

IN THE MATTER OF THE Resource Management Act 1991

AND

IN THE MATTER OF AN Application by
Landcorp Farming Ltd
(CRC081038)
for a water permit to take and use
water from the Mayfield-Hinds
Groundwater Allocation Zone.

DECISION OF THE HEARING COMMISSIONER

Heard on 5 May 2010 at the Hotel Ashburton, and formally adjourned later that day. The hearing was formally closed on 26 July 2010.

INDEPENDENT HEARING COMMISSIONER

Mr Alan Withy, Independent Commissioner.

APPEARANCES

The Applicant (Landcorp Farming Ltd)

Mr David Poulsen (Hydrogeologist)

Council Officers

Dr Paul Hopwood (Investigating Officer)

Dr Tim Ezzy (Principal Consents Officer)

Mrs Johanna Christensen (Consents Hearings Officer)

Ms Jane Beel (Consents Hearings Officer)

Date of decision 3 August 2010

DECISION

On behalf of the Canterbury Regional Council, pursuant to sections 104 and 108 Resource Management Act 1991, the Commissioner has determined as follows:

1. That Resource consent **application CRC081038 by Landcorp Farming Ltd** to take and use groundwater in the Mayfield-Hinds Groundwater Allocation Zone **is granted subject to conditions.**
2. The duration of the consent is for **ten years** from the date of this consent.
3. See Annexure 1 for the Conditions numbered 1-15.

Glossary of Terms and Abbreviations:

Act:	means the Resource Management Act 1991 unless specified otherwise.
AEE:	means an Assessment of Environmental Effects.
Council:	means the Canterbury Regional Council.
CRC:	means the Canterbury Regional Council.
ECan:	means the Canterbury Regional Council.
GWAZ:	means a Ground Water Allocation Zone.
IO:	means the Investigating Officer in terms of Section 42A of the Act.
NZMS:	means the New Zealand Map Series.
PNRRP:	means the Proposed Natural Resources Regional Plan.
RMA:	means the Resource Management Act 1991.
RO:	means the Reporting Officer in terms of Section 42A of the Act.
RoR:	means the formal right of reply exercised on behalf of the Applicant.
RPS:	means the Canterbury Regional Planning Statement.
TRP:	means the Transitional Regional Plan.

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INTRODUCTION

This is the decision of Independent Commissioner Alan Withy appointed by the Canterbury Regional Council (“CRC”) to hear the application by Landcorp Farming Ltd which was granted on 3 August 2010. Authority was delegated from CRC by Mr Donald Fraser, Consents Hearings Officer, Team Leader.

1. The Application

This application to take and use groundwater was received on 9 October 2007.

It was audited by an external consultant, further information sought and an updated AEE received from the Applicant on 12 December 2007.

The Applicant formally advised CRC of amendments to the original application on 3 November 2009.

The Application as presented at the hearing seeks consent to:

- *... take groundwater from Bore K37/3096 at map reference NZMS 260 K37:79240-93285 at a rate not exceeding 30 litres per second with a maximum volume of 249,750 cubic metres between 1 July and the following 30 June, for irrigation of 60 hectares of crops and pasture for grazing stock including milking dairy cows at Trevors Road.*
- *... measure and record the rate at which water is taken to an accuracy of plus or minus five percent.*
- *... take all practical steps to use the water efficiently so that the volume of water used for irrigation does not exceed that required for the soil to reach field capacity, to minimise leaks and avoid irrigation of non-productive areas.¹*

The application is for a new ‘take’, and duration of ten years is sought for the activity.

2. Submissions

Five submissions were received within the statutory timeframe. One was ‘neither in support nor opposition’ to the application, and the other four opposed the application. Two of the submitters in opposition asked to be heard but no submitters attended the hearing.

¹ Poulsen Evidence and SKM letter dated 4 June 2010.

3. Statutory provisions

This application is subject to the provisions of the Proposed Natural Resources Regional Plan (PNRRP), the Regional Policy Statement and the Transitional Regional Plan (TRP).

4. Appearances and evidence

Mr Poulsen of SKM presented the application for Landcorp Farming Ltd.

Dr Hopwood, Investigating Officer for CRC described in his pre-circulated report:

- a) Background*
- b) Notification*
- c) Submissions*
- d) Description of the proposed activity*
- e) Legal and planning matters*
- f) The relevant plans*
- g) Classification of the proposal*
- h) Consultation*
- i) Description of the affected environment*
- j) Assessment of actual and potential effects*
- k) Statutory assessment*
- l) Other relevant matters*
- m) Recommendation* ²

He elaborated on his written report at the hearing and answered questions from the Commissioner. It was apparent that there was agreement between CRC officers and the applicant's consultant on the likely effects of the application generally.

A significant difference was the likely or potential interference with other bores and particularly those on properties owned by Kinsale Dairy and the Atkinson Family. This possible impact rendered the proposal in the RO's opinion 'non-complying'. He concluded by indicating he would support the proposal if suitable mitigation were implemented. Eventually he reclassified the application as discretionary. ³

The hearing was adjourned to allow negotiations between the applicant's representative and the RO. The hearing was reconvened and after further submissions and evidence from both Mr Poulsen and Dr Hopwood, Mr Poulsen indicated a desire for the hearing to be adjourned 'sine die' to allow for further investigations and negotiations with CRC Officers. His Right of Reply was formally reserved.

² RO Report dated 19 April 2010.

³ RO Memo dated 21 June 2010.

The Commissioner issued a Minute dated 5 May 2010 which included a timetable for action as follows:

1. *The Hearing is adjourned, 'sine die'.*
2. *The Applicant's right-of-reply was reserved, and may be exercised in writing.*
3. *The Applicant is given leave to present further information, by 4 June 2010.*
4. *The CRC reporting officers are to prepare a report thereon, by 18 June 2010.*
5. *The CRC administration officers are to circulate Items 3 and 4 to all five parties who lodged submissions on the Application, by 25 June 2010.*
6. *The submitters are to be invited to comment on Items 3 and 4, and indicate whether they wish to be heard, by 16 July 2010.*
7. *The information described in Items 3, 4 and 6 is to be forwarded to the Commissioner, who is to decide by 23 July 2010, if and when the Hearing should be reconvened, and what further information he may require to determine the Application.*⁴

5. Further information

Additional information was received from the applicant by letter dated 4 June 2010. This letter addressed the aspects of the proposal that had undergone review, and provided a revised assessment of interference effects based on a re-evaluation of the results of aquifer testing. All other aspects of the proposal were described as unchanged.

Dr Hopwood reviewed the further information and said in a Memo dated 21 June 2010:

This memo has been prepared in response to the amended proposal provided by the applicant, dated 4 June 2010.

The applicant has revisited the assessment of effects on neighbouring bore owners, but all other aspects of the application are unchanged from that assessed in my section 42A report presented to the hearing panel on 5 May 2010. Consideration of other effects and consent duration are taken as read from that report.

It should be noted that the application has been amended since it was originally receipted on 20 September 2007, and I consider that the amendments are within the scope of the original application as the rate of take, annual volume and area to be irrigated are lower than originally applied for.

⁴ Commissioner Minute No 1 dated 5 May 2010.

In my officer's report dated 5 May 2010 prepared under section 42a of the RMA, my recommendation to the commissioner was that the application should not be granted, in the absence of further mitigation, due to the potential for adverse effects on surrounding bore owners. Effects on neighbouring bores were assessed by modelling of well interference effects using parameters derived by the consultant, Mr Poulsen.

At the hearing, Mr Poulsen reserved his right of reply, and subsequently prepared a revised assessment of well interference effects based on a re-analysis of aquifer testing data.

Mr Poulsen states that the original interpretation of aquifer test data derived aquifer parameters which were different to those derived by Environment Canterbury Groundwater Hydrologist Matt Smith from the same aquifer test data. Mr Poulsen subsequently accepted the parameters as derived by Mr Smith and considers that Mr Smith's methodology provides a more robust assessment since it incorporates an independent measure of transmissivity from which the other parameters are derived.

..... I consulted with Mr Smith, who agreed that the parameters recommended by him and adopted by Mr Poulsen, are appropriate for assessment of effects on other bores in the area.

Mr Poulsen submitted a revised assessment of effects on surrounding bores using the Schedule WQN10 drawdown interference tool. The assessment indicates that the interference effects of the proposed abstraction from bore K37/3096 is not likely to result in adverse drawdown effects on neighbouring bores.

I carried out an audit of the well interference effects assessment based on the parameters recommended by Mr Smith, which is in agreement with the assessment provided by Mr Poulsen. My audit is in agreement with that provided by Mr Poulsen and I agree that there are not likely to be any bores adversely affected as a result of the proposed abstraction, other than those owned by the applicant.

..... Having considered all relevant matters outlined in s104(1), I am satisfied that the actual and potential effects of the proposed activity will be acceptable. Under section 104B, I recommend that the application be granted.⁵

The SKM letter dated 4 June and RO (Dr Hopwood) Memo dated 21 June were circulated to all parties who had lodged submissions to the original application for their comments by 16 July, and an indication as to whether they wished to be heard at a re-convened hearing. No responses were received by 23 July and so the Commissioner closed the hearing on 26 July 2010.

⁵ RO Memo dated 21 June 2010

However a late response was received from a representative of the school that had made a submission to the original application. CRC Officers confirmed with the School Representative that the response had been forwarded outside the allowed period, advised her that the hearing had been closed, and that the School's response could not be considered by the Commissioner. However the matters raised in the late response were similar to those contained in the original submission which would be considered by the Commissioner before making a decision on the proposal.

6. Evaluation of effects

Any actual or potential effects on the environment: The RO considered cumulative effect of takes on other groundwater users, groundwater allocation, seawater intrusion, aquifer stability, groundwater quality, surface water flows, well interference/take on surrounding groundwater users, inefficient take on other groundwater users, and water quality. He concluded that the effects would be minor or less, with the exception of possible effects on nearby existing bores.

Initially he was concerned that mitigation proposals were inadequate. However by the time of his June Memo regarding the amended proposals put forward by SKM in June ⁶, he had become satisfied. He said:

Mr Poulsen submitted a revised assessment of effects on surrounding bores using the Schedule WQN10 drawdown interference tool. The assessment indicates that the interference effects of the proposed abstraction from bore K37/3096 is not likely to result in adverse drawdown effects on neighbouring bores.

I carried out an audit of the well interference effects assessment based on the parameters recommended by Mr Smith, which is in agreement with the assessment provided by Mr Poulsen. My audit is in agreement with that provided by Mr Poulsen and I agree that there are not likely to be any bores adversely affected as a result of the proposed abstraction, other than those owned by the applicant. ⁷

Adverse effect of the take on Tangata Whenua values: CRC copied the application to Te Runanga O Arowhenua and no submission was received. The RO stated in evidence that he was not aware of any impacts that the proposal may have on Tangata Whenua values given that effects on surface water flows and water quality have been assessed as minor.

⁶ SKM letter dated 4 June 2010.

⁷ RO Memo dated 21 June 2010.

7. Relevant plans

There are objectives and policies in the operative Regional Policy Statement (RPS) which are relevant to the taking and use of groundwater. The PNRRP contains much more focused policy provisions, but is at an intermediate statutory stage on its way to eventually becoming operative, so less weight can be given to it at this time.

The RO analysed the proposal in relation to the relevant plans and concluded that it was a discretionary activity that could be approved subject to adequate mitigation measures. He said:

*... the relevant provisions have been highlighted and discussed previously in this report. I do not consider the proposal conflicts with the policies and objectives of the pNRRP or the RPS.*⁸

8. Part 2, Resource Management Act

The purpose of the Act is to promote the sustainable management of natural and physical resources. This is defined as:

... managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while –

- (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) Safeguarding the life - supporting capacity of air, water, soil, and ecosystems; and*
- (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*⁹

The Commissioner is satisfied on the basis of the evidence provided by the applicant and RO, that the proposed taking and use of water sought through this application will represent an efficient use and development of the groundwater resource, and will not result in an unsustainable abstraction from groundwater in the area.

9. Section 104 Resource Management Act

The RMA requires:

⁸ RO Memo dated 21 June 2010.

⁹ RMA Section 5.

When considering an application for a resource consent and any submissions received, the consent authority must, subject to Part 2, have regard to—

- (a) any actual and potential effects on the environment of allowing the activity; and*
- (b) any relevant provisions of—*
 - (i) a national environmental standard;*
 - (ii) other regulations;*
 - (iii) a national policy statement;*
 - (iv) a New Zealand coastal policy statement;*
 - (v) a regional policy statement or proposed regional policy statement;*
 - (vi) a plan or proposed plan; and*
- (c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.*¹⁰

The RO said he considered the proposal was consistent with the provisions of all relevant plans, and that he was “... *satisfied that the effects on the environment will be acceptable*”.

The Commissioner is satisfied on the basis of the evidence produced by the applicant and the RO, that the application is consistent with Section 104 of the Act.

10. Conditions

Section 108 of the Act authorises suitable conditions and the RO has provided a suite of recommendations based on those drafted by the applicant. They are implemented as Annexure 1 to this report.

11. Duration

The PNRRP gives the following guidelines for consideration of the suitable duration of a consent:

The nature and sensitivity of the affected environment, including:

- (i) the degree to which the sensitivity of the affected environment may become more sensitive over time; and*

¹⁰ RMA Section 104(1).

- (ii) *the risk of unforeseen adverse effects arising from the consented activity and;*
- (iii) *the level of knowledge about the affected environment.* ¹¹

The RO reported:

Having had regard to these matters and on the basis of the audit of the AEE, I consider that, given the recommended conditions, there are no apparent reasons why the consent should not be granted for the duration applied for. ¹²

The Commissioner therefore determines that this consent be granted for a maximum period of 10 years.

12. Determination

Accordingly it is the decision of the Commissioner that pursuant to Sections 104, 104B and 108 of the Resource Management Act 1991, this application is granted consent for a duration of 10 years on the specific terms and conditions as set out in Annexure 1 for CRC081038 (Landcorp Farming Ltd).

DATED the 10th day of August 2010



Alan Withy,
Independent Commissioner

¹¹ PNRRP Chapter 1 Section 1.3.5.

¹² RO Report dated 19 April 2010.

ANNEXURE 1

Conditions: (CRC081038 - Landcorp Farming Ltd)

- 1) Water may be taken only from bore K37/3096, 300 millimetres diameter and 77.2 metres deep, at map reference NZMS 260 K37:79240-93285.
- 2) Water may be taken at a rate not exceeding 30 litres per second, with a volume not exceeding 2592 cubic metres in any period of seven consecutive days, and 249,750 cubic metres between 1 July and the following 30 June.
- 3) Water shall only be used for irrigation on the area of land shown in attached plan CRC081038, which forms part of this consent.
- 4) The consent holder shall, before the first exercise of this consent, install an easily accessible straight pipe(s), with no fittings or obstructions that may create turbulent flow conditions, of a length at least 15 times the diameter of the pipe, as part of the pump outlet plumbing or within the mainline distribution system.
- 5) The consent holder shall before the first exercise of this consent:
 - (a)
 - (i) install a water meter(s) that has an international accreditation or equivalent New Zealand calibration endorsement, and has pulse output, suitable for use with an electronic recording device, which will measure the rate and the volume of water taken to within an accuracy of plus or minus five percent as part of the pump outlet plumbing, or within the mainline distribution system, at a location(s) that will ensure the total take of water is measured; and
 - (ii) install a tamper-proof electronic recording device such as a data logger(s) that shall time stamp a pulse from the flow meter at least once every 60 minutes, and have the capacity to hold at least one season's data of water taken as specified in clauses (b)(i) and (b)(ii), or which is telemetered, as specified in clause (b)(iii).
 - (b) The recording device(s) shall:
 - (i) be set to wrap the data from the measuring device(s) such that the oldest data will be automatically overwritten by the newest data (i.e. cyclic recording); and
 - (ii) store the entire season's data in each 12 month period from 1 July to 30 June in the following year, which the consent holder shall then download and store in a commonly used format and provide to the Canterbury Regional Council upon request in a form and to a standard specified in writing by the Canterbury Regional Council; or
 - (iii) shall be connected to a telemetry system which collects and stores all of the data continuously with an independent network provider who will make that data available in a commonly used format at all times to the Canterbury Regional Council and the consent holder. No data in the recording device(s) shall be deliberately changed or deleted.
 - (c) The water meter and recording device(s) shall be accessible to the Canterbury Regional Council at all times for inspection and/or data retrieval.
 - (d) The water meter and recording device(s) shall be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.
 - (e) All practicable measures shall be taken to ensure that the water meter and

recording device(s) are fully functional at all times.

- 6) Within one month of the installation of the measuring or recording device(s), or any subsequent replacement measuring or recording device(s), and at five-yearly intervals thereafter, and at any time when requested by the Canterbury Regional Council, the consent holder shall provide a certificate to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:
 - (a) The measuring and recording device(s) has been installed in accordance with the manufacturer's specifications; and
 - (b) Data from the recording device(s) can be readily accessed and/or retrieved in accordance with clauses (b) and (c) of condition (5).
- 7) The Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, shall be informed immediately on first exercise of this consent by the consent holder.
- 8) The taking of water in terms of this permit shall cease for a period of up to 48 hours, on notice from the Canterbury Regional Council, to allow measurement of natural groundwater levels.
- 9)
 - (a) The irrigation system used in association with taking water in terms of this permit shall not be used to distribute effluent, fertiliser or any other added contaminant, unless:
 - (i) a reduced pressure zone (RPZ) backflow preventer; OR
 - (ii) an air gap backflow preventer
 is installed within the pump outlet plumbing.
 - (b) The back flow prevention device must be designed and installed in accordance with Canterbury Regional Council (CRC) guide "Fertigation, Backflow Preventers" E05/30 (June 2009).
 - (c) The backflow preventer must be installed downstream of the water meter.
 - (d) The injection point for the effluent, fertiliser or added contaminant must be located downstream of the backflow preventer device.
 - (e)
 - (i) a RPZ device installed in accordance with (a)(i) shall be tested within one month of its installation and every 12 months thereafter by a certified Approved Backflow Technician (ABT) or Independent Qualified Person (IQP) as defined in the CRC guide E05/30;
 - (ii) the test report for the RPZ undertaken in accordance with (e)(i) shall be provided to the Canterbury Regional Council Attention: RMA Compliance and Enforcement Manager, within one month of each test;

OR

 - (f)
 - (i) An air gap device in accordance with (a)(ii) shall be photographed. The photograph shall clearly show the air gap system. A diagram showing the dimensions of the air gap and outlet pipe are to be included;
 - (ii) The information required in accordance with (f)(i) shall be provided to the Canterbury Regional Council Attention: RMA Compliance and Enforcement Manager, within two months of the installation of the device.
 - (g) A copy of:
 - (i) the most recent test report required under (e)(ii); OR
 - (ii) information required under (f)(ii);
 shall be located in the adjoining pump shed and be readily accessible.

Advisory note:

This condition does not authorise the distribution of effluent or fertiliser as this is subject to separate consent requirements pursuant to s15 of the RMA.

- 10) The consent holder shall take all practicable steps to:
 - (a) Ensure that the volume of water used for irrigation does not exceed that

- required for the soil to reach field capacity; and
 - (b) Avoid leakage from pipes and structures; and
 - (c) Avoid the use of water onto non-productive land such as impermeable surfaces and river or stream riparian strips.
- 11) a)
 - (i) With the exception of the first period ending 30 June that this consent is exercised, for each preceding 12 month period ending 30 June each year and for the following irrigation season, an approved method shall be used to calculate the nitrate-nitrogen concentration in the soil drainage water below the plant root zone and to prepare a 'nutrient budget' for the subject land for that prior 12 month period.
 - (ii) Management practices shall be implemented to minimise the loss of nitrate-nitrogen in the soil below the root zone.
- b) A record of the measured and estimated input data and calculations undertaken in accordance with clause (a) shall be:
 - (i) prepared by 31 August each year;
 - (ii) certified as an accurate record by a person who can demonstrate competency in agricultural management;
 - (iii) maintained for the property for the duration of the consent; and
 - (iv) provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, by 30 September each year.
- c) The following records shall be kept for each irrigated block and made available to the Canterbury Regional Council on request:
 - (i) timing and rate of irrigation applications;
 - (ii) timing and rate of nitrogen fertiliser applications, including dairy shed effluent applications;
 - (iii) timing and rate of nitrification inhibitor applications;
 - (iv) stocking rates (number and type of animals) on a monthly basis;
 - (v) timing of cultivation activities and crops/pasture planted;
- d) For the purposes of this condition an 'approved method' is:
 - (i) The most recent version of the 'OVERSEER' (AgResearch) model for pastoral, crop and horticultural land;
 - (ii) The most recent version of the Soil Plant Atmosphere Model (SPASMO-HortResearch) for horticultural land;
 - (iii) Any other method approved by the Canterbury Regional Council.
- 12) The consent holder shall, prior to the use of water for irrigating dairy pasture, provide a copy of an individual Farm Management Plan (FMP) to the Canterbury Regional Council which shall address at a minimum how the individual farm will implement practicable steps to:
 - (a) Ensure water is used in a technically efficient manner;
 - (b) Minimise nutrient losses from the property.
- 13) a) Compliance with the individual Farm Management Plan shall be assessed annually by a suitably qualified person. If any non-compliance is noted, the consent holder shall remedy the non-compliance within one month.
- b) A copy of all compliance assessments shall be forwarded to the Canterbury Regional Council within one month of the assessment being completed.
- 14) The Canterbury Regional Council may, once per year, on any of the last five working days of March or July, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage.
- 15) The lapsing date for the purposes of section 125 shall be 30 June 2015.

Decision: Landcorp Farming Ltd, Carew.

ANNEXURE 2

Plan: (CRC081038 - Landcorp Farming Ltd)

