyphosate has been discharged. Sampling, analysis and reporting shall be undertaken in accordance with conditions (20) and (21).
- 20 In areas where triclopyr has been discharged -(a) Samples of water shall be taken from channels containing flowing water within 25 metres downstream and immediately upstream of the spray area. Samples shall be taken as follows:(i) One upstream sample shall be taken immediately prior to spraying;(ii) One downstream sample shall be taken upon the conclusion of spraying; and(iii) One downstream sample shall be taken within 40 days of the conclusion of spraying and following sufficient rainfall on river flow to result in surface water movement over the sprayed area.(b) The samples taken in accordance with (a)(ii) and (iii) shall be analysed for triclopyr.(c) The sample taken in accordance with Condition (a)(i) shall be analysed for triclopyr only if the samples taken in accordance with either (a)(ii) or (iii) show a result that is greater than or equal to the maximum concentration specified in Condition 7(ii).(d) If the analysis of the samples taken in accordance with Condition(a)(ii) or (iii) shows that the concentration of triclopyr does not exceed the concentration specified in Condition (7)(ii), the results shall be provided to the Canterbury Regional Council within 10 working days of receipt of the results by the consent holder.(e) If the analysis of the sample taken in accordance with (20)(a)(i) or (20)(a)(ii) shows that the concentration of triclopyr determined exceeds the concentration specified in Condition (7)(ii), the consent holder shall:(i) Notify the Compliance Monitoring Section of the Canterbury Regional Council within two working days of receipt of the results by the consent holder; and(ii) Implement all practicable measures to reduce the concentration of the contaminant in the receiving environment. Without limitation such measures may include cessation of activities that may have caused the exceeding concentration, or removal of contaminant source(s), or review of discharge procedures. The measures to be implemented shall be reported to the Compliance Monitoring Section of Canterbury Regional Council along with the notice of the results under (e)(i).
- 21 In areas where glyphosate has been discharged -(a) Samples of water shall be taken from channels containing flowing water within 25 metres downstream and immediately upstream of the spray area. Samples shall be taken as follows:(i) One upstream sample shall be taken immediately prior to spraying,(ii) One downstream sample shall be taken upon the conclusion of spraying.(b) The samples taken in accordance with (a)(ii) shall be analysed for glyphosate.(c) The sample taken in accordance with Condition (a)(i) shall only be analysed for glyphosate if the sample taken in accordance with Condition(a)(ii) shows a result that is greater than or equal to the maximum concentration specified in Condition (7)(i).(d) If the analysis of the samples taken in accordance with Condition(a)(ii) shows that the concentration of glyphosate does not exceed the concentration specified in Condition (7)(i), the results shall be provided to the Canterbury Regional Council within 10 working days of receipt of the results by the consent holder.(e) If the analysis of the sample taken in accordance with (a)(i) or (ii) shows that the concentration of glyphosate determined exceeds the concentration specified in Condition (7)(i), the consent holder shall:(i) Notify the Compliance Monitoring Section of Canterbury Regional Council within two working days of receipt of the results by the consent holder; and(ii) Implement all practicable measures to

reduce the concentration of the contaminant in the receiving environment. Such measures may include cessation of activities that may have caused the exceeding concentration, or removal of contaminant source(s), or review of discharge procedures. The measures to be implemented shall be reported to the Compliance Monitoring Section of Canterbury Regional Council along with the notice of the results under (e)(i).

- (a) Where the permission of the Waimakariri District Council has been obtained a representative sample of groundwater shall be taken from a Waimakariri District Council public supply bore between 24 and 72 hours of herbicides being sprayed on an area within 250 metres up-gradient of the bore and shall be analysed for glyphosate and triclopyr.(b) The results of these analyses shall be provided to the Compliance Monitoring Section of the Canterbury Regional Council and the Waimakariri District Council within 20 working days of sampling taking place.(c) If the analysis of any sample taken in accordance with (a) shows that the concentration of herbicide determined exceeds the concentration given in Condition (7)(i) or (ii), the consent holder shall obtain and analyse a second sample of groundwater from another bore in accordance with (a).
- All water sample analyses shall be undertaken by a laboratory accredited to NZS/ISO/IEC Guide 17025 or equivalent defined by an accreditation body recognised as operating to ISO/IEC Guide 58 for those analyses.
- The Canterbury Regional Council may, on any working day in November or February, serve notice of its intention to review the conditions of this consent for the purposes of: (a) Determining whether the conditions of this consent are adequate to deal with any adverse effects on the environment which may arise from the exercise of this consent and which it is appropriate deal with at a later stage; or (b) Altering the frequency or type ofmonitoring required under this consent. (c) Complying with the requirements of a relevant rule in an operative regional plan.

Record Number: CRC041535 Record Type: Renewal

Permit Type: Discharge Permit

Record Holder: Canterbury Regional Council (Regional

Record Status: Engineer)
File Number: Issued - Active
Previous Record(s): CO6C/21414

Next Record(s): CRC921460, CRC921461, Location: CRC921462, CRC921463, Description: CRC921464, CRC921465,

CRC980229

Waterways Within Canterbury Regional Council, CANTERBURY REGIONAL COUNCIL AREA to discharge herbicides glyphosate, triclopyr and diquat, along with surfactants, into water or onto land where they might enter water.



Customer Services

P. 03 353 9007 or 0800 324 636

PO Box 345 Christchurch 8140 P. 03 365 3828 F. 03 365 3194 E. ecinfo@ecan.govt.nz

www.ecan.govt.nz

Key Dates:

EventDateCommencement Date21 Oct 2004Given Effect To27 Apr 2006Lapses30 Sep 2009Expires21 Feb 2022

Workflow (Only shows if workflow has open tasks):

Task Name Task Status Task Status Date

Conditions:

No	Text	
1	a.	All persons undertaking activity authorised by this consent shall be familiar with the provisions of the "Environment Canterbury Handbook for Spraying", current at the time each discharge event occurs, including:
		Quality Control Plan for the Discharge of Herbicides to Control Fairway Vegetation and Vegetation Control in Water Courses and Enclosed Freshwater Bodies; and
		Safety Procedures and Contingency Plan. Hot Spots list and spawning times.
	a.	Updated copies of the "Environment Canterbury Handbook for Spraying" shall be provided to the Canterbury Regional Council for the attention of the Compliance Monitoring Section by 1 August each year.
2		The only herbicides discharged to a waterway shall be glyphosate, triclopyr or diquat. For the purposes of this consent, a waterway is defined as any drain, water race, irrigation channel, canal, stream or river in the Canterbury Region, where a discharge to the waterway is not authorised by resource consent CRC981580.
	b.	Diquat shall only be discharged to waterways as follows: i. where the use of glyphosate has failed to control emergent or submerged broadleaf weeds; or

ii. to control weeds in the Ashburton Hinds Drainage Scheme. a. Triclopyr shall not be discharged directly to water and shall not be discharged to any waterway containing, or that may contain, water. b. The only herbicides discharged to any enclosed freshwater body shall be glyphosate or diquat. c. Additives to these herbicides shall only be surfactants or marker dyes added in accordance with the manufacturer's instructions. 3 The method of discharge for glyphosate, triclopyr and added surfactants shall be ground-based spraying, which includes hand-held spot application using backpack sprayers, fine droplet hand held sprayers and mist blowers, and vehicle mounted guns and booms. b. Diquat shall only be used as a proprietary gel formulation. a. Herbicide shall be discharged in a manner which complies with the "Agrichemical 4 User's Code of Practice and Appendices", NZS 8409:1999, or any subsequent versions of that document current at the time of discharge. b. The person carrying out the discharge shall hold a current certificate as a registered herbicide applicator issued by a nationally-recognised herbicide applicator training organisation. The application rate and concentration of any herbicides and surfactants discharged shall not exceed the manufacturer's recommended rate for the product and purpose of use. Only herbicides that are registered at the time of discharge for the purpose of vegetation control under the Hazardous Substances and New Organisms Act 1996, the Agricultural Compounds and Veterinary Medicines Act 1997, or any succeeding legislation shall be discharged. 7 There shall be no discharge on public holidays, or weekends which immediately precede or follow public holidays. 8 The consent holder shall prepare a Proposed Plan for Herbicide Application (the Proposed Plan) at least once per year. The Proposed Plan shall identify the herbicide application areas for the coming year, proposed dates of application, herbicides to be used and method(s) of application. The Proposed Plan shall be forwarded to the following parties by 1 August of each year: i. The Canterbury Regional Council for the attention of the Compliance Monitoring Section ii. the territorial authorities within whose districts the discharge will occur; iii. Te Runanga O Ngai Tahu; iv. the Runanga within whose rohé herbicide discharges will occur; v. the Councils of Fish and Game New Zealand within whose regions the discharge will occur; vi. The Department of Conservation area conservancies within which the discharge will occur; and vii. National Beekeepers Association – Canterbury Branch

These parties shall be invited to provide comments on the Proposed Plan within 15 working days. b. The consent holder shall convene a meeting to be held during Septembber each year to which the parties listed are invited to discuss; the Proposed Plan and issues and identify areas of concern; spraying practices; monitoring results; current and predicted herbicide use; contractor performance and training needs; and the effectiveness of the consent conditions. c. The consent holder shall take into account matters identified in comments on the Proposed Plan made by these parties, or matters raised during the meeting, and amend the Proposed Plan accordingly. d. Consultation with the Te Runanga O Ngai Tahu, the Department of Conservation, and Fish and Game New Zealand shall occur prior to any discharge during fish spawning times into a fish spawning area located in a waterbody identified in the "Hot Spots" list, as defined in the "Environment Canterbury Handbook for Spraying". 9 There shall be no discharge onto native bank-side vegetation, as far as practicable. 10 The discharge shall not occur within: a. 25 metres upstream of an intake for a water supply that is not used for domestic or community water supply purposes; or b. 250 metres upstream of an intake for a water supply that is used for domestic or private water supply purposes; or c. 1 kilometre upstream of an intake for a water supply that is used for community water supply purposes; unless the owner of the water supply has given written permission to the discharge occurring closer to the intake than the distances above. All mixing of chemicals used for the discharge shall be sufficiently remote from any watercourse so that any accidental spillage of chemicals or spray does not discharge to the watercourse. A copy of this resource consent shall be given to all persons undertaking activities authorised by this consent prior to commencing the activities. The concentration of glyphosate in the waters of any watercourse arising from the exercise of this consent shall not, after reasonable mixing, exceed 0.1 grams per cubic metre. Reasonable mixing is deemed to have occurred 25 metres downstream of a discharge in a watercourse, or 25 metres from a discharge into a lake. The concentration of triclopyr in the waters of any watercourse arising from the exercise of this consent shall not, after reasonable mixing, exceed 0.01 grams per cubic metre. Reasonable mixing is deemed to have occurred 25 metres downstream of a discharge. The concentration of diquat in the waters of any watercourse arising from the exercise of this consent shall not exceed, after reasonable mixing, 0.01 grams per cubic metre. Reasonable mixing is deemed to have occurred 25 metres downstream of a discharge in a watercourse, or 25 metres from a discharge into a lake. 16 a. The percentage saturation of dissolved oxygen in the waters of any watercourse

	arising from the exercise of this consent shall not fall below 70 percent. b. Where it is intended to kill a significant proportion of the emergent aquatic plants in a section of a waterbody as a result of the discharge; and i. this is likely to reduce the dissolved oxygen concentration to less than 80 percent saturation; or ii. the section of the waterbody has significant ecological values;
	spray applications shall be staggered to ensure that no more than 50 percent of the length or area of the margins of the section of the waterbody is sprayed at any one time, and there shall be at least a 30 day interval before spray application recommences to the balance area of that section of the waterbody.
17	There shall be no discharge of contaminants within 50 metres of any beehive.
18	There shall be no discharge of surfactant onto plants in flower where honey bees are likely to be present if it has been demonstrated in field or laboratory tests and reported in published material that the surfactant is toxic to honey bees when discharged in accordance with manufacturer's instructions.
19	The discharge shall not occur within 50 metres of any bird nesting or rearing young on the bed or bank of a river.
20	The discharge shall not cause an objectionable or offensive odour beyond 100 metres from the point of discharge.
21	Samples containing a mix of herbicides and water that is to be discharged shall be taken during at least six discharge events each year to ensure manufacturer's specifications are not being exceeded.
22	Samples of the receiving water shall be taken from at least six areas each year in the vicinity of which herbicide discharge has been undertaken over an area of at least 0.5 hectares. Samples shall be taken from at least two areas where triclopyr has been discharged, at least two areas where glyphosate has been discharged, and at least two areas where diquat has been discharged. Sampling, analysis and reporting shall be undertaken in accordance with conditions (23) to (28) below.
23	In areas where triclopyr has been discharged -
	Samples of water shall be taken from channels containing flowing water within 25 metres downstream and immediately upstream of the spray area. Samples shall be taken as follows:
	 a. One upstream sample shall be taken immediately prior to spraying; b. One downstream sample shall be taken immediately after spraying; and c. One downstream sample shall be taken within 40 days of the conclusion of spraying and following sufficient rainfall on river flow to result in surface water movement over the sprayed area. i. The samples taken in accordance with (a) shall be analysed for triclopyr.
24	In areas where glyphosate has been discharged - a. Samples of water shall be taken from channels containing flowing water within 25 metres downstream and immediately upstream of the spray area. Samples shall be taken as follows:

- a. One upstream sample shall be taken immediately prior to spraying,
- b. One downstream sample shall be taken immediately after spraying.
- c. One downstream sample shall be taken after 12 hours but within 72 hours of the conclusion of spraying.
- a. The samples taken in accordance with (a) shall be analysed for glyphosate.
- 25 In areas where diguat has been discharged
 - a. Samples of water shall be taken from channels containing flowing water within 25 metres downstream and immediately upstream of the diquat application area. Samples shall be taken as follows:
 - i. One upstream sample shall be taken immediately prior to diquat gel being applied,
 - ii. One downstream sample shall be taken immediately after diquat gel application is complete.
 - iii. One downstream sample shall be taken after 12 hours but within 72 hours of the completion of the diguat gel application.
 - a. The samples taken in accordance with (a) shall be analysed for diquat.
- All water sample analyses carried out in accordance with Conditions (23)(b), (24)(b) and (25)(b) shall be undertaken by a laboratory accredited to NZS/ISO/IEC Guide 17025 or equivalent defined by an accreditation body recognised as operating to ISO/IEC Guide 58 for those analyses.
- If the analysis of any sample taken shows that the concentration of herbicide determined does not exceed the levels given in conditions (13), (14), or (15) the results shall be provided to the Canterbury Regional Council for the attention of the Compliance Monitoring Section ten working days of receipt of the results by the consent holder.
- If the analysis of any sample taken shows that the concentration of herbicide determined exceeds the levels given in Condition (13), (14), or (15), the consent holder shall:
 - a. Notify any known public, private or community water supply downstream of the sample area immediately the result is known;
 - b. Notify the Canterbury Regional Council for the attention of the Compliance Monitoring Section immediately the result is known; and
 - c. Implement all practicable measures to reduce the concentration of the contaminant in the receiving environment. Such measures may include cessation of activities that may have caused the excessive concentrations or removal of contaminant source(s).
 - d. Implement all practicable measures to prevent a recurrence of the event in any location.
 - e. Following the implementation of any measures undertaken in compliance with (c) the consent holder shall obtain and analyse a second set of samples within the next 48 hours. Results of this analysis shall be reported to the Canterbury Regional Council for the attention of the Compliance Monitoring Section immediately the results are known.

29 Within three months from the date of granting of this consent, the consent holder shall in consultation with Te Runanga O Ngai Tahu and with the advice of a Fisheries expert agreed on by between itself and Te Runanga O Ngai Tahu draw up a programme of on-going monitoring to be undertaken to indicate any effects of the discharge on eels in the waterways in the Ashburton Hinds Drainage Scheme. This programme will include provisions for the reporting of results to Te Runanga O Ngai Tahu. b. Within two weeks of it being drawn up, a copy of the monitoring programme shall be forwarded to the Canterbury Regional Council for the attention of the Compliance Monitoring Section. c. The monitoring programme prepared under (a) shall be implemented and carried out by the consent holder over a period of ten years commencing no later than six months after the granting of this consent. 30 Within three months from the date of granting of this consent, the consent holder shall in consultation with Te Runanga O Ngai Tahu, the Department of Conservation, Fish and Game New Zealand and Water Quality Scientists from the Canterbury Regional Council, draw up a monitoring programme to be undertaken within an area where it is anticipated regular discharge of herbicides will occur to indicate any effects of the discharge on invertebrates. This programme will include provisions for the reporting of results to Te Runanga O b. Within two weeks of it being drawn up, a copy of the monitoring programme shall be forwarded to the Canterbury Regional Council for the attention of the Compliance Monitoring Section. c. The monitoring programme prepared under (a) shall be implemented and carried out by the consent holder over a period of ten years commencing no later than six months after the granting of this consent. The consent holder shall provide to the Canterbury Regional Council Compliance Monitoring Section, by the last working day of each month, a programme of the herbicide discharge activity that will be undertaken in the following month. This programme shall provide details of the location of operations, target vegetation, herbicides to be used and methods of application. Should any excessive application of herbicide or a herbicide spill event occur into a waterway or enclosed freshwater body from which a drinking water supply (private or community) is being drawn, then the consent holder shall notify the owners or operators of these supplies immediately. 33 When spraying the consent holder shall erect and maintain signs 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 note: a. that spraying is in progress; b. the proposed times of the spraying; c. method of application; and d. the active chemical being used.

34 The consent holder shall provide a report to the Canterbury Regional Council for the attention of the Compliance Monitoring Section by the 31st May of each year. This report shall identify the vegetation spraying that has taken place in the previous twelve months including: a. the areas of operation; b. the type of chemicals used; c. the amount of chemical used; d. spray method used: e. the dates of the operation; and f. the results, and an analysis of the results of any monitoring that has taken place. The applicant will annually review its current practises regarding herbicide use and need for herbicide use and alternative herbicide compounds that could be used. This will take into account current information regarding alternatives to spraying, and a commitment to decreasing herbicide use over the duration of the consent. These will be incorporated into the documents identified in condition (1) of this consent and any changes notified to the parties listed in condition (8) of this consent. 36 The Canterbury Regional Council may, on any of the last five working days of November or February, each year serve notice of its intention to review the conditions of this consent for the purposes of: a. Determining whether the conditions of this consent are adequate to deal with any adverse effects on the environment, which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or b. Altering the frequency and type of monitoring required under this consent; or c. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

The lapsing date for the purposes of section 125 shall be 30 September 2009.

37