

Attachment 1.

Discharge Permit CRC185857

Scope

1. This consent authorises the discharge onto or into land where contaminants may enter water arising from farming activities on Properties:
 - (a) listed in Schedule CRC185857A, or any subsequent revisions thereof as provided for under Condition 8; and
 - (b) located within the area shown on Plan CRC185857A (the *Command Area*),and including the expansion of dairy support land and irrigated dairy farm land, the conversion of land to dairy farm land and the undertaking intensive winter grazing.

Definitions

2. Land types

Term	Definition
Dry Land	Land that is not irrigated but where nitrogen losses are managed under this consent.
Existing Scheme Irrigated Land	Land lawfully supplied with irrigation water supplied by an irrigation scheme or principal water supplier prior to 26 May 2014.
Lawfully Irrigated PC2 Land	Land that was previously not irrigated and which was first supplied with irrigation water by an irrigation scheme or principal water supplier under the authorisation of resource consent(s) CRC121664 or CRC162882 (or replacements and subsequent variations).
Other Irrigated Land	Land that is irrigated from any source and which is not Existing Scheme Irrigated Land or Lawfully Irrigated PC2 Land and which is on a Property that receives irrigation water from the MHV Water irrigation scheme.

Advisory note: All land on a Property managed by the Consent Holder under this resource consent shall fall in one or more of the land types listed. All properties must be fully or partially irrigated with water from the MHV Water irrigation scheme.

Other definitions

Term	Definition
Authorised Properties	Properties that the consent holder has elected to treat as Authorised Properties for the purposes of Conditions 9 and 10.
Certified Freshwater Farm Plan	A freshwater farm plan certified under section 217G of the Resource Management Act 1991 (as amended from time to time in accordance with section 217E(2) or (3)), or as provided for by

	the Resource Management (National Environmental Standards for Freshwater) Regulations 2020
CDWPZ Impacted Land	<p>Land that is included in a Community Drinking Water Protection Zone, plus any other land within the same paddock where it is not possible to treat such further land on a different management basis for the purposes of condition 21.</p> <p><i>Advisory note: For example:</i></p> <ul style="list-style-type: none"> • <i>it will typically not be possible to provide differential stock grazing within the same paddock; and</i> • <i>it may be possible to provide differential management for a cropping or horticultural operation in the same paddock.</i>
Commencement Date	The date that this resource consent (CRC185857) is given effect to, without limiting any amendment to the reporting requirements as may be agreed in accordance with Condition 30.
Community Drinking Water Protection Zone	A Community Drinking Water Protection Zone as identified in Schedule 1 of the Canterbury Land and Water Regional Plan.
Farming activity	All Agricultural and Horticultural landuses (whether irrigated or not) and including but not limited to dairy farming, dairy support, winter grazing, sheep and beef farming, deer, pig and goat farming, arable/cropping, fruit & vegetable productive landuses and other agricultural and horticultural land use and forestry/ineffective areas.
NES Equivalent Farm	<p>A Property on which:</p> <ul style="list-style-type: none"> a) 20 ha or more is in arable land use; or b) 5 ha or more is in horticultural land use; or c) 20 ha or more is in pastoral land use; or d) 20 ha or more is in a combination of any two or more of the land uses described above, <p>provided that this definition shall not limit the consideration of, as a significant change application, any increase in the area used for dairy farming (being the use of land by milking dairy cows) by more than 10 hectares.</p>
HPZ gmp	<p>The farming practices described in Schedule 24a of the operative Canterbury Land & Water Regional Plan (at the Commencement Date), taking into account:</p> <ul style="list-style-type: none"> i. the type of farming activity; and ii. the drainage characteristics of the soils; and iii. the climatic conditions and topography of the Property; and iv. the type of irrigation system used.

Nutrient Allocation Zone	A nutrient allocation zone within the area shown on Plan CRC185857A.
Nutrient Discharge Allowance (NDA)	The Nutrient Discharge Allowance as determined by Conditions 3 to 7.
Property	Any contiguous area of land, including land separated by a road or river, held in one or more than one ownership, that is utilised as a single operating unit, and may include one or more certificates of title.
Sensitive receptor	Areas of wetland, surface water bodies and riparian areas, sites of cultural significance (as may be further defined in consultation with Te Rūnanga o Arowhenua) and, in the case of any land located within a Community Drinking Water Protection Zone, the Community Drinking Water Supply.
Significant change	<p>In relation to the farming activity on a Property means:</p> <ul style="list-style-type: none"> a) an increase in the area irrigated by more than 10 hectares; b) an increase in the area used for dairy farming (being the use of land by milking dairy cows) (whether irrigated or not) by more than 10 hectares; c) any increase in the area used for intensive winter grazing (being the grazing of livestock on annual forage crop at any time in the period 1 May to the following 30 September); and d) any increase in the area on a property of dairy support land (being the farming of non-milking dairy cows, including heifers), <p>as compared to the maximum area used on that Property in any year (being the period of 1 July to 30 June) in the period 1 July 2014 to 30 June 2019.</p>

Schedules of Properties covered by this consent

3. Schedule CRC185857A attached to and forming part of this consent, shall specify:
- (a) The Nutrient Allocation Zone(s) within which each Property is located; and
 - (b) the load that has been calculated or deemed for each Property in accordance with Conditions 4 to 7; and
 - (c) a total aggregated NDA for each Nutrient Allocation Zone, being the sum of the assessed nitrogen losses from all Properties provided for in Conditions 4(a) and (b) and identified in the relevant part of Schedule CRC185857A.

Advisory note 1: Where a Property is located within more than one Nutrient Allocation Zone, the load shall be allocated on a pro rata basis against the relevant land area(s).

Advisory note 2: Where a Property is supplied water by more than one scheme which also holds a discharge consent the load shall be allocated on a pro-rated basis proportionally on a contracted flow basis or on such other basis as may be determined in consultation with the Canterbury Regional Council while ensuring all losses are accounted for (and not double counted) as between the schemes.

Requirement to meet HPZ gmp and to make further reductions

4. The nitrogen losses for each Property listed in Schedule CRC185857A shall:
- (a) For Existing Scheme Irrigated Land, Other Irrigated Land and Dry Land, be calculated on the basis of:
 - i. the farming activities which have been identified as occurring on the Property between 1 January 2009 and 31 December 2013; and
 - ii. with nitrogen losses from such land being further limited to HPZ gmp; and
 - iii. further reduced:
 - A. from 1 January 2025, by 15%; and
 - B. from 1 January 2030, by 25%
- provided that the further reductions provided for in Condition 4(a)(iii)(A) and (B) will not be required:
- C. on any Property where the calculated nitrogen losses for that Property is less than 20kg N per hectare per year when modelled with OVERSEER® version 6.0; or
 - D. when the nitrate-nitrogen concentration in any monitored river in the Lower Hinds/Hekeao Plains Area is below an annual median of 2.4 mg/L and an annual 95th percentile of 3.5 mg/L, and the annual average nitrate concentration in groundwater in the Hinds/Hekeao Plains Area is at or below 6.9 mg/L.
- (b) For Lawfully Irrigated PC2 Land, be a deemed loss rate of 27 kg N/ha/year, when modelled with OVERSEER® version 6.0.3,
 - (c) For Authorised Properties, be listed in a separate part of Schedule CRC185857A with a nominal value of 'zero', as deemed in accordance with Conditions 9 and 10,

except that where a load is modelled using OVERSEER®, the current version of OVERSEER® shall be used and the inputs shall be updated where relevant to reflect the current OVERSEER® Best Practice Data Input Standards, but they must still describe the same baseline scenario.

Advisory note 1: Where a Property meets more than one of the above criteria, the nitrogen losses for the Property are calculated on a weighted average of the parcels which form the Property.

Advisory note 2: Authorised Properties are not subject to any individual nutrient loss limit (and nor do they contribute to or be deducted from the Scheme NDA for the

purposes of Conditions 3 to 7). Their inclusion in Schedule CRC185857A is to ensure their inclusion and wider management by the Scheme is clear.

Advisory note 3: The effect of Condition 4(c) is to ensure the load from Authorised Properties cannot be aggregated with Properties managed under Conditions 4(a) and (b).

5. For the purposes of Condition 4(a)(iii)(D) above, the 6.9 mg/L specified is the groundwater quality determined by the Canterbury Regional Council as the median concentration across the Canterbury Regional Council's quarterly groundwater monitoring bores (screened less than 30 metres below the ground level) being:
 - (a) at the Commencement Date of this resource consent, the monitoring bores within the Lower Hinds Plains Area are those referred to in Appendix A in Technical Report R13/93 Hinds Plains water quality modelling for the limit setting process (Technical Report R13/93); and
 - (b) any additional or alternative monitoring bore (*New Bore*) that the Canterbury Regional Council determines to use when assessing groundwater in the Hinds/Hekeao Plains Area subject to any transitional arrangements that might be agreed with the Canterbury Regional Council in relation to the use of the New Bore.

Advisory note 1: The Canterbury Regional Council's quarterly groundwater monitoring bores are those referred to or consistent with Policy 13.4.14 and Table 13(i) of the Canterbury Land and Water Regional Plan. If there are any changes to these monitoring bores, the Canterbury Regional Council will inform the Consent Holder and discuss transitional arrangements if the changes may affect compliance with reporting and monitoring obligations under this consent.

6. The maximum annual amount of nitrogen that is lost to water from the Properties described in Condition 4(a) and (b) and listed in Schedule CRC185857A shall not exceed the combined and aggregated NDA of those Properties for each Nutrient Allocation Zone.

Advisory note: Authorised Properties do not contribute to the load limits described in this Condition 6.

7. The NDA to be determined in accordance with Conditions 4 and 6:
 - (a) shall be calculated using the Matrix Method (as approved by the Chief Executive of the Canterbury Regional Council on 29 April 2020) and as included in Schedule CRC185857B, or any other equivalent method approved by the Chief Executive of Environment Canterbury (together Matrix Method), provided that:
 - i. if OVERSEER® is used, the current version of OVERSEER® shall be used and the inputs shall be updated where relevant to reflect the current OVERSEER® Best Practice Data Input Standards, but they must still describe the same baseline scenario; and
 - ii. the nitrogen loss calculation for any dairy farming operation where a building consent and effluent discharge consent was granted for a new or upgraded dairy milking shed in the period 1 January 2009 to 31 December 2013, shall be on the basis that the dairy farming activity is operational.

- (b) for land listed within Schedule CRC185857A at the Commencement Date, may be updated within the 12 months following, provided that:
 - i. the update is consistent with the assessment methodology described for the Matrix Method;
 - ii. information on the changes (including information on the actual land use and irrigation system) is recorded to support each change, including confirmation that the change remains consistent with Condition 4;
 - iii. a revised Schedule CRC185857A including any updates is to be provided to Regional Leader - Monitoring and Compliance, Canterbury Regional Council and any assessments undertaken are provided to the Canterbury Regional Council on request.

Addition and removal of Properties from Schedule CRC185857A

- 8. Properties (or land) may be added or removed from Schedule CRC185857A, provided:
 - (a) the Consent Holder provides the updated schedule by 1 December in any year that a change occurs to Schedule CRC185857A, to the Regional Leader - Monitoring and Compliance, Canterbury Regional Council and Te Rūnanga o Arowhenua, including:
 - i. the revision number of the schedule; and
 - ii. an updated consent wide map showing all Properties managed under this consent and the relevant Nutrient Allocation Zone boundary; and
 - iii. an electronic copy of the plan in Condition 8(a)(ii) above, in a commonly used Geographic Information System (GIS) format.
 - and
 - (b) in the case of any Property (or land) joining the Scheme and described in Condition 4(a) and (b) and listed in Schedule CRC185857A, the Consent Holder shall, unless Condition 10(a) applies, apply to the Matrix Method to the Property's (or land's) nitrogen baseline and make the assessment available to the Canterbury Regional Council on request.

Obligations in relation to Authorised Properties

- 9. Any Property that is:
 - (a) less than five hectares in area; or
 - (b) greater than five hectares, and where the nitrogen losses for the Property are less than 15 kg N/ha/year,may be treated by the Consent Holder as an Authorised Property for the purposes of this consent.
- 10. In relation to any Property that the Consent Holder has elected to treat as an Authorised Property in accordance with:
 - (a) Condition 9(a):
 - i. any nitrogen losses shall not contribute to or be deducted from the Scheme NDA for the purposes of Conditions 3 to 7; and
 - ii. losses from that Property will be listed on Schedule CRC185857A with a nominal nutrient discharge allowance of '0'.
 - (b) Condition 9(b):
 - i. the Consent Holder shall require that each such Authorised Property maintain a Schedule 24a Plan or Certified Freshwater Farm Plan, as required by Condition 18(b);

- ii. any nitrogen losses shall not contribute to or be deducted from the Scheme NDA for the purposes of Conditions 3 to 7; and
- iii. losses from that Property will be listed on Schedule CRC185857A with a nominal nutrient discharge allowance of '0'.

Advisory note 1: This resource consent enables the Consent Holder to supply water to Properties that would otherwise be able to be farmed as or in similar circumstances as permitted farming land use activities outside of the scheme ASM programme. The nutrient losses from such Properties are authorised by this consent but the consent holder may choose to either manage the losses on the basis of being an Authorised Property or in accordance with Conditions 3 to 7.

Audited Self-Management Programme

11. From:

- (a) the Commencement Date, the consent shall comply with the Audited Self-Management Programme (ASM), including Environmental Management Strategy (EMS) that was developed in accordance with resource consent CRC183851 and operative immediately prior to that date. In complying with this Condition 11(a), the Consent Holder shall consult with the Regional Leader - Monitoring and Compliance, Canterbury Regional Council to determine how compliance and the transitional regime for any replacement EMS as required by Condition 11(b) are to be implemented. Should a transitional regime be agreed then the Consent Holder shall comply with it on the basis that it forms part of the conditions of this consent; and
- (b) Within 12 months of the Commencement Date, the Consent Holder shall update and comply thereafter with the revised EMS that is to be prepared in accordance with Conditions 12 to 14.

12. The EMS required by Condition 11(b) shall:

- (a) identify the roles and responsibilities of the persons and entities involved in the management of the Consent Holder's environmental programme and the implementation of this resource consent;
- (b) implement environmental objectives and targets for all Properties described in Condition 4(a) and (b) to ensure:
 - i. this resource consent CRC185857 is complied with;
 - ii. Properties provided for in Conditions 4(a) and (b) implement HPZ gmp, and in the case of Properties provided for in Condition 4(a), the specified further reductions to achieve nitrogen loss reduces over time; and
 - iii. Properties required to hold a Farm Environment Plan are achieving or working towards the achievement of an 'A' Audit.
- (c) ensure the Consent Holder has robust audit and reporting procedures in place to ensure a high level of compliance with *Farm Environment Plans, Schedule 24a Plans or Certified Freshwater Farm Plans* (as might apply);
- (d) have appropriate procedures in place (through the EMS and each *Farm Environment Plan, Schedule 24a Plan or Certified Freshwater Farm Plans*) to ensure the identification of effects on neighbouring sensitive receptors are appropriately avoided, remedied or mitigated;
- (e) be consistent with the Environmental Monitoring Plan and associated requirements provided for in Conditions 22 to 27;
- (f) require that any Properties wanting to undertake a significant change will first need to obtain the approval of the consent holder, with the EMS providing

details on how applications for significant change are to be assessed, including procedures to ensure applications for significant change are only approved where:

- i. in the case of any NES Equivalent Farm, contaminant loads in the catchment and concentrations of contaminants in receiving waterbodies are, as a result of the significant change, likely to be no greater than that occurring at 2 September 2020, having regard to:
 - A. any assessed nutrient loss; and
 - B. the controls set out in any Farm Environment Plan, Schedule 24a Plan or Certified Freshwater Farm Plan (as might apply), provided that this Condition 12(f) shall not apply where the significant change application relates to an increase in irrigated area that is not used for dairy farming (being the use of land by milking dairy cows).

Advisory note: Where it a Property can demonstrate a significant change will not result in any increase in losses from the Property, it is not expected catchment-scale modelling or assessments will be required.

and

- ii. effects on local sensitive receptors are avoided, remedied or mitigated.
- (g) provide reproducible methodology on:
- i. how the nutrient load limits are calculated, and the rationale for that nutrient load applied; and
 - ii. how nutrients from all land subject to this resource consent will be accounted for;
- and
- (h) provides detail on how the management of Properties joining or leaving the scheme is to occur (including the methodology for allocating nutrients).

13. The EMS shall provide for or require:

- (a) effects on neighbouring sensitive receptors to be managed through further measures (in addition to Condition 12(b), including:
 - i. requiring that stock are excluded from waterbodies in accordance with Regional Council rules, any granted resource consent(s) and the Resource Management (Stock Exclusion) Regulations 2020; and
 - ii. encouraging the establishment of vegetated riparian strips to minimise nutrient, sediment and microbial pathogen loss to waterbodies.
- (b) the management of nutrient losses on Properties (which are not Authorised Properties) through a Farm Environment Plan or Certified Freshwater Farm Plan (as might apply) and audit process in accordance with the conditions of this resource *consent*.
- (c) Properties provided for in Conditions 4(a) and (b) shall:
 - i. have their annual nutrient losses assessed in accordance with the Matrix Method identified in Schedule CRC185857B;
 - ii. be subject to an audit procedure in accordance with Condition 19 and 20 (with the EMS being required to specify the steps that will be taken (including consequences to *ensure future compliance*) for Properties where condition 12(b)(iii) applies and is not being met).
- (d) with the Farm Environment Plan audit records for each Property undertaken in accordance with this Condition 13(d) being kept and made available for the Canterbury Regional Council to inspect, upon request; procedures to enable

each Farm Environment Plan, Schedule 24a Plan or Certified Freshwater Farm Plan to be amended to address any changes that might be recommended following the preparation of a Remediation and Response Plan that is prepared in accordance with Condition 26.

- (e) the monitoring and data required under this consent and the EMS to be collected and reported to the Canterbury Regional Council in accordance with Condition 28 (with a copy to be provided to Te Rūnanga o Arowhenua); and
- (f) within 20 working days of the exit of any Property from Schedule CRC185857A (and the management of nutrient losses by the consent holder), the consent holder is to advise the Canterbury Regional Council of the authorised land use that is to apply to the departing Property.

14. When preparing the EMS or seeking amendments to any of the matters listed in Conditions 12 and 13, the Consent Holder shall:

- (a) engage with the Chair of Te Rūnanga o Arowhenua or their representative to discuss the finalisation of the EMS content listed in Condition 12 within reasonable timeframes. The purpose of the engagement is to consult with Te Rūnanga o Arowhenua and to enable Te Rūnanga o Arowhenua to participate in and have input into the preparation of the EMS or any amendment to the EMS. The Consent Holder shall, subject to any alternative procedure that might be agreed with Te Rūnanga o Arowhenua and advised to the Regional Leader - Monitoring and Compliance, Canterbury Regional Council:
 - i. provide drafts of the EMS or amendments to the EMS along with any relevant supporting materials to Te Rūnanga o Arowhenua's at least six weeks prior to the documents being submitted to the Canterbury Regional Council for certification;
 - ii. offer to meet with Te Rūnanga o Arowhenua representatives within the six week period referred to in Condition 14(a)(i), for the purposes of discussing the EMS or amendments to the EMS;
 - iii. incorporate the comments or changes received from Te Rūnanga o Arowhenua into the EMS or the amended EMS, except that if the consent holder determines the comments or changes are not appropriate, it shall undertake further consultation with Te Rūnanga o Arowhenua to see if alternative further changes can be made. If the Consent Holder determines that further changes cannot be made then it shall prepare a document that records the comments or changes that have not been included and the reasons for not including them.
- (b) The updated EMS along with any document to be prepared in accordance with Condition 14(a) are to be provided to Te Rūnanga o Arowhenua at the time of seeking certification from the Canterbury Regional Council in accordance with Condition 15.

15. The EMS and any amendment to the EMS that has been prepared in accordance with Conditions 12 to 14 shall be submitted to the Regional Leader - Monitoring and Compliance, Canterbury Regional Council for certification. The EMS and any changes shall only be implemented following certification by the Regional Leader - Monitoring and Compliance, Canterbury Regional Council.

16. (a) Prior to the 1 December:
- i. immediately after the second anniversary of the Commencement Date of this resource consent;

- ii. immediately after the sixth anniversary of the Commence Date of this resource consent; and
- iii. for each year that is after the second anniversary of the Commencement Date but not provided for by Conditions 16(a) (i) and (ii),

(or such other time as may be agreed to by the Regional Leader - Monitoring and Compliance, Canterbury Regional Council), the Consent Holder shall engage a suitably qualified and independent expert to undertake a review of the EMS that shall include:

- iv. for the reviews to be undertaken in accordance with:
 - A. Condition 16(a)(i) and (ii), a full review of the EMS;
 - B. Condition 16(a)(iii), a review of at least one third of the EMS (to be rotated annually at each EMS review to ensure the full EMS is reviewed at least once every three years), for the purpose of identifying and discussing the implementation of the EMS and any improvements that may be able to be made to better achieve the objectives developed in line with Condition 12(b);

and

- v. for all reviews:
 - A. a review of any changes made to the use of the property irrigation, land use and management standards as applied through the Matrix Method when calculating the scheme nitrogen losses; and
 - B. a review of the process undertaken to update any changes made to the nutrient budget reference files used to calculate scheme nitrogen load limits and losses into the most recent version of OVERSEER®

- (b) Following the review, the Consent Holder shall provide a copy of the review report to Te Rūnanga o Arowhenua and offer to meet with it for the purposes of discussing the findings of the review, and any amendments that might be made to the EMS.
- (c) A copy of the review shall be provided to the Regional Leader - Monitoring and Compliance, Canterbury Regional Council as a part of the annual report to be provided under Condition 16.

17. In the event that a Property is excluded from the ASM programme then the Consent Holder shall notify Te Rūnanga o Arowhenua and the Regional Leader - Monitoring and Compliance, Canterbury Regional Council within 20 working days of the exclusion.

Farm Environment Plans, Schedule 24a Plans or Certified Freshwater Farm Plans

18. For all Properties where farming activities are undertaken, and unless Condition 10(a) applies, the Consent Holder shall ensure that:
- (a) Properties provided for in Condition 4(a) and (b) maintain a Farm Environment Plan in the form set out in Schedule CRC185857C, as may be amended following agreement from the Regional Leader - Monitoring and Compliance, Canterbury Regional Council;
 - (b) Properties provided for in Conditions 4(c) and 9(b) maintain a Schedule 24a Plan in the form set out in Schedule CRC185857D, as may be amended following agreement from the Regional Leader - Monitoring and Compliance, Canterbury Regional Council, provided that should the use of a Certified

Freshwater Farm Plan be required or available on the basis it is certified and available for use then the Consent Holder may, as may be mutually agreed with the Regional Leader - Monitoring and Compliance, Canterbury Regional Council elect to use such a plan in place of the plans provided for in Conditions 18(a) and (b).

Farm Environment Plan Audits

19. All Farm Environment Plans as required by Condition 18(a) shall be audited within the frequency determined by either:

- (a) the audit grade received in the previous audit, as provided for in Table CRC185857-1 below:

Table CRC185857-1

Audit Grade	Audit Frequency	
	No change in management or significant change	Change in management or significant change
A	4 years	1 year
B	2 years	1 year
C	1 year	In the following year
D	6 months	Within 6 months
<i>A "year" is the period from 1 July to the following 30 June.</i>		

provided that the Consent Holder may consult with the Regional Leader - Monitoring and Compliance, Canterbury Regional Council for the purposes of developing an agreed transitional regime for the audit frequencies provided for in Table CRC185857-1 (given the 10 September to the following 9 September reporting date being implemented by the Consent Holder at the Commencement Date). Any agreed transitional regime will apply in place of Table CRC185857-1.

or

- (b) in the case of Properties added to Schedule CRC185857A, within one year of the Property being added to that Schedule; or
- (c) in the case of a Property located within a Community Drinking Water Protection Zone where the risk level increased, within one year of the completion of the updated risk assessment; or
- (d) where there are exceptional circumstances, and the Consent Holder is able to obtain an approved exemption (in writing) from the Regional Leader - Monitoring and Compliance, Canterbury Regional Council from the frequencies of audits identified in Conditions 19(a) and (b). For the purposes of this condition 'exceptional circumstances' may include any event or action that reasonably prevents an audit being undertaken - including but not limited to

any event of force majeure, the death or serious illness of a shareholder or shareholder's representative(s) or their dependents, biosecurity or natural hazards, or recent Property sales or lease changes; or

- (e) should a Certified Freshwater Farm Plan be certified and available for use in accordance with condition 18 then the Consent Holder shall comply with the required timings for audits provided for in that plan (and if no audit process is provided for then the Consent Holder shall comply with timeframes for audit set out in the conditions 19(a) to (d)).
20. (a) Farm Environment Plans audits shall be conducted in accordance with the 'Certified Farm Environment Plan Auditor Manual', May 2020, or such other methodology (including any subsequent version of the 'Certified Farm Environment Plan Auditor Manual', May 2020) as may be mutually agreed with the Regional Leader - Monitoring and Compliance, Canterbury Regional Council, including the timing and implementation of such other methodology.
- (b) The audit of Certified Freshwater Farm Plan shall be undertaken in accordance with any associated guidance manual, or if no audit process is provided for, or no such guidance material available, the audits shall be undertaken on the basis of applying the 'Certified Farm Environment Plan Auditor Manual' with any necessary modifications as may be mutually agreed with the Regional Leader - Monitoring and Compliance, Canterbury Regional Council.
 - (c) If requested by the Regional Leader - Monitoring and Compliance, Canterbury Regional Council, the consent holder shall facilitate the Canterbury Regional Council undertaking spot checks of any Farm Environment Plan Auditors previously approved by Canterbury Regional Council. This shall include providing copies any audits and the relevant supporting information that are available to the consent holder.

Community Drinking Water Supplies

21. For any Property falling partly or wholly within a Community Drinking Water Protection Zone, the Consent holder shall ensure:
- (a) Discharges from the Property are assessed and managed in discussion with the impacted shareholder(s) and the Community Drinking Water Supplier in accordance with Schedule CRC185857E, and in a manner that is consistent with the Resource Management (National Environmental Standard for Sources of Human Drinking Water) Regulations 2007, with the assessment completed:
 - i. within three months of the Commencement Date for all properties managed by the Scheme and falling partly or wholly within a Community Drinking Water Protection Zone at that date;
 - ii. at least once every three years for Properties with existing Community Drinking Water Protection Zone risk assessments;
 - iii. within three months of a Property within a Community Drinking Water Protection Zone being added to Schedule CRC185857A (including a new Community Drinking Water Protection Zone being added to Schedule 1 of the Canterbury Land and Water Regional Plan that

includes Properties) that have not been previously assessed in accordance with Schedule CRC185857E);

- iv. within three months of the Consent Holder becoming aware of information that may materially impact on any assessment previously undertaken; and
- v. within three months of any change to the area of an existing Community Drinking Water Supply Protection Zone taking formal effect for the purposes of Schedule 1 of the Canterbury Land and Water Regional Plan.

(b) Where a Community Drinking Water Protection Zone Risk Assessment identifies the Property as:

- i. Low Risk; there shall be no further management actions required in relation to the farming activities able to occur on the CDWPZ Impacted Land (subject to compliance with this resource consent and permitted activity rules related to Community Drinking Water Protection Zones);
- ii. Medium Risk; the farming activities able to occur on the CDWPZ Impacted Land shall be managed to (in addition to compliance with this resource consent and permitted activity rules related to Community Drinking Water Protection Zones):
 - A. avoid the discharge of solid or liquid effluent (including animal based manures) within 20 metres of the Community Drinking Water Protection Zone;
 - B. ensure all irrigation on the CDWPZ Impacted Land in the Community Drinking Water Protection Zone is undertaken using good management practice to minimise drainage to groundwater; and
 - C. implement any other site specific recommendations that are consistent with managing Medium Risk activities and that are identified in the Community Drinking Water Protection Zone Risk Assessment.
- iii. High Risk; the farming activities able to occur on the CDWPZ Impacted Land shall be managed to (in addition to compliance with this resource consent and permitted activity rules):
 - A. avoid the discharge of solid or liquid effluent (including animal based manures) within 20 metres of the CDWPZ;
 - B. avoid any winter grazing (as defined in the Canterbury Land and Water Regional Plan at the Commencement Date) within the CDWPZ Impacted Land;
 - C. ensure all irrigation on the CDWPZ Impacted Land in the Community Drinking Water Protection Zone is undertaken using

good management practice to minimise drainage to groundwater;

- D. ensure there is no increase in stocking rate or fertiliser application on the CDWPZ Impacted Land in the Community Drinking Water Protection Zone; and
 - E. implement any other specific recommendations that are consistent with managing Medium and/or High Risk activities and that are identified in the Community Drinking Water Protection Zone Risk Assessment.
- (c) All new Community Drinking Water Protection Zone Risk Assessments prepared after the commencement date are to be reviewed by a suitably qualified and experienced individual prior to implementation of the required actions set out in the risk assessment for the Property.
- (d) Where a Community Drinking Water Protection Zone Risk Assessment review increases the risk status of a Property compared to previous assessments, the assessments are to be provided to the Regional Leader - Monitoring and Compliance, Canterbury Regional Council prior to the implementation of the required actions set out in the risk assessment for the Property.
- (e) as a part of the Farm Environment Plan, Schedule 24a Plan or Certified Freshwater Farm Plan (as might apply) for any Property located within the CDWPZ, there shall be additional requirements:
- i. to include an objective that seeks to ensure land located within the CDWPZ is managed to prevent deterioration of drinking water from activities occurring on that land; and
 - ii. for the Property Owner to maintain records to demonstrate all agreed minimum actions are being implemented,
- (f) without limiting Condition 21(b), the Consent Holder shall, as soon as practicable, and in all cases within two working days, notify relevant Community Drinking Water Supplier, and the Regional Leader - Monitoring and Compliance, Canterbury Regional Council, if it becomes aware of an "Event" that may have an adverse effect on the quality of the water in the community supply bore, with an "Event" for the purposes of this consent meaning, but not limited to, an incident within the well protection zones of the relevant community supply bore that may contaminate the water supply from the community supply bore - such as accidental release of pollutants or excessive stock access, combined with the saturation of soil beyond the water retaining capacity (e.g. over-irrigation).

Advisory note: The level of mitigation required should apply based on whichever contaminant has the highest risk rating.

Environmental Monitoring

22. Within six months of the Commencement Date, the Consent Holder shall submit to the Regional Leader - Monitoring and Compliance, Canterbury Regional Council, an

Environmental Monitoring Plan that satisfies Conditions 23 and 24 and which has been prepared by suitably qualified and experienced person(s).

23. The objectives of the Environmental Monitoring Plan shall be to:

- (a) obtain water quality information that may assist in better understanding the effects of nutrient discharges from properties within Schedule CRC185857A:
 - i. on groundwater nitrate-nitrogen concentrations over-time; and
 - ii. surface water quality over time; and
- (b) require the reporting of any water quality information gathered to the Canterbury Regional Council for the purpose of better informing future water resource management in the Hinds/Hekeao Plains Area;
- (c) require the Consent Holder to investigate and respond to changes in water quality attribute state(s) or band(s) (as might apply) for certain contaminants as to be identified based on five years of data in accordance with Condition 24 (a Deterioration) as specified in Table CRC185857-2; and
- (d) to require the Consent Holder to prepare a Remediation and Response Plan in consultation with Te Rūnanga o Arowhenua following any identified Deterioration that includes:
 - i. requiring the Consent Holder to manage nutrient losses that are determined to be contributing to any identified Deterioration in a manner that is consistent with improving water quality over time; and
 - ii. reviewing individual Property Farm Environment Plans or Certified Freshwater Farm Plans (as might apply) through the EMS programme where it is determined those farming activities are contributing to any identified Deterioration.

24. **Catchment groundwater monitoring**

- (a) Subject to Condition 27, the Consent Holder shall undertake (either directly or through a catchment group) water quality sampling on a minimum of 10 bores, with all bores being sampled quarterly for nitrate-nitrogen in accordance with the requirements of the National Environmental Monitoring Standards Water Quality – Part 1 Groundwater dated March 2019.

Localised surface water monitoring

- (b) Subject to Condition 27 the Consent Holder shall undertake (either directly or through a catchment group) surface water quality monitoring in the following waterbodies with the final monitoring site in each waterbody to be determined in consultation with Te Rūnanga o Arowhenua and the Regional Leader - Monitoring and Compliance, Canterbury Regional Council:
 - i. Oakdale Drain
 - ii. Harris Drain;

- iii. the Hinds River; and
- iv. any further or alternative location(s) that may be determined through the review of the Environmental Monitoring Programme that is to be undertaken in accordance with Condition 27,

and such surface water monitoring shall include monitoring of the contaminants listed in Table CRC185857-2, with:

- A. monitoring to occur at the frequencies included in column 2 of Table CRC185857-2; and
- B. where specified in column 3 of Table CRC185857-2, monitoring being undertaken for contaminants to determine a Base Attribute State, calculated for each monitoring site at the commencement of the consent for monitoring sites where adequate water quality data already exists, or after five years of monitoring where no current water quality data exists.

Table CRC185857-2

Contaminant	Frequency of sampling	Base Attribute State	Deterioration
Nitrate toxicity mg NO ₃ - N mg/L	Monthly	Median and 95 th percentile of previous 5 years' data.	<ul style="list-style-type: none"> • Where the annual (1 July to 30 June) median and/or 95th percentile NO₃- N mg/L are greater than the calculated base attribute state.
Dissolved reactive phosphorous DRP mg/L	Monthly	Median and 95 th percentile of previous 5 years' data.	<ul style="list-style-type: none"> • Where the annual (1 July to 30 June) median and/or 95th percentile NO₃- N mg/L are greater than the calculated base attribute state.
<i>Escherichia coli</i> E. coli/100ml	Monthly	The attribute band as calculated in accordance with the Table 9 of the NPSFM 2020 (August 2020) and using 5 years of data	<ul style="list-style-type: none"> • Where the attribute band (as per the NPSFM 2020) is worse than the calculated base attribute state (using 5-year rolling data).
Macroinvertebrates (percentage cover)	Annually between December and March	The median attribute band as calculated in	<ul style="list-style-type: none"> • Where the attribute band (as

	(inclusive) (QMCI or MCI using NEMS 2020 methodology)	accordance with Table 14 of the NPSFM 2020 (August 2020) and using 5 years of data.	per the NPSFM 2020) is worse than the calculated base attribute state (using annual data)
Deposited fine sediment (percentage cover)	Monthly	The attribute band as calculated in accordance with Table 14 of the NPSFM 2020 (August 2020) and using 5 years of data.	<ul style="list-style-type: none"> Where the attribute band (as per the NPSFM 2020) is worse than the calculated base attribute state (using 5-year rolling data).
Periphyton (percentage cover and chlorophyll-a)	Monthly	Not applicable for percentage cover For Chlorophyll-a: the attribute band as calculated using 5 years of data in accordance with Table 2 of the NPSFM 2020 (August 2020).	Not applicable for percentage cover <ul style="list-style-type: none"> For Chlorophyll-a: where the attribute band (as per the NPSFM 2020) is worse than the calculated base attribute state (using 5-year rolling data).
Macrophytes (percentage cover)	Monthly	Not applicable	Not applicable

Advisory note 1: The Base Attribute State(s) are based on the attribute bands and attribute states in Appendix 2A of the National Policy Statement for Freshwater Management 2020 (August 2020).

Advisory note 2: Where water quality sampling is undertaken as part of a catchment group, members of the group may seek to rely on the same groundwater monitoring bores or surface water monitoring sites as part of their respective consent requirements.

Advisory note 3: The 'Base Attribute State' (numeric) for nitrate will be calculated as the maximum of annual median and the maximum of annual 95 percentiles from the first 5 years of numeric attribute states calculated from monthly data.

25. The Consent Holder shall implement the Environmental Monitoring Programme within 12 months of the Commencement Date. Following its implementation, the Consent Holder shall:

- (a) provide a summary within the annual report by 1 December 2022 and then annually thereafter that sets out the results of all sampling undertaken over the previous 12 month period, including a discussion on:
 - i. the extent to which there has been an identified Deterioration; and
 - ii. for contaminants where a Deterioration is not defined (being Periphyton and Macrophytes percent covers, the nature of any changes over time, including any unexpected declines.

26. In the event that there is a Deterioration that is identified as a part of the water monitoring required under Condition 24(b), the Consent Holder (either directly or through a catchment group) shall, within one month of the Deterioration being identified, engage a suitably qualified and experienced person to prepare a Remediation and Response Plan. The Remediation and Response Plan shall:

- (a) discuss the potential causes of the Deterioration, and the extent to which they might be attributable to the activities on farmland under the management of this resource consent;
- (b) advise on any changes that might be made to a Farm Environment Plan or Schedule 24a Plan for the Properties included in Schedule CRC185857A, on the basis that any changes will be proportionate to the relative contributions of those Properties to the Deterioration;
- (c) advise how nutrient discharges may be further managed to ensure improving water quality over time;
- (d) advise on any further or amended monitoring that may be required to better understand the Deterioration (and the timeframes for that monitoring); and
- (e) remain in place and be subject to regular reviews for the duration of any Deterioration, as might be identified through further monitoring.

The Remediation and Response Plan shall be prepared in consultation with Te Rūnanga o Arowhenua and shall be completed within six months of the Deterioration being identified (or such other time as may be agreed to by the Regional Leader - Monitoring and Compliance, Canterbury Regional Council) and the Consent Holder shall implement any recommendations. A copy of the completed Remediation and Response Plan shall be provided to Te Rūnanga o Arowhenua and to the Regional Leader - Monitoring and Compliance, Canterbury Regional Council as a part of the annual reporting required under Condition 28.

27. The Consent Holder shall undertake a review of the groundwater and surface water monitoring required under Condition 24:

- (a) within the six month period that begins on the date that is five years after the Commencement Date, being the date which the Base Attribute State has been determined for all listed contaminants, or
- (b) at any other time that may be determined by the Consent Holder; or

- (c) on making any change to Schedule CRC185857A that results in increasing the area managed by the scheme on a Property or adjoining Properties by more than 200 hectares over that occurring at the Commencement Date, provided that in the case of a review under this Condition 27(c), the review shall be limited to the effects of the change and the need to consider further groundwater and/or surface water monitoring sites.

27A. If the Consent Holder is required to or elects to undertake such a review under Condition 27, the Consent Holder will engage a suitably qualified and experienced person to:

- (a) Advise on any changes that might be made to add, remove or amend:
 - i. Groundwater monitoring bores;
 - ii. Surface water monitoring sites;
 - iii. Contaminants;
 - iv. How a Deterioration is determined; and
 - v. Sampling frequency.
- (b) Prepare a Water Monitoring Amendment Report that:
 - i. Outlines the reasons for the change(s) proposed; and
 - ii. Confirms that the additional, removal or amendment will continue to enable the Consent Holder to meet the objectives set out in Condition 23;
- (c) Consult with the Regional Leader - Monitoring and Compliance, Canterbury Regional Council in the preparation of the Water Monitoring Amendment Report; and
- (d) Provide a copy of the of the Water Monitoring Amendment Report to the Regional Leader - Monitoring and Compliance, Canterbury Regional Council for certification that any change(s) proposed meet the requirements of this Condition 27A and the objectives outlined in Condition 23.

27B The Consent Holder shall only implement the change(s) proposed to the monitoring required in Condition 24 if written certification is provided by the Regional Leader – Monitoring and Compliance, Canterbury Regional Council.

General Reporting

28. The Consent Holder shall prepare an annual report describing the results of the ASM programme and the audits that have been conducted each year. The report shall include a summary of the FEP Auditing programme for the completed year preceding the reporting period, including the following:
- (a) the name of the FEP auditor(s);
 - (b) a summary of the audit performance grading, including the predominant farming system on the properties graded;

- (c) the number of Properties receiving each audit grade;
 - (d) the number of properties which have received repeated fail grades (being C or D grades in relation to a Farm Environment Plan or any fail grade as may be determined in consultation with the Regional Leader - Monitoring and Compliance, Canterbury Regional Council in relation to any Certified Farm Environment) in the past five years (including a summary of the reasons and actions taken);
 - (e) the total annual calculated loss of nitrogen from all Properties within the Command Area over the reported year, in accordance with the method outlined in Schedule CRC185857B, and including information on:
 - i. the load that has been calculated or deemed for each Property in accordance with Conditions 3 to 7;
 - ii. the total aggregated NDA for each Nutrient Allocation Zone, being the sum of the assessed nitrogen losses from all Properties provided for in Conditions 4(a) and (b) and identified in the relevant part of Schedule CRC185857A; and
 - iii. predicted changes in average nitrogen concentrations beyond the root zone.
 - (f) the reporting on environmental monitoring required in accordance with Condition 25;
 - (g) a summary of any significant change applications considered in accordance with Condition 12;
 - (h) the performance of Properties in the scheme in meeting the environmental targets and objectives as specified in the Farm Environment Plans required by Condition 18(a); and
 - (i) results of the review required by Condition 16.
29. A copy of the annual report required under Condition 28 shall be provided to Te Rūnanga o Arowhenua and the Regional Leader - Monitoring and Compliance, Canterbury Regional Council, by 1 December 2022 and annually thereafter.
30. The reporting requirements in Conditions 28 and 29 may be altered with the agreement of the Regional Leader - Monitoring and Compliance, Canterbury Regional Council to reflect the timing of the consent implementation between this consent and existing consent CRC183851.

Advisory note: The intention of Condition 30 is to ensure that the Consent Holder is able to rely on resource consent CRC183851, this consent, or a combination of the two for a transitional period, as might be agreed, for the purposes of ensuring the Consent Holder can avoid unnecessary duplication of reporting requirements and where necessary, complete or dispense with annual reporting requirements where they may be covered by one of more resource consent.

Requirement for legal obligation to secure reductions

31. Within six months of the Commencement Date, the Consent Holder shall ensure that as a part of any water supply agreement between the Consent Holder and any Property provided for in Conditions 4(a) and (b) and where reductions are required in accordance with 4(a)(iii)(A) to (C), the water supply agreement shall specify that the Property owner be required to enter a legally binding obligation running with the land to secure the obligations set out in Condition 4(a)(iii)(A) to (C).

Review

32. The Canterbury Regional Council may once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of:
 - (a) dealing with any adverse effect on the environment which may arise from the exercise of the consent; and /or
 - (b) addressing the failure of any Remediation and Response Plan to achieve the improvements anticipated in the plan in relation to water quality.
33. The Consent Holder may, in consultation the Regional Leader - Monitoring and Compliance, Canterbury Regional Council combine the obligations in this resource consent with any other resource consent held by the Consent Holder that provides for similar or the same obligations.

Further Advisory Notes:

Addition and removal of Properties to and from the Schedule CRC185857A is at the sole discretion of the Consent Holder.