

BEFORE THE CANTERBURY REGIONAL COUNCIL

UNDER The Resource Management Act 1991

AND

IN THE MATTER OF Application CRC220011 by Kingan Property Investments Limited
for a discharge permit to discharge onsite wastewater to land
from a four lot subdivision

DECISION OF HEARING COMMISSIONER

BIANCA SULLIVAN

Dated 14th June 2022

BACKGROUND AND PROCEDURAL MATTERS

1. This is the decision of independent hearing commissioner Bianca Sullivan. I was appointed by the Canterbury Regional Council (CRC) to hear and decide this consent application by Kingan Property Investments Limited (KPIL or the applicant) pursuant to the Resource Management Act 1991 (RMA or 'the Act'). The application seeks to discharge onsite wastewater to land associated with a four-lot subdivision located at 48 Murdochs Road, Ashburton.
2. The application was lodged on 5 July 2021 and was prepared on behalf of the applicant by Michael Boswell of Austin Bluewater Environmental Concepts Limited (Austin Bluewater). The CRC's application form titled "discharge of contaminants into land from an onsite wastewater system" was completed, with supporting information provided about nearby wells, the groundwater receiving environment, effects on groundwater, and the wastewater and land application system design. A more robust assessment of effects on groundwater quality, in particular the effects of *E. coli* and nitrate nitrogen, was requested under section 92 of the RMA. A response was provided by E2 Environmental dated 30 November 2021.
3. The application was publicly notified on 24 March 2022, with a public notice in the Ashburton Guardian and Ashburton Courier. Notice was served on a number of parties, as detailed in paragraph 52 of the s42A report. Submissions were received from six individuals, with three supporting and three opposing the application. One of the opposing submitters changed their position to support after their submission was lodged. The content of submissions is discussed later in this decision. No submitters wished to be heard.
4. The section 42A report was prepared by Ms Kelly Walker and dated 2 June 2022. The s42A report was provided to the applicant, who was given the opportunity to be heard. The applicant elected not to be heard but their consultant, Joe Drury, General Manager of Austin Bluewater, provided a letter dated 10 May 2022 in support of granting the application. I will return to this later in my decision.
5. Given that there were no parties to be heard, this decision is prepared based on the papers only. I have not visited the site but am familiar with both the area and the operation of this type of activity. I have read the supporting information provided by the applicant including the assessment of environmental effects (AEE) and section 92 response, the submissions and the section 42A report.

THE APPLICATION

6. The application is described in detail in the AEE and is summarised in Ms Walker's section 42A report at paragraphs 19 to 34. I consider this summary to be an accurate description of the application and adopt it for the purposes of this decision.
7. As a very brief summary, a discharge permit (CRC220011) is sought to discharge domestic wastewater from four onsite wastewater systems into land, from the proposed subdivision of Lot 2 DP65695 into four lots. Each of the four new lots will be approximately 0.4 hectares (ha) in size, being the subdivision of a 1.73 ha lot. The site is currently undeveloped pasture grass.
8. A single dwelling is proposed for each lot, with a maximum of six bedrooms. The applicant proposes to discharge wastewater on each lot via a secondary (aerated) treatment system,

with associated dripline or sand trench land application system. The size of the treatment system and land application will be tailored to the size of the dwelling, with discharge volumes and land application areas (driplines or sand trenches) proposed for three to six bedroom dwellings.

9. The applicant seeks a 15-year duration.

SUBMISSIONS

10. As stated above, the applications were publicly notified on 24 March 2022, with six submissions received. Submissions in support were received from S and T Philips, P and L McQuarters, and D Prebble. Submissions in opposition were received from J Logan, and A and T Kerr. B O'Brien initially lodged a submission in opposition, but changed this to support after the submission period closed.
11. I have read all submissions in full and consider that Ms Walker's summary in paragraphs 53 and 54 of her section 42A report is complete and accurate. I adopt it for the purposes of this decision. Submitters in opposition primarily had concerns about the potential effects on groundwater quality, in particular effects on nearby bores supplying drinking water. They considered that new subdivisions shouldn't be approved without the availability of reticulated sewage treatment. Supporting submitters did not consider that the discharges would be an issue. B O'Brien's opposing position was changed to supporting due to concerns that greywater could be discharged untreated as a permitted activity if this application is declined.
12. These matters are discussed further below.

CONSIDERING THE APPLICATION

13. For the purposes of my assessment in the following sections, and for my final decision, I have considered all relevant documentation that applies to these applications. This includes the application, AEE, the submissions, the section 42A report, and the letter received from Mr Drury dated 10 May 2022.

Status of the application

14. There was no dispute as to the applicable plans and status of the activity. The discharge permit is considered to be a restricted discretionary activity under rule 5.9 of the Canterbury Land and Water Regional Plan (LWRP).

Statutory considerations

15. Sections 104, 104C, and 105 of the RMA dictate the matters which I must consider in making this decision.
16. Section 104(1) lists the matters that I must have regard to in considering the application, stating that:

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*
 - (ab) *any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from 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.*
17. Section 104C of the RMA applies to the determination of restricted discretionary activities, stating that:
- (1) *When considering an application for a resource consent for a restricted discretionary activity, a consent authority must consider only those matters over which—*
 - (a) *a discretion is restricted in national environmental standards or other regulations;*
 - (b) *it has restricted the exercise of its discretion in its plan or proposed plan.*
 - (2) *The consent authority may grant or refuse the application.*
 - (3) *However, if it grants the application, the consent authority may impose conditions under section 108 only for those matters over which—*
 - (a) *a discretion is restricted in national environmental standards or other regulations;*
 - (b) *it has restricted the exercise of its discretion in its plan or proposed plan.*
18. Section 105 applies to discharge permits and requires that, in addition to the matters in section 104(1), I must have regard to
- (a) *The nature of the discharge and the sensitivity of the receiving environment to adverse effects; and*
 - (b) *The applicant's reason for the proposed choice; and*
 - (c) *Any possible alternative methods of discharge, including discharge to any other receiving environment.*
19. These sections of the RMA are considered in turn below.

SECTION 104(1)(a) – ACTUAL AND POTENTIAL EFFECTS ON THE ENVIRONMENT

The existing environment

20. Before addressing the actual and potential effects of the proposed activity, I must consider the environment against which the effects are assessed. This includes lawful existing activities, consented activities and permitted activities.
21. The affected environment is described in section 7 of the application form, with accompanying supporting information including bore locations and groundwater quality data. Paragraphs 35 and 36 of the section 42A report, and the technical review by Mr Mark

Trewartha (CRC Senior Scientist, Groundwater Science) attached as appendix B to the s42A report, review the application information and provide additional information and analyses.

22. There is general agreement as to the existing environment to be considered for this application. I consider that the receiving environment is highly sensitive to the discharge of contaminants from treated wastewater for the following key reasons:
- a. The test pits presented in the application show topsoil with Category 2 sandy silty loam underneath. According to Mr Trewartha, such soils have a high nitrogen leaching potential.
 - b. The site is located over a shallow unconfined aquifer with high transmissivity, and nitrate nitrogen levels are high and, in many bores increasing. The AEE states that nitrate nitrogen concentrations in surrounding bores range from 7-10.5 mg/L, while Mr Trewartha and Ms Walker also refer to bores exceeding the Ministry of Health's Drinking Water Standard for New Zealand (DWS) maximum allowable value (MAV) of 11.3 mg/L nitrate nitrogen.
 - c. Groundwater flows in a north west to south east direction. There are 123 active consented bores within 1 kilometre of the applicant's site. Neighbouring properties obtain drinking water from the reticulated town supply or from onsite bores, although the CRC's records do not appear to be accurate as to which bores abstract water for domestic supply.
 - d. There are records of *E.coli* exceeding the DWS MAV of less than 1 in 100 ml of sample in bores the surrounding property.
 - e. The surrounding land use is predominantly lifestyle blocks and arable cropping. The s42A report records 18 discharges of onsite wastewater to land within 500 metres of the applicant's property.
 - f. Ashburton District Council's reticulated wastewater network does not extend to the applicant's property, although reticulated drinking water supply is available.
 - g. The area is Residential D Zone in the Ashburton District Plan, which allows subdivision to a minimum lot size of 4,000 square metres.
23. No evidence was provided to suggest that the permitted baseline, as provided for by section 104(2), should apply in this case.
24. I note here also that the site falls within the Ashburton Water Management Zone (AWMZ) in the LWRP. Schedule 8 of the LWRP bases groundwater quality limits for nitrate nitrogen on the MAV, with a maximum concentration of 11.3 mg/L and an annual average concentration of 5.65 mg/L. Section 13 of the LWRP, which is the Ashburton sub-regional chapter, has an annual average nitrate nitrogen target of 6.9 mg/L, to be met by 2035. The *E.coli* limit in section 13 is an annual median concentration of less than 1 organism/100 millilitres, consistent with the DWS.

Considering the effects

25. The application is a restricted discretionary activity and, in accordance with section 104C of the RMA, my discretion is limited to the matters provided for in Rule 5.9 of the LWRP. These matters are:

1. *The actual and potential environmental effects of not meeting the condition or conditions of Rule 5.7 for an existing system; and*
 2. *The actual and potential direct and cumulative environmental effects of not meeting the condition or conditions of Rule 5.8 for a new, modified or upgraded system; and*
 3. *The actual and potential environmental effects of the discharge on the quality and safety of human and animal drinking-water; and*
 4. *The effect of on-site wastewater treatment system density in the local area including known on-site wastewater treatment system failures, the material health status of the community, groundwater quality, the nature of effects of current sewage disposal methods, treatment options available and affordability.*
26. The first matter above is not relevant to this application, as this application is for a new activity. Turning to the second matter, the proposed activity does not meet conditions (1) and (2) of Rule 5.8. Condition (1) restricts the discharge volume to 2 cubic metres per day, while condition (2) states that the discharge must be onto a site that is equal to or greater than 4 hectares in area.
27. There was no dispute between the parties as to the scope of effects that should be considered. The following actual and potential effects were considered in the s42A report, and are also discussed below under these headings:
- a) Effects, including cumulative effects, of the discharge on groundwater quality and emerging surface water quality;
 - b) Effects on human and stock health;
 - c) Effects on tangata whenua values.
28. There was no material disagreement on the extent of effects, however there is disagreement as to the significance of these effects. This is the focus of the discussion below.

Effects on water quality

29. The applicant engaged E2 Environmental and Engeo Limited to assess the effects of the proposed discharges of nitrate nitrogen and faecal matter on groundwater quality. Modelling was used to predict the change in nitrate nitrogen and faecal coliform concentrations on the nearest downgradient bore, BY21/0346, 66 metres distant. Engeo's modelling was audited by Mr Trewartha, who agreed with both the method and conclusions.
30. The model predicted that the DWS MAV for *E.coli* of less than 1 coliform unit per 100 ml would be met at the base of either type of proposed land treatment system. The modelling showed a predicted increase in the concentration of *E.coli* at bore BY21/0346 of 0.31 cfu/100ml. The applicant provided evidence that this bore is not used for potable supply. I accept that this effect will decrease with further distance, although note that *E.coli* concentrations in nearby bores have exceeded the DWS MAV of less than 1 in 100 ml of sample.
31. The model predicted an increase of 1 mg/L nitrate nitrogen in bore BY21/0346 from each of the sand trench and driplines. Engeo and E2 Environmental's assessment also compared the differences in nitrate nitrogen loading between the previous land use on the site, sheep and beef farming, and the proposed lifestyle block residential use. Their assessment of 15 kg/ha/yr

nitrate load for sheep and beef farming compared to 25 kg/ha/yr for the four wastewater systems. This equates to an additional nitrate load of 10 kg/ha/yr.

32. Both the applicant's assessment and the s42A report conclude that nitrate nitrogen concentrations will increase downgradient as a result of the four wastewater discharges. The applicant's assessment concludes that the effects of this are likely to be minor, as the increase is small and the nitrate nitrogen concentration at the immediate downgradient bore are still likely to be within the DWS guideline value of 11.3 mg/L.
33. Ms Walker concludes in the s42A report that such an increase in nitrate nitrogen is not acceptable given the currently high levels in groundwater surrounding the site, the increasing trends, and the policy direction.
34. I acknowledge the applicant's assessment that the activity is small in scale and the increase in nitrate nitrogen concentration is also small. However, I consider that even a small increase in a receiving environment that already has substantially elevated concentrations is a significant effect. The planning provisions help to determine whether this effect is acceptable or not, and this is discussed in the following section.

Effects on human and stock health

35. Effects on human and stock health can arise from contact with the wastewater discharge (for example through access to the land application system), or from consuming water contaminated by the discharge (for example through drinking water from a nearby bore affected by the discharge). I agree with the AEE and the s42A report that the mitigation proposed would manage any access to the land application system, while the design and maintenance of the land application systems will avoid failure and ponding.
36. Effects from consuming contaminated water are closely related to the effects on water quality discussed above. Ms Walker concludes in her s42A report that the potential effects of pathogens on groundwater users are likely to be minor, but that the potential effects of increases in nitrate nitrogen concentrations on the users of surrounding wells is likely to be unacceptable.
37. I acknowledge the submissions of A and T Kerr, and J Logan, who are concerned that they would need to pay to connect to the reticulated water supply if water quality is to degrade further. B O'Brien's submission initially expressed concern about an increase in nitrate levels, but the submission was amended to supporting the application when an alternative permitted activity system was considered. I return to this below in my discussion of alternatives. Other submitters aren't concerned about effects of increasing nitrate nitrogen concentrations, although specific reasons aren't provided.
38. Given the degraded nature of the groundwater receiving environment, and the potential associated effects on human and stock health, I agree with Ms Walker that these effects are significant.

Effects on tangata whenua values

39. The site of the proposed discharges is within the rohe of Arowhenua Rūnanga, who did not lodge a submission on the application. I am not aware that the applicant undertook consultation with Arowhenua Rūnanga representatives.

40. The applicant considers that Ngāi Tahu values will be protected by the high levels of treatment proposed, along with regular maintenance of the treatment and disposal system. No reference is made to the relevant iwi management plan. Ms Walker's discussion at paragraphs 113 to 117 of her s42A report focuses on effects on surface water; however, it concludes that the proposed discharge may adversely affect iwi values and tikanga due to the potential for further degradation of groundwater quality.
41. Without any input from Arowhenua Rūnanga, I am reliant on the Kati Huirapa Iwi Management Plan (IMP) for guidance as to what effects are acceptable to Rūnanga. The IMP seeks to "restore the life supporting capacity of all natural waters and waterways" and says that "all sewage, all waste discharges out of the rivers, lakes, sea, all natural waters". Considering the IMP, the effects of the discharge and the degraded state of groundwater, I agree with Ms Walker that the discharge could adversely affect tangata whenua values.

Effects conclusion

42. I acknowledge the high level of treatment proposed by the applicant and their conclusions that the separation distances are adequate to protect water quality. However, the discharge will add an additional nitrate load to an already degraded groundwater system. This groundwater system is used for human and stock drinking water and is connected to surface waterways. For these reasons I conclude that the effects of the discharge will be significant. I consider the proposed activity against the relevant planning provisions below before concluding whether these effects are acceptable.

SECTION 104(1)(b) – RELEVANT PLANNING PROVISIONS

43. Section 104(1)(b) requires me to have regard to any relevant provisions of statutory planning documents. Ms Walker's section 42A report at paragraphs 121 to 151 contains what I consider to be a complete record of the relevant documents and provisions, assessing the application against the relevant provisions of the National Policy Statement for Freshwater Management 2020 (NPS-FM), Canterbury Regional Policy Statement (RPS) and the LWRP.
44. The applicant completed a planning assessment sheet that is part of the application form and considered the proposed discharges against the relevant planning provisions. The application concluded that the proposed discharge is consistent with the relevant planning provisions, based on the conclusions made regarding the effects of the activity.
45. I have considered the relevant objectives and policies of these statutory documents in making my decision. I consider the NPS-FM to be a key document for this application, in part because it was gazetted after the development of the RPS and LWRP. These planning documents therefore were prepared without consideration of the NPS-FM.
46. I have had regard to the NPS-FM objective and policies, in particular the objective and Policy 1, that require freshwater to be managed in a way that gives effect to Te Mana o te Wai. Te Mana o te Wai requires the resource to be managed in a way that prioritises the health and well-being of water bodies and ecosystems first, the health needs of people (drinking water) second, and the ability of people and communities to provide for their social, economic and cultural well-being third.

47. Referring to my finding on the effects, I agree with Ms Walker that the proposed discharges will not meet Te Mana o te Wai. While the AEE maintains that the high level of treatment and adequate separation distances will mean that Te Mana o te Wai will be met, the discharges will add additional nitrate load to a groundwater system that is already degraded. I consider that allowing any further degradation, albeit small, would be contrary to the first and second priorities of Te Mana o te Wai.
48. Considering the provisions of the LWRP, I note that the application is consistent with policy 4.13, as land based treatment is proposed prior to discharge. Policy 4.14A is specific to the disposal of domestic effluent and wastewater, requiring “disposal to be managed so as to avoid any adverse effect that is more than minimal on surface and ground waters”. I acknowledge that it is hard to manage wastewater discharges in this way where the groundwater quality is degraded.
49. There is a strong focus in the objectives and policies of the LWRP on improving water quality where it is degraded. I particularly refer to strategic policy 4.7 of the LWRP, which states:
- Resource consents for new or existing activities will not be granted if the granting would cause a water quality or quantity limit set in Sections 6 to 15 to be breached, or further over allocation (water quality and/or water quantity) to occur, or in the absence of any water quality standards in Sections 6 to 15 the limits set in Schedule 8 to be breached. Replacement consents, or new consents for existing activities may be granted to:*
- (a) *allow the continuation of existing activities at the same or lesser rate or scale, provided the consent contains conditions that contribute to the phasing out of the over allocation (water quality and/or water quantity) within a specified timeframe;*
or
- (b) *exceed the allocation limit (water quality and/or water quantity) to a minor extent and in the short-term if that exceedance is part of a proposal to phase out the overallocation within a specified timeframe included in Sections 6 to 15 of this Plan.*
50. Through contributing additional nitrate nitrogen to groundwater, the proposed discharges will not contribute to achieving the section 13 nitrate nitrogen target of 6.9 mg/L set in Table 13(i). Referring to policy 4.7(b), while the proposed discharges will only contribute to the nitrate over-allocation to a minor extent, they are not part of a proposal to phase out the over-allocation. As such, I consider that they are contrary to this policy.
51. Considering the objectives and policies of the LWRP as a whole, I do not consider that the proposal is consistent with the LWRP.

SECTION 104(1)(c) – OTHER MATTERS

52. Ms Walker lists the IMP and the Canterbury Water Management Strategy (CWMS) as matters to be considered under section 104(1)(c) of the RMA. These documents were not assessed in the application. I consider that these documents are relevant and have had regard to them in making my decision.
53. I discussed the IMP above when considering the effects on tangata whenua values, and will not return to it here. With regard to the CWMS, I agree with Ms Walker’s discussion at paragraph 157 of her s42A report.

SECTION 105

54. The matters listed in section 105(1) of the RMA are additional requirements for discharge permits which I must have regard to:
- (a) *the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and*
 - (b) *the applicant's reasons for the proposed choice; and*
 - (c) *any possible alternative methods of discharge, including discharge into any other receiving environment.*
55. I have considered section 105(1)(a) in my consideration of effects. In relation to section 105(1)(b), the AEE considers that the proposed secondary treatment system with dripline or sand filter land application system is best practice and appropriate for the site. While I agree that such a system is generally suitable for the types of conditions at this site (for example, soil type, depth to groundwater), the degraded groundwater quality makes such a system unsuitable at this location.
56. Turning to section 105(1)(c), the applicant states that the Ashburton District Council reticulated wastewater network does not extend to the proposed site. Mr Drury, in his letter dated 10 May 2022, considers an alternative permitted activity scenario. This involves blackwater being collected in a tank and collected and removed by a vacuum truck, while greywater would be discharged to ground in accordance with rule 5.12 of the LWRP. This alternative is referred to in the submission of B O'Brien, who changed their submission from oppose to support based of concerns about the effects of greywater discharges.
57. Mr Drury maintains that the discharge of greywater to land would have an adverse effect on groundwater. While this is discussed in his letter, no evidence is provided to back this up. I note that rule 5.12 contains several conditions, including requiring filtration, separation distances and discharge via a land application system. I don't have information before me to conclude whether or not this is a better alternative.

PART 2 OF THE RMA

58. Section 104(1) of the RMA states that the matters to be considered must be done so subject to Part 2. The Court of Appeal's decision in *RJ Davidson v Marlborough District Council*¹ was referred to by Ms Walker in her s42A report. This decision clarifies how to approach the directive by section 104(1) to consider provisions subject to Part 2.
59. I have accepted that the proposal does not meet the objectives and policies of the RPS and LWRP. I also conclude that the proposal is contrary to the NPS-FM and, in particular, Te Mana o Te Wai. These documents have been prepared to give effect to Part 2 and there is no conflict between the relevant objectives or policies that would benefit from consideration against Part 2. With reference to *Davidson*, I therefore find that there would be no benefit to my evaluation of the proposal from consideration of Part 2.

¹ [2018] NZCA 316

DECISION

60. Under the powers delegated to me by the Canterbury Regional Council, for the reasons given above, pursuant to sections 104, 104C and 105, and subject to Part 2 of the Resource Management Act 1991, I DECLINE the application by Kingan Property Investments Limited for discharge permit CRC220011 to discharge onsite wastewater from four lots.

Dated at Christchurch this 14th day of July 2022



Bianca Sullivan
Independent Hearing Commissioner