

BEFORE THE CANTERBURY REGIONAL COUNCIL

IN THE MATTER OF the Resource Management Act 1991 (“**the Act**” or “**RMA**”)

AND

IN THE MATTER OF Proposed Land and Water Regional Plan (“**PLWRP**”)

BETWEEN

**LINCOLN UNIVERSITY AND NEW ZEALAND
INSTITUTE FOR PLANT AND FOOD RESEARCH**

Submitters

AND

CANTERBURY REGIONAL COUNCIL

Regional Authority

STATEMENT OF EVIDENCE OF KATHERINE MCKENZIE

4TH FEBRUARY 2013

INTRODUCTION

- 1 My full name is Katherine McKenzie, but I am commonly known as Kate. I hold a Bachelor of Arts (Geography) from the University of Canterbury and have been an Associate Member of the NZPI for 2 years. I am a Consultant Planner for Resource Management Group Ltd (RMG), a Christchurch-based resource and environmental management firm.
- 2 I have five and a half years of experience in resource management planning in New Zealand. The majority of this time was spent working at Grey District Council as a Consents Planner. My experience there included processing land use and subdivision resource consent applications, notices of requirement and various other planning related applications. I was also required to provide resource management advice to councillors, senior Council staff members and the general public.
- 3 I have been employed at RMG Ltd as a Consultant Planner since February 2012. During the course of my employment I have been involved in the preparation of resource consent applications, notices of requirement and submissions on planning documents; and providing resource management advice to clients.

SCOPE OF EVIDENCE AND SUBMISSIONS SUMMARY

- 4 My evidence addresses the submissions of Lincoln University and the New Zealand Institute for Plant and Food Research Limited (Plant and Food) on the Proposed Land and Water Regional Plan (PLWRP). I have assumed that the Commissioners are familiar with the detail of the submissions and therefore, rather than repeating them in full, I have summarised the key areas in Table One below.

Chapter/Topic	Relevant Provision	Submission	Paragraph Reference
On-Site Wastewater Treatment System	Definition – Section 2.10	<ul style="list-style-type: none">• Use of term 'holding tank'	<ul style="list-style-type: none">• 10
	Discharge –	<ul style="list-style-type: none">• Inclusion of term	<ul style="list-style-type: none">• 13

	Rules 5.7 and 5.9	‘hazardous waste’	
	Activity Status – Rules 5.7 and 5.9	• ‘Permitted Activity’ vs ‘Controlled Activity’	• 18
Stormwater	Definition – Community or Network Utility Operator Stormwater System	• Refining definition to exclude individual sites owned by companies	• 22
	Activity Status – Rules 5.72 and 5.73	• Non-Complying activity status	• 26
Transfer of Water Permits	Rule 5.107	• Requirement to surrender 50% of water take upon transfer	• 31
Hazardous Substances	Definition – Section 2.10 and Schedule 4	• Consistent use of definition	• 43
	Rule Framework	• Support approach taken	• 47
Contaminated Land	Policies 4.16	• Consistent of the use of terms (contaminated land/potentially contaminated land/contaminated sites)	• 49
	Policy 4.23	• Consistent use of terms	• 49

		(contaminated land/potentially contaminated land/contaminated sites)	
		<ul style="list-style-type: none"> • Use of wording ‘no adverse effects’ 	<ul style="list-style-type: none"> • 53

5 I have structured my evidence around the above issues. It should be noted that submissions on other matters were also made by Lincoln University and Plant and Food, however it was not considered necessary to provide further explanation for these matters.

PLANNING AND STATUTORY CONTEXT

6 I am sure that the Commissioners have received evidence and extensive legal submissions on the statutory framework applicable to this Plan Change and the planning context in which it should be considered. I do not propose to repeat a detailed discussion here on those matters.

7 I will comment, however, that in my view Lincoln University and Plant and Food are of local, regional and national importance in terms of their research and education functions.

8 Proposed Change 1 to the Canterbury Regional Policy Statement (CRPS) dealing with the development of Greater Christchurch, which will become Chapter 6 of the operative CRPS 2013, recognises “agricultural research establishments” in a number of objectives and policies. Protection is given to these facilities through policies which manage development to not give rise to significant reverse sensitivity effects when considering development options for Greater Christchurch. The fact that the CRPS specifically seeks to ensure the uninterrupted operation of these facilities indicates that they are of at least regional importance.

9 The submissions which Lincoln University and Plant and Food have made that are being considered at this hearing relate mainly to ensuring the PLWRP is clear and consistent for plan users. As a result, the organisations are not seeking changes specific only to their individual operations. While some of



the submission points may have a direct impact on either organisation, the requested amendments to the PLWRP have been designed to be more generally applicable as they relate to the wider environment.

THE ISSUES

Discharges

On-Site Wastewater - Definition

- 10 The pLWRP contains provisions relating to the discharge of wastewater from existing, new or upgraded on-site domestic wastewater treatment systems onto or into land.
- 11 As defined by the pLWRP, an on-site wastewater treatment system includes “a system that...treats and applies the wastewater to a land application system or a holding tank.” Lincoln University submitted on this definition (as did other organisations), seeking the removal of the reference to holding tanks. The reason for the submission was that holding tanks are generally associated with wastewater systems which do not have a discharge, and the rules relating to on-site wastewater treatment control the discharge of treated wastewater onto or into land; not its storage.
- 12 The Section 42A report recommends that this change be accepted. In my opinion, the term ‘holding tank’ is superfluous and I agree that the reference to holding tanks should be deleted.

On-Site Wastewater– Hazardous Waste

- 13 The Canterbury Regional Council¹ sought in their own submission to include a new condition to both Rule 5.7 and 5.9 which states that the discharge shall not contain any hazardous waste. This change was also recommended in the Section 42A report.
- 14 The pLWRP defines ‘hazardous waste’ as including bacteria and pathogens. While the purpose of an on-site wastewater treatment system is to treat human effluent, the discharge may, from time to time, contain residual bacteria and pathogens. Therefore the addition of a reference to ‘hazardous waste’ in Rules 5.7 and 5.9 would likely trigger the requirement for all on-site wastewater treatment systems to gain resource consent.

¹ Canterbury Regional Council submission (Submitter number 167) – pages 13-14

- 15 In that regard, Lincoln University opposed the Canterbury Regional Council's submission, particularly as it sought the inclusion of a reference to 'hazardous waste' in Rules 5.7 and 5.9.
- 16 The Section 42A report recommends the inclusion of the term; however no discussion or reasoning is provided, other than to say that including the condition will ensure that these substances are not included in the discharges.
- 17 In my opinion the purpose of the inclusion of the term is to discourage the disposal, and ultimately the discharge of 'hazardous waste' through the systems. I believe that it is an unintentional consequence that the remnant bacteria and pathogens from the discharge of sewage effluent which falls within the definition of hazardous waste is not a permitted discharge. I therefore consider that the term hazardous waste should not be included in these rules.

On-Site Wastewater – Activity Status

- 18 In their submission, Nga Runanga of Canterbury and Te Runanga o Ngai Tahu² seek to require all discharges from existing on-site wastewater systems to gain a discharge permit. Lincoln University and Plant and Food consider this requirement particularly onerous, given the number of systems in operation throughout Canterbury and the fact that these systems are controlled by permitted activity standards and relevant New Zealand standards.
- 19 In that regard, Lincoln University and Plant and Food opposed the controlled activity status sought by the submitter.
- 20 The Section 42A report does not recommend the inclusion of the relief sought by Nga Runanga of Canterbury and Te Runanga o Ngai Tahu. While some discussion is provided on altering the activity status of new on-site wastewater treatment systems for the purposes of cost recovery by Council – this has not been formally included as a recommendation.
- 21 In my opinion, the requirement is onerous and I agree with Lincoln University, Plant and Food and the Section 42A report's recommendation to reject a controlled activity status rule for existing septic tanks.

² Nga Runanga of Canterbury and Te Runanga o Ngai Tahu submission (Submitter number 358) – pages 24-25

Stormwater – Community or Network Utility Operator Stormwater System Definition

- 22 Community or Network Utility Operator Stormwater Systems are defined as being “means a stormwater system owned and operated by a group, territorial authority or company comprising swales, drains, channels, wetlands, infiltration basins or pipework and other treatment devices, which may include detention ponds, for the treatment of stormwater prior to a discharge to and, groundwater, surface water or connecting to a reticulated stormwater system”. The definition determines whether Rule 5.71 or 5.72 applies to the discharge of stormwater.
- 23 As the definition includes a stormwater system owned and operated by a company, the current wording results in privately owned stormwater systems being captured by this rule. Lincoln University and Plant and Food sought that the definition be amended so that it does not unintentionally capture privately owned stormwater systems which are not serving a community. No specific wording was provided.
- 24 The Oil Companies³ submission also sought amendment to this definition for the same reason, and their relief sought to insert the word “public” to further refine the definition. Plant and Food and Lincoln University supported this submission in further submissions, as a method of addressing concerns with this definition. The inclusion of the word “public” would assist in making it clear that Rule 5.71 only applied to systems serving a number of properties, rather than privately owned systems serving individual sites which happen to be owned by a company.
- 25 The Section 42A report has recommended that the definition be altered to “Community stormwater system means a stormwater system owned and operated by a group, territorial authority or company that serves two or more sites that are in separate ownership, comprising swales, drains...” I consider this altered wording adequately addresses Lincoln University and Plant and Food’s concerns that the definition would capture stormwater systems from individual sites which are owned by a company, and agree with the recommendation in the Section 42A report.

³ Oil Companies submission (submitter number 99) – page 30

Stormwater – Non-complying Activity Status

- 26 The pLWRP rule framework for individual stormwater systems stipulates that a stormwater discharge is permitted, provided that certain conditions are met. If one or more of the conditions is not met, the discharge becomes a non-complying activity. Lincoln University and Plant and Food submitted that the non-complying activity status for discharges that do not fall under the permitted standards was unduly restrictive.
- 27 In that regard, the Lines Companies seek an amendment to Rule 5.73 to reflect a restricted discretionary status, with the following associated matters of discretion:
- “1. The effects on ground and/or surface water quality from not meeting the condition or conditions of Rule 5.72.*
- 2. The extent to which the proposed activity will prevent or compromise the attainment of environmental outcomes sought by, or is inconsistent with, the objectives and policies of this Plan relating to water quality.”*
- 28 Lincoln University and Plant and Food consider the non-complying status onerous; particularly as stormwater discharges cannot be avoided, and industry standards are available to avoid, remedy or mitigate adverse effects. It is their view that restricted discretionary activity status is more appropriate. This issue is particularly relevant when considering construction phase stormwater on a potentially contaminated site. All such discharges would be non-complying under the current regime, which I believe is an inappropriate activity status for an unavoidable by-product of land development.
- 29 The Section 42A report recommends that Rule 5.73 be amended to become a discretionary activity and states that a discretionary status is more appropriate (than restricted discretionary status) as it provides for the consideration of all aspects, rather than just the condition of Rule 5.72 (now recommended to be split as 5.72(a) and 5.72(b)) which it does not meet.
- 30 In my opinion, a restricted discretionary activity status is much more appropriate. The suggested amendment to Rule 5.73 will enable Council to consider the effects of stormwater discharges which do not comply with the permitted activity standards. However, the amendments recognise that a stormwater discharge is inevitable, and consideration should only be limited

to the effects which the permitted standards seek to control. Further, a restricted discretionary status would make it clear to plan users the matters over which matters Council can exercise its discretion; while retaining the ability to decline an application if warranted by the adverse effects of the activity.

Water Transfers

Rule 5.107 – Surrender of water upon transfer

- 31 The PLWRP seeks to reduce over-allocation of groundwater resources by introducing a rule framework whereby a restricted discretionary activity status is applied to a water transfer in an over-allocated zone, provided the consent holder surrenders up to 50% of the water take upon transfer. The transfer of water where the rate of surrender is not achieved becomes a non-complying activity.
- 32 The specific relief sought by Lincoln University is to introduce a lower rate of surrender (10%) when a consent holder transfers a water permit to a separate parcel of land which is under the same ownership. The primary reason for seeking this relief, is that the proportion of the water takes required to be surrendered to achieve a restricted discretionary activity status is too high for the rule to effectively achieve the objectives and policies it is designed to implement. I consider that the matters which discretion is restricted to provide adequate scope for decision makers to ensure that water use efficiency is being achieved when transferring water permits; and that the requirement to surrender a proportion of the water take is superfluous in this regard.
- 33 Lincoln University's campus and research farms are located within the Selwyn-Waihora Sub-region, and are located in the Selwyn-Waimakariri Groundwater Allocation Zone. This groundwater allocation zone is currently significantly over-allocated. If Lincoln University wished to transfer a groundwater permit from one block of land to another, they would be required to surrender 50% of the water take in order to have the transfer assessed as a restricted discretionary activity. In my view this would place unnecessary and costly consenting requirements on the organisation, which is not effective or efficient, and introduces a degree of uncertainty.

- 34 The rule is aimed at implementing the Canterbury Regional Policy Statement 2013, Canterbury Water Management Strategy, and the National Environmental Standard for Freshwater Management 2011. The effectiveness of this rule in achieving the objectives of these planning documents is discussed in further detail below.
- 35 Policy 7.3.4 of the Regional Policy Statement (RPS) requires a timeframe to be set for over-allocation to be phased out, and also requires the adverse effects of over-allocation to be addressed in the interim. The RPS requires the Council to set objectives, policies and methods in regional plans, but does not specifically state that this would include surrendering a proportion of a water permit when it is transferred.
- 36 The Canterbury Water Management Strategy (CWMS) seeks to achieve water use efficiency, in order to reduce over-allocation and also to provide a greater economic return for the region per unit of water. The Strategy does not specifically target water transfers as a tool to reduce over-allocation, except to say “*localised transfer of water allocations between consent holders will continue to be possible, subject to safeguards to prevent unintended consequences for the environment or other users.*”⁴
- 37 The National Policy Statement for Freshwater Management 2011 (NPS) aims to avoid and phase out over-allocation, and directs regional councils to change regional plans to provide for the efficient allocation of fresh water to activities, within set limits. The NPS does not require the surrender of water when transferring water permits. It does however, suggest reviewing existing water permits. A review of existing water permits would be a much more efficient method of addressing over-allocation, as it would enable the consent authority to determine exactly how much of any given water permit is being used, and would provide a better indication of whether a catchment is actually over-allocated. This is, in my view, a much more appropriate starting point for phasing out over-allocation.
- 38 I believe that the most relevant objectives of the PLWRP to water transfers are 3.11 and 3.21, which seek to ensure that water is available and efficiently used, and that land uses develop and change while remaining consistent with the CWMS targets. Policies 4.71 and 4.72 appear to provide proactive

⁴ Excerpt from the Canterbury Water Management Strategy – Strategic Framework – November 2009, page 14

approaches to achieving these objectives through promoting water transfers as a method of realising efficiencies. However I consider that Policy 4.73, which introduces the concept of surrendering a proportion of the water take on transfer, has the potential to discourage water transfers. Policy 4.73 is realised by the implementation of Rule 5.107(5) which introduces the requirement to surrender a significant amount of a water take upon transfer.

39 I consider that the effect of Rule 5.107(5), as currently drafted, could be to discourage the transfer of water permits. It appears to have been drafted on the premise that water permits which the consent holder seeks to transfer must not be being used efficiently; that the water is surplus to requirements (the s42a report refers to the transfer of “unused or unwanted water”⁵); and therefore up to 50% of the water take can be surrendered. There does not appear to be any scientific basis for such a high rate of surrender. The s42a report only states that a high threshold has been established which is considered appropriate given the fragility of the groundwater resource. The report also states that an applicant has the option of applying as a non-complying activity if they do not wish to surrender a portion of the consented allocation.

40 As the rule does not set an achievable rate of surrender, it is likely to be ineffective at achieving any significant efficiency gains, either at a property or catchment level. It is my opinion that, rather than surrendering such a large portion of their water take, a consent holder is more likely to apply for a non-complying activity consent or continue to inefficiently use their existing permit to derive maximum economic gain from the permit. An unintended outcome of the rule may be, therefore, to discourage transfers altogether. It may also continue the adversarial approach to managing water resources that is currently being adopted by water users. As the rule will discourage transfers, I believe that it does not assist in implementing the objectives of the RPS, CWMS or the NPS in relation to achieving water use efficiency and phasing out of over-allocation. This also fails to achieve Objectives 3.11 and 3.21 of the PLWRP, as efficiencies are less likely to be made if transfers do not occur.

41 I also consider that, while the transfer of a water permit without any surrender does not achieve any reduction in over-allocation, it does enable

⁵ Page 247 of the section 42A report, discussing the merits of Policy 4.73

an assessment of water use efficiency which would otherwise not occur. The transfer of water permits therefore achieves the CWMS's objective of increasing economic return per unit of water, and transfers should therefore be encouraged. The current provisions will actively discourage consent holders from considering a transfer, because the water would be less valuable.

- 42 The relief sought will enable consent holders to transfer water permits between their properties (which would generally be done to increase water use efficiency and maximise economic returns) by setting an achievable proportion of the water permit to be surrendered, but will also require an assessment of efficiency through consideration of the matters which discretion is limited to in Rule 5.107. It recognises that consent holders may have other genuine reasons for transferring water permits between properties that they own, rather than simply that the water take is "unused or unwanted" at the consented location. The relief sought does not specifically address the fundamental issue, which is the effectiveness of this rule in general, however it enables an individual consent holder to more efficiently utilise their existing water permit while still requiring some overall reduction in the consented water take.

Hazardous Substances and Contaminated Land

Hazardous Substance – Definition

- 43 The pLWRP provides two definitions of a hazardous substance; one in Section 2.10 (the definitions section) and the other in Schedule 4 (Hazardous Substances). Both define a hazardous substance as containing one or more of the listed intrinsic properties or being of a nature that may generate a substance with any one or more of those properties. This wording is taken from the RMA and its reference to the Hazardous Substances and New Organisms Act. The difference between them is that the definition in Schedule 4 refers to the Hazardous Substances (Minimum Degrees of Hazard) Regulation 2001; a regulation that defines the level of hazard that triggers when a substance becomes hazardous, whereas the definition in section 2.10 does not.
- 44 Lincoln University and Plant and Food sought in their submission that all hazardous substance provisions refer to the definition contained in Schedule 4 and that the definition contained in Section 2.10 be deleted. The reason for

seeking this relief was to ensure consistency throughout the proposed Plan, and ensure that a relevant definition was used to determine the application of the hazardous substances provisions.

45 The Section 42A report notes the discrepancy between the definitions and recommends that the definition in Section 2.10 be amended to reflect that in Schedule 4 (and not deleted).

46 In my opinion, the consistent use of any term is vital, and the provision of a single definition will provide clarity for plan users. It is my view that the definition in Schedule 4 is the more appropriate of the two, as it provides clarity on the level at which a substance is considered hazardous and this would provide greater certainty for activities. The Section 42A report amendment is supported and gives effect to the relief sought.

Hazardous Substance - Rules

47 Lincoln University and Plant and Food supported the permissive rule framework in the pLWRP, on the basis that the storage of hazardous substances is already adequately controlled by other authorities such as Territorial Authorities and ERMA. It is noted that the Section 42A report makes recommendations to amend or delete some of the conditions of Rule 5.164. The purpose of these changes is to avoid duplication with other legislation.

48 I agree that the proposed hazardous substance rule framework will streamline the approval process associated with the storage and use of hazardous substances, and avoid duplication with other legislation. I also am supportive of the changes recommended in the section 42A report will help achieve the same outcome.

Contaminated Land and Potentially Contaminated Land

49 Lincoln University sought the substitution of the term 'contaminated sites' with the term 'potentially contaminated land' in Policy 4.16 and 4.23, as the rules to which these policies relate refer to 'potentially contaminated land'. Further, the term 'contaminated site' is not defined.

50 The Section 42A report recommends the amendment to Policy 4.23, but not to Policy 4.16. No discussion is provided as to why the reference to 'contaminated sites' in Policy 4.16 is recommended to be retained.

51 In my opinion, applying consistent terminology is important, as it provides clarity for plan users and assists in the interpretation of plan provisions. I agree with the amendments sought by Lincoln University and consider that if Council are of a mind to adopt the recommendation of the Section 42A report, the term ‘contaminated sites’ should be defined in Section 2.10 (definitions).

52 *Contaminated Land – No Adverse Effects*

53 Lincoln University also sought that Policy 4.23 be amended to remove the reference to “no adverse effects”, and rather that the phrase “adverse effects are avoided” should be used. The reason for seeking this change is to align this policy with other policies which seek to avoid adverse effects.

54 The wording Lincoln University sought was: “*Any discharges of hazardous substances from contaminated land, including existing and closed landfills, shall be managed to ensure ~~there are no~~ that adverse effects on people’s health or safety, on human or stock drinking water supplies, or on surface water are avoided.*”

55 The Section 42A report recommends the wording substitution not be adopted because the alternative proposed does not improve the pLWRP.

56 In my opinion, the use of the words “no adverse effects” sets a high threshold, and does not recognise that land which is already contaminated is not always able to be managed such that there are no adverse effects whatsoever, and I agree with Lincoln University in this respect. I believe that the use of the phrase adverse effects “are avoided” is consistent with the purpose of the Resource Management Act, and the rest of the proposed policy framework of the pLWRP.

SUMMARY AND CONCLUSIONS

57 My evidence addresses a range of issues relevant to Lincoln University and the New Zealand Institute of Plant and Food Research Limited.

58 The matters which are of particular interest to these organisations can be broadly summarised as follows:

- Various amendments have been sought to provide consistency and clarity to the PLWRP, including to definitions, policies and rules relating to wastewater, stormwater, potentially contaminated sites

and storage of hazardous substances. It is my opinion that these amendments will ensure that the PLWRP can be easily interpreted, and will achieve the resource management outcomes it is intended to govern.

- Lincoln University is seeking amendment to Rule 5.107 to establish a condition which only requires a 10% rate of surrender, when transferring a water permit from one property to another which are under the same ownership. The proposed rule framework sets an unachievably high rate of surrender for water transfers, and therefore encourages water users to apply for consent to transfer under Rule 5.108 as a non-complying activity without offering to surrender any of the take. It is my opinion that the amendment proposed by Lincoln University will go some way towards addressing the concern that this rule will discourage water transfers, and consequently have an impact on the PLWRP's ability to manage the efficient use of Canterbury's groundwater resources. This proposed amendment would therefore help align the PLWRP with the Canterbury Water Management Strategy and the National Environmental Standard for Freshwater Management.

59 Overall, I consider the relief sought by Lincoln University and Plant and Food will assist in achieving the PLWRP's desired resource management outcome of integrated land and water management in Canterbury, and agree with the amendments requested by these organisations.

Katherine McKenzie
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Resource Management Group Ltd

4 February 2013