

Application CRC181666

By D J and B J Hickmott

For a discharge permit

To discharge contaminants in domestic wastewater into land

Abbreviated Section 42A Officer's Report – Adele Dawson-Incite

Date: October 2017

INTRODUCTION

1. D J and B J Hickmott (the applicants) have applied for a consent to discharge contaminants in domestic wastewater from an on-site wastewater system into land.
2. The site of the discharge is located at 254 Easterbrook Road, Fernside, Rangiora. The site is legally identified as Lot 2 DP 82284 and located at or about, NZTM 2000 1565993mE, 5202412mN.
3. Malcolm Linton of Drainage Consultancy and Design Ltd (the consultant) has prepared the Assessment of Environmental Effects (AEE), on behalf of the applicant. The AEE and further information received from the consultant can be viewed on file (see HPRM folder CRC181666).
4. The applicants have applied to discharge domestic wastewater to land via a single onsite wastewater system. The wastewater system will receive wastewater from an existing dwelling and office building. The proposed land application system will replace an existing soak hole disposal system.
5. A site visit was not undertaken during the processing of this consent application.

DESCRIPTION OF THE PROPOSED ACTIVITY

6. The applicants propose to discharge domestic wastewater into land via a primary wastewater treatment system and 2A sand trench. Refer to Section 4 of the AEE, (Pages 6-12), for a more detailed description.
7. The application relates to the property at 254 Easterbrook Road, Fernside, Rangiora with a lot size of 4ha.
8. The existing dwelling has 4 bedrooms and the design flow from the office building has been estimated at 750L/day. The total design flow is 2150L/day.
9. The design flow from the dwelling at 1400L/day is consistent with the AS/NZS 1547:2012 Standard for a 4 bedroom dwelling. The design flow from the office building is based on up to 15 staff (50L/person/day). This allowance is also consistent with the AS/NZS 1547:2012 Standard.
10. The proposed treatment system will be a primary wastewater treatment system. The treatment system has not been selected. The existing dwelling will still discharge via the current septic tank and a new tank will be installed to service the office building.
11. The wastewater will then be pumped to a 2A sand trench land application system (LAS). The sand trench will be constructed largely above ground level, the discharge point will be a maximum of 200 millimetres below ground level.
12. The LAS will have a minimum area of 43 square metres.

13. The application rate will be 50 millimetres per day.
14. The perimeter of the LAS will be fenced to prevent vehicle, stock and public access.
15. The proposed treatment and land application system will be serviced twelve monthly in accordance with the AS/NZS 1547:2012 Standards.
16. The proposed treatment, land application system and application rate are consistent with the AS/NZS 1547:2012 Standard.
17. The applicant has requested consent duration of 15 years.

LEGAL AND PLANNING MATTERS

The Resource Management Act 1991 (RMA)

18. Section 15 of the RMA states that:
*“(1) No person may discharge any—
(a) contaminant or water into water; or
(b) contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water; or
(c) contaminant from any industrial or trade premises into air; or
(d) contaminant from any industrial or trade premises onto or into land—
unless the discharge is expressly allowed by a national environmental standard or other regulations, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent.”*
19. The proposed discharge cannot comply with the relevant regional rules and there is no national environmental standard that authorises the discharge, therefore a resource consent is required.

Canterbury land and Water Regional Plan (LWRP)

20. The proposal does not meet the following condition of Rule 5.8 in the Canterbury Land and Water Regional Plan:
 - a. Condition 1 as the discharge volume will exceed 2m³ per day; and
 - b. Condition 3(h) as the discharge will occur where there is less than 1m separation to groundwater.
21. Accordingly, resource consent is required pursuant to s15 of the Resource Management Act under Rule 5.9 as a **restricted discretionary** activity.
22. For further details as to how the activity was classified, please refer to the attached s42A addendum in Appendix Two.
23. I consider that no other consents are required for this application and no assessment of other regional plans is relevant.

CONSULTATION

24. The applicant did not carry out any consultation as they did not identify any potentially adversely affected parties.
25. Environment Canterbury advised the following parties of the application:
 - a. Mahaanui Kurataiao Limited;
 - b. Waimakariri District Council; and

c. Fish and Game.

26. To date no response has been received from them.

DESCRIPTION OF THE AFFECTED ENVIRONMENT

27. The applicants have provided a description of the affected environment in Section 7 of the AEE (Pages 16-24) which accompanied the application.

28. I have audited the applicant's assessment and note in particular:

a. Soil type

- i. The topography of the site is flat.
- ii. The applicants conducted a test pit on site to a depth of 1.5m and has assessed the least permeable soil type to be category 5 clay. The discharge however is beneath this layer into gravels/sands (category 1).
- iii. S-Maps assessed soils in the area to be poorly drained Longbeach Deep Silty Loam. I note that this only considers the first 1m of the soil profile and the discharge will be below this.
- iv. The onsite bore is located 50m from the proposed discharge envelope. The borelog for M35/8586 shows the top 1.8m consists of 0.3m of brown earth, 0.2m of clay, and 1m of blue sandy gravels.
- v. I agree with the applicant's assessment that discharge will occur directly into gravel/sands.

b. Groundwater

- i. The applicants assessed groundwater to flow in a north west to south east direction based on Environment Canterbury's database. There are piezometric contours available for the area that confirm groundwater flow is north-west to south-east.
- ii. The applicants have assessed the potential highest groundwater to be as high as 0.47m below ground level based:

Well Number	Well depth (metres)	Distance (in metres) and direction from land application system	Highest groundwater reading (metres below ground level) (please ensure you subtract the measuring point)	Number of readings	Years readings were taken
<i>Example: L35/0241</i>	8.9	180m NW	2.6	87	1973 to 1989
M35/0336	9.8m	120m = N / W	-0.479m	18	1977 - 1986
M35/0337	6.9m	658m = S / E	999.989m	20	1977 - 1986
M35/0338	8.199m	900m = N / E	-0.569m	57	1977 - 1987

- iii. Mottling was also evident in the test pit at 1100mm below ground level.
- iv. I consider that the applicant has identified the closest wells with groundwater readings. The readings are however from the 1970s and 1980s where groundwater levels were particularly high. M35/9001, 1.65m deep is located 1.98km north-west of the site and monthly groundwater level readings have been taken between 2001 and 2017. The highest groundwater level recorded is 0.06m below ground level. The elevation of this well is 22.88m above MSL and the elevation of the onsite well is estimated at 26.85m above MSL.

The accuracy of these measurements can be +/- 5m. Based on the readings above and the evidence of groundwater in the test pit, I agree that the groundwater level could be as high as 0.5m below ground level.

- vi. The applicant has not provided any information on expected groundwater quality.
- vii. The most relevant groundwater quality information is from well M35/4852, 15m deep located 1.79 km south-west of the site. A reading was taken in March 2016 which showed *E.coli* <1 MPN/100ml and nitrate nitrogen 4.5mg/L.

c. Surface Water

- i. The closest surface water body is an unnamed drain approximately 47m to the west along Easterbrook Road.

d. Groundwater Users

- i. The drinking water supply for the property is an onsite well located 50m from the discharge envelope. The site is not located within the Community Supply Well Protection Zone.
- ii. There are 18 active bores within 500m of the proposed discharge envelope. The closest neighbouring bore is 87m south.

e. Other Issues

- i. The site is not within a silent file or Ngai Tahu Statutory Acknowledgement Area and there are no Heritage New Zealand sites registered on the property.
- ii. The site is not listed on the Listed Land use Register (LLUR), nor are there any sites listed within 100m of the property.
- iii. The closest neighbouring property is located 12m from the discharge envelope. The site adjoins two other residential properties.
- iv. There are 7 consented discharges to land located within 500m of the site. There is not a discharge permit for every property, therefore it is likely there are several more discharges occurring as there is no reticulated wastewater system in the area.

ASSESSMENT OF ACTUAL AND POTENTIAL EFFECTS

- 29. Refer to Section 7 of the AEE (Pages 16-24), which accompanied this application for the assessment of effects that may arise from this proposal.
- 30. Based on the LWRP, the following effects are within the limits of our discretion and are discussed in the following sections:
 - a. The adverse effects, including cumulative effects, of the discharge and other discharges on groundwater quality and emerging surface water;
 - i. Adverse effects of nitrate nitrogen on groundwater quality and users;
 - ii. Adverse effects of pathogens on groundwater quality and users;
 - b. Adverse effects on human and stock health.

31. Adverse effects on surface water, Ngai Tahu cultural values and amenity values have been deemed outside our discretion for this consent as the applicant can meet the related conditions of Rule 5.8. Therefore the effects are deemed to be less than minor.
32. Further discussion is provided below for those effects where I do not agree with the applicant's assessment or conclusions or where I consider further discussion is required.

Potential adverse effects of nitrate nitrogen on groundwater quality and users

33. The applicant has assessed the potential adverse effects of nitrate nitrogen on groundwater quality and users in section 7.5.1 of the application. The primary treatment provided by the multi chamber septic tank is likely to provide treated effluent with a total nitrogen concentration of approximately less than 40mg/L based on the Onsite Effluent Testing Trials.
34. The applicant considers that the discharge will have minor effects of groundwater quality as:
 - a. The volume of the discharge will be restricted through consent conditions; and
 - b. There will be good separation between discharges.
35. **Cumulative effect;** There is no community reticulated wastewater network in the area therefore all properties are reliant on septic tank disposal. There is also no reticulated water supply provided to this property or surrounding properties, therefore groundwater is the primary source of drinking water. The current nitrate nitrogen concentration in groundwater is expected to be less than half the Ministry of Health Maximum Acceptable Value. As the applicant is replacing an existing land application system, only increasing the discharge rate by 750 L/day and the property is 4ha providing good separation of discharges, I consider the cumulative effects will be minor.
36. **Overall;** Taking into account the above information, I consider the potential adverse effects on groundwater quality will be minor and no persons will be adversely affected given the separation of discharges and the separation to neighbouring wells.

Potential adverse effects of pathogens on groundwater quality and users

37. The applicant has assessed the potential adverse effects of the discharge of pathogens in section 7.5.2 of the application. The applicant has estimated that the concentration of faecal coliforms at the base of the 2A sand trench will be less than 100cfu/100ml.
38. The applicant has concluded that there will be minor impacts from the discharge of pathogens due to good removal through the sand trench and underlying natural soils.
39. The highest potential groundwater has been assessed to be approximately 0.5m below ground level. The discharge point will be located a maximum of 200mm below ground level as the system is largely constructed above ground in a mound. This will ensure there will be at least an additional 200mm between the base of the 2A sand and groundwater.
40. The site is not located within a Community Drinking Water Protection Zone. The closest bore is located 87m away, it is therefore unlikely that the discharge will affect down gradient water users.
41. **Cumulative effect;** I consider that the proposed treatment system combined with the 2A sand trench will provide significant reductions in pathogens. In addition, as the 2A

sand trench is replacing an existing soak hole, even with the increase in volume, I consider that the impacts on groundwater quality may be reduced.

42. **Overall;** Taking into account the above information I consider the potential adverse effects on groundwater quality will be minor and no persons will be adversely affected.

Potential Adverse effects of the discharge on human and stock health

43. The perimeter of the LAS will be fenced to prevent vehicle, stock and public access reducing the potential for contact with the discharge.
44. The application rate of 50mm is appropriate for discharge into category 1 soils and is consistent with AS/NZS 1547:2012 Standards; therefore ponding is unlikely. I note that the least permeable soil is a category 5 clay but the design of the sand trench includes gravel beneath the 2A sand which will be installed to a depth where free draining material is encountered.
45. The discharge will occur via a 2A sand trench, the distribution lines will be 200mm below ground level, thus reducing the potential for contact. There are no wells located within 80m.
46. The system will be maintained regularly in accordance with the manufacturer's guidelines to avoid failure and ponding.
47. The applicant is proposing a discharge envelope that is greater than 10m from neighbouring boundaries given this distance and that the discharge is occurring below ground level, I consider contact with wastewater at the ground surface will be avoided.
48. Taking into account the above information, I consider the potential adverse effects on human and stock health will be less than minor.

Summary

49. The main issues to be brought to the decision maker's attention are:
- a. The applicant is proposing to install a wastewater treatment and disposal system where groundwater is very high and the volume to be discharged is greater than 2m³ per day.

CONSIDERATION OF ALTERNATIVES

50. The applicant considered discharging via drip lines however the area required was too large and it may still have required to be constructed above ground level.

OBJECTIVES AND POLICIES

51. The relevant objectives and policies are identified in the attached 's42A Addendum'.
52. Of particular reference to this application are:
- a. Policy 4.14 and Policy 4.14A of the LWRP.
53. I consider that the proposed discharge is consistent with these policies as the wastewater treatment and LAS will have a minor environmental effect.

RECOMMENDATION

Notification – (Section 95A and 95B)

53. The assessment of adverse effects undertaken above indicates that adverse effects on the environment will be no more than minor. I also note that public notification is not required by a National Environmental Standard or rule in a plan. I do not consider that special circumstances would require public notification. Given the above, I consider that public notification of this application, pursuant to s95A of the RMA 1991, is not required.
54. I also note that adverse effects on persons will be less than minor, and that there are no affected protected customary rights group or affected customary marine title group. Given this, I consider that limited notification of this application, pursuant to s95B of the RMA 1991, is not required.
55. In conclusion, I recommend that this application be decided on a non-notified basis.

Part 2 Matters (Purpose and Principles of the RMA)

56. Under section 104(1) of the RMA, the consent authority must consider applications "subject to Part 2" of the Resource Management Act 1991 (RMA), specifically sections 5, 6, 7 and 8.
57. The Purpose of the RMA (Section 5) is to:
"promote the sustainable management of natural and physical resources."
58. The purpose is achieved by the guidance provided by the Principles of the RMA (i.e. s.6, s.7, and s.8).
59. In the attached s42A Addendum (Appendix Two), I have considered Part 2 of the RMA. Of particular importance for this proposal are the maintenance and enhancement of the quality of the environment and any finite characteristics of natural and physical resources.
60. Given this, I consider that this activity will achieve the purpose of the RMA.

Consideration of Application (Section 104(1)(a) –(c))

61. The assessment of adverse effects undertaken for the purpose of notification determination concluded that adverse effects were no more than minor. I consider that this assessment is also relevant to the assessment required under s104(1)(a).
62. The following positive effects have been identified:
a. Creation of job opportunities through the installation and maintenance of the system.
63. In summary, in accordance with Section 5 of the RMA I consider that any adverse effects will be acceptable and are able to be avoided, remedied or mitigated subject to an appropriate set of conditions.
64. In accordance with section 104(1)(b) of the RMA, I have had regard to all relevant objectives and policies for this application. The relevant objectives and policies are identified in the attached 's42A Addendum' (see Appendix Two). The addendum also includes a list of the purpose and principles of the RMA which I have taken into consideration when making my recommendation. I consider this application is consistent with the objectives and policies of the relevant planning provisions.
65. In accordance with section 104(1)(c) I have had regard to any other matters relevant to this application including:

a. Canterbury Water Management Strategy

The proposal is located within the area managed by the Waimakariri Zone Committee. The committee have generated a Zone Implementation Programme (ZIPs) for this zone. ZIPs are non-statutory documents that are being completed by each of the Zone Committees within the Canterbury region. ZIPs contain zone-specific recommendations for water management to achieve the CWMS targets. The specific ZIP priority outcomes related to the proposal are regarding the availability of high quality drinking water. I consider that the proposed discharge will not affect the ability of the ZIP aspirations being achieved.

b. Mahaanui Iwi Management Plan

- i. The site is located within the Tūāhuriri Rūnanga boundary. The Rūnanga were advised of the proposal via Mahaanui Kurataiao Ltd and asked to respond by the 29 September 2017 if they had any concerns. There has been no response at the time of finalising this report.
- ii. The site is not located within a Silent Files or Ngāi Tahu Statutory Acknowledgement Areas or sensitive site.
- iii. I have assessed the proposal against the IMP and consider the application is consistent with the relevant policies. The IMP includes policies that state the discharge should not occur directly to water or where contaminants may enter water. It also states that adverse impacts on water and land should be avoided, and that best practice should always be encouraged. I consider that the proposed discharge will not contravene these policies given the discharge rate is appropriate for the soil and sufficient maintenance will occur.
- iv. I have assessed the proposal against the IMP and consider the application is consistent with the relevant policies.

Determination of applications for restricted discretionary activities (Section 104C)

1. *When considering an application for a resource consent for a restricted discretionary activity, a consent authority must consider only those matters over which—*
 - c. *a discretion is restricted in national environmental standards or other regulations:*
 - d. *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.*

66. The matters for discretion have been restricted in Rule 5.9 of the LWRP. These are:

- a. *The actual and potential environmental effects of not meeting the condition or conditions of Rule 5.7 for an existing system; and*
- b. *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*
- c. *The actual and potential environmental effects of the discharge on the quality and safety of human and animal drinking-water; and*
- d. *The effect of on-site domestic wastewater treatment system density in the local area including known on-site domestic wastewater treatment system failures, the material health status of the community, current groundwater quality, the nature of effects of current sewage disposal methods, treatment options available and affordability.*

Section 105(1) – Matters relevant to certain applications

67. In accordance with section 105, I have had 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 environment. These have been described by the applicant as discussed above.
68. I have considered section 105 in preparing this report and consider that the proposed discharge method is appropriate for the site.

Section 107(1) – Restrictions on grant of certain discharge permits


69. Under Section 107(1) of the RMA a consent authority may not grant a consent for the discharge of a contaminant into water, or onto or into land, if after reasonable mixing the discharge is likely to give rise in the receiving waters, to:
- "(c) The production of conspicuous oil or grease films, scums, foams, floatable or suspended material:*
 - (d) Any conspicuous change in the colour or visual clarity:*
 - (e) Any emission of objectionable odour:*
 - (f) The rendering of fresh water unsuitable for consumption by farm animals:*
 - (g) Any significant adverse effects on aquatic life."*
70. Given the level of treatment proposed and nature of the receiving environment, I consider that the effects listed above are very unlikely to occur.

Duration

71. The applicant has sought consent duration of 15 years.
72. The LWRP does not list particular matters which we shall have regard to when considering the duration of a resource consent. However, I have taken into consideration the nature and sensitivity of the receiving environment and the method of treatment proposed and I am satisfied a duration of 15 years is appropriate.


Grant or refuse

73. Having considered all relevant matters under sections 104 and 104C, I recommend granting resource consent CRC181666 subject to the conditions attached (Appendix One).

Signed:  Date: 5/10/2017
Name: Adele Dawson
Senior Resource
Management Consultant

Reviewer's comments:

--

Signed:  Date: 5/10/2017
Name: Hannah Goslin
Resource Management
Consultant

REFERENCES

Australian/New Zealand Standard: On-site domestic wastewater management (AS/NZS 1547:2012)

Canterbury Regional Council, 2015. Land and Water Regional Plan

Canterbury Regional Council, 2013. Canterbury Regional Policy Statement, including the amended CRPS provisions effective 12 June 2015 and 23 July 2015.

Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007.

The Resource Management Act 1991. Consolidated version incorporating all the amendments to that Act including the Resource Management Amendment Act 2013.

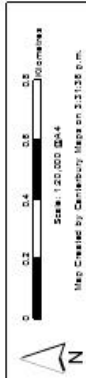
APPENDIX 1: RECOMMENDED CONDITIONS

1	The discharge shall be only domestic wastewater originating from a property with legal description Lot 2 DP 82284, located at 254 Easterbrook Road, Fernside, Rangiora as shown on Plan CRC181666A, attached to and forming part of this resource consent.
	Wastewater Treatment and Disposal
2	The volume of wastewater discharged shall not exceed 2.150 cubic metres per day.
3	The discharge shall be only from: <ul style="list-style-type: none">a. a single dwelling with a maximum of 4 bedrooms; andb. an office and amenity block.
4	The wastewater shall be discharged into land only at or about NZTM 2000 1565993mE, 5202412mN via the land application system located within the discharge envelope, labelled on Plan CRC181666B, attached to and forming part of this consent.
5	Prior to discharge to the land application system, the wastewater shall: <ul style="list-style-type: none">a. receive primary treatment in a multichamber septic tank wastewater treatment system or alternative treatment system which provides the same or better quality treatment; andb. pass through a proprietary effluent filter.
6	The wastewater treatment system and land application system shall not include chlorine disinfection.
7	After exiting the treatment system, the wastewater shall be pumped to a land application system constructed in accordance with the design shown on Plan CRC181666C, attached to and forming part of this resource consent, and as described below: <ul style="list-style-type: none">a. A layer of sand, of a grade that fits within the 2A envelope shown on Diagram One, attached to and forming part of this resource consent, shall be installed beneath the base of the distribution pipes;b. The land application system shall have a minimum area of 43 square metres;c. The layer of graded sand shall be a minimum depth of 600 millimetres;d. The base of the 2A sand layer shall be a maximum of 200 millimetres below ground level; ande. A layer of free draining gravels shall be installed beneath the 2A sand layer to a depth where free draining in situ soils are intercepted.

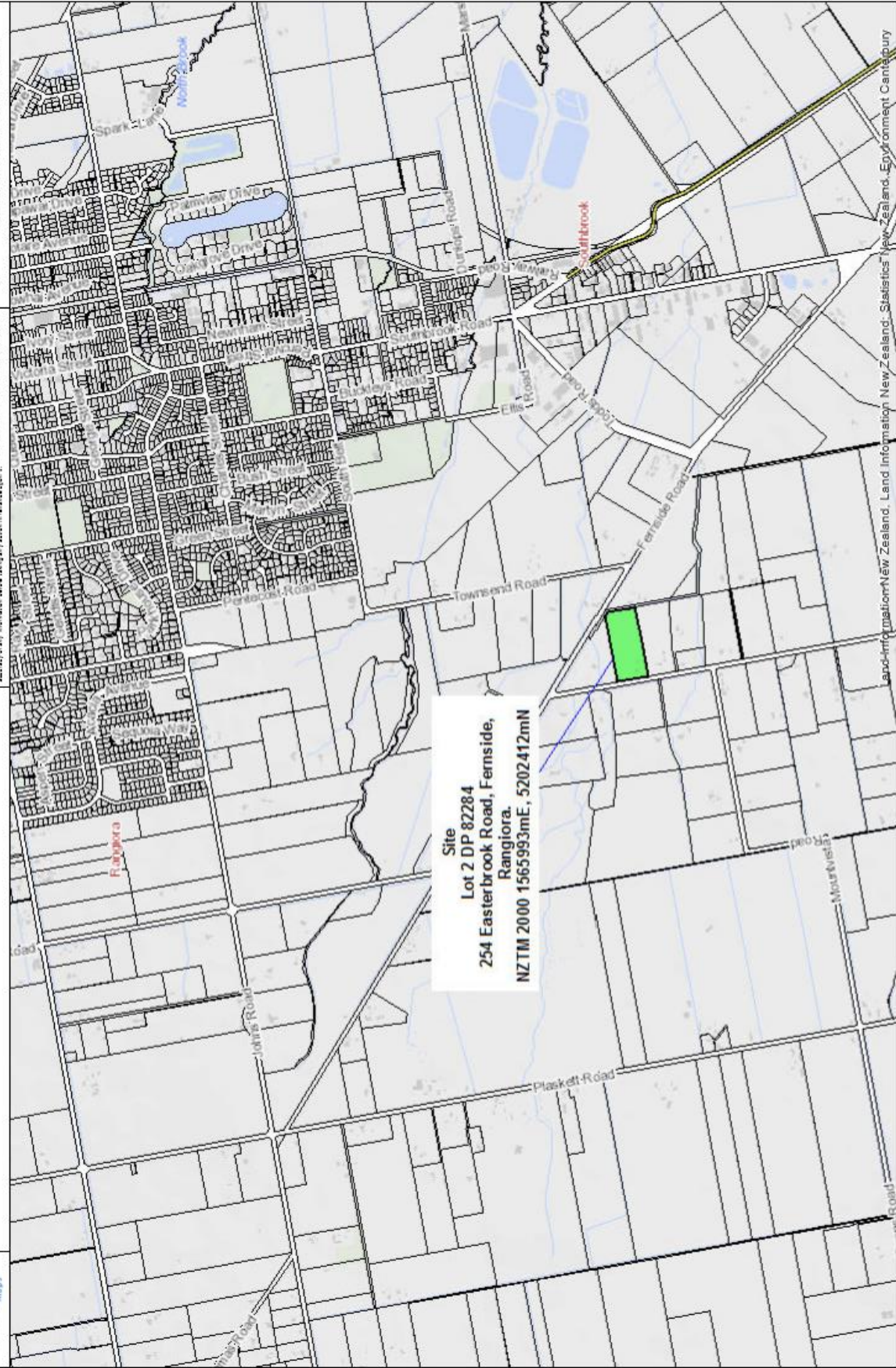
8	The wastewater shall be evenly dosed over the land application system at a rate not exceeding 50 millimetres per day.
9	The perimeter of the land application system shall be fenced, or shall be clearly demarcated by signage and marker pegs and the consent holder shall ensure that there is no activity undertaken on top of the land application system that may cause damage to the disposal system (for example: stock grazing, car parking or deep rooted trees).
10	A minimum depth of 200 millimetres of unsaturated soil shall be maintained at all times between the base of the 2A sand layer and the highest groundwater level.
11	There shall be no ponding of treated or untreated wastewater on the land surface and no overland discharge of treated or untreated wastewater.
12	There shall be no discharge: <ul style="list-style-type: none"> a. within 20 metres of any surface water body; and b. to surface water as a consequence of the exercise of this consent.
13	There shall be no discharge within 50 metres in any direction, of any authorised and/or existing bores.
	Installation
14	<p>Within one month of the installation of the treatment and land application system, the consent holder shall provide to the Canterbury Regional Council, Attention Regional Leader - Monitoring and Compliance, the following:</p> <ul style="list-style-type: none"> a. A signed copy of a compliance certificate certifying: <ul style="list-style-type: none"> a. that the installation of the wastewater treatment system, land application system, any ancillary treatment devices and associated pipework has been installed by a person with at least two years' experience in the installation of such systems; and b. the installed wastewater treatment system is capable of achieving the treatment standard and separation to groundwater specified in condition (5) and (10) of this consent; and c. that the system has been installed in accordance with the conditions of this consent. b. A copy of a signed 'as built plan' which clearly shows the location of the installed wastewater treatment system and land application system, and the separation to property boundaries and surface water bodies; and c. Photographs which show: <ul style="list-style-type: none"> i. the height of the installed distribution lines relative to ground level; and ii. fencing, signage, vegetation or marker pegs demarcating the perimeter of the land application system.

	Maintenance
15	<p>The wastewater treatment and land application system shall be serviced and maintained at least once every twelve months by a qualified person with at least two years' experience in the maintenance of such systems. The maintenance shall include but not be limited to:</p> <ul style="list-style-type: none"> a. Ensuring that the lid(s) of the wastewater treatment system are readily accessible at all times; b. Measuring the depth of solids and scum in the wastewater treatment system(s); c. Pumping out the wastewater treatment tank(s) if the solids and scum layers combined are greater than one half the depth of the wastewater treatment tank(s); d. Removing sludge from the base of the pump chamber to ensure the build-up does not exceed 60 millimetres; e. A visual inspection of the components outlined in the clauses below, and cleaning, repairing or replacing as required: <ul style="list-style-type: none"> i. proprietary effluent filter; ii. electrical parts; iii. audible alarms; and iv. the distribution pump; f. Flushing the distribution lines; and g. Inspection of the distribution pipes at the site of the land application system to ensure that they are operating correctly and replacing as required.
16	<p>Within one month of the installation of the wastewater treatment and land application system, the consent holder shall provide to the Canterbury Regional Council, Attention Regional Leader - Monitoring and Compliance, a signed copy of a maintenance contract or agreement. The maintenance contract:</p> <ul style="list-style-type: none"> a. Shall be with the system supplier or an alternative contractor experienced in the maintenance of the wastewater treatment and land application system; b. Shall specify details of the maintenance required under condition (15) of this consent; and c. If the contract changes during the duration of this consent, a new contract in accordance with (a) and (b) of this condition shall be forwarded to the Canterbury Regional Council, Attention Regional Leader - Monitoring and Compliance, within one month of the contract being signed.
17	<p>Following every service a written report shall be prepared and kept by the consent holder. In addition, the consent holder shall keep written records of all repairs made to any part of the wastewater treatment and land application system. The consent holder shall forward a copy of the written reports and</p>

	records of repairs to the Canterbury Regional Council, Attention Regional Leader - Monitoring and Compliance, on request.
	Administration
18	<p>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:</p> <ul style="list-style-type: none"> a. Dealing with any adverse effect on the environment that may arise from the exercise of the consent or b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.
19	<p>If this consent is not exercised before 30 September 2022 it shall lapse in accordance with section 125 of the Resource Management Act 1991.</p> <p>Advice Note: On sale of the property, the consent holder shall inform the new property owner of the volume and location of the wastewater discharge, maintenance requirements and the requirement to comply with consent conditions.</p>

[illegible]

Site
Lot 2 DP 82284
254 Easterbrook Road, Fernside,
Rangiora.
NZTM 2000 1565993mE, 5202412mN

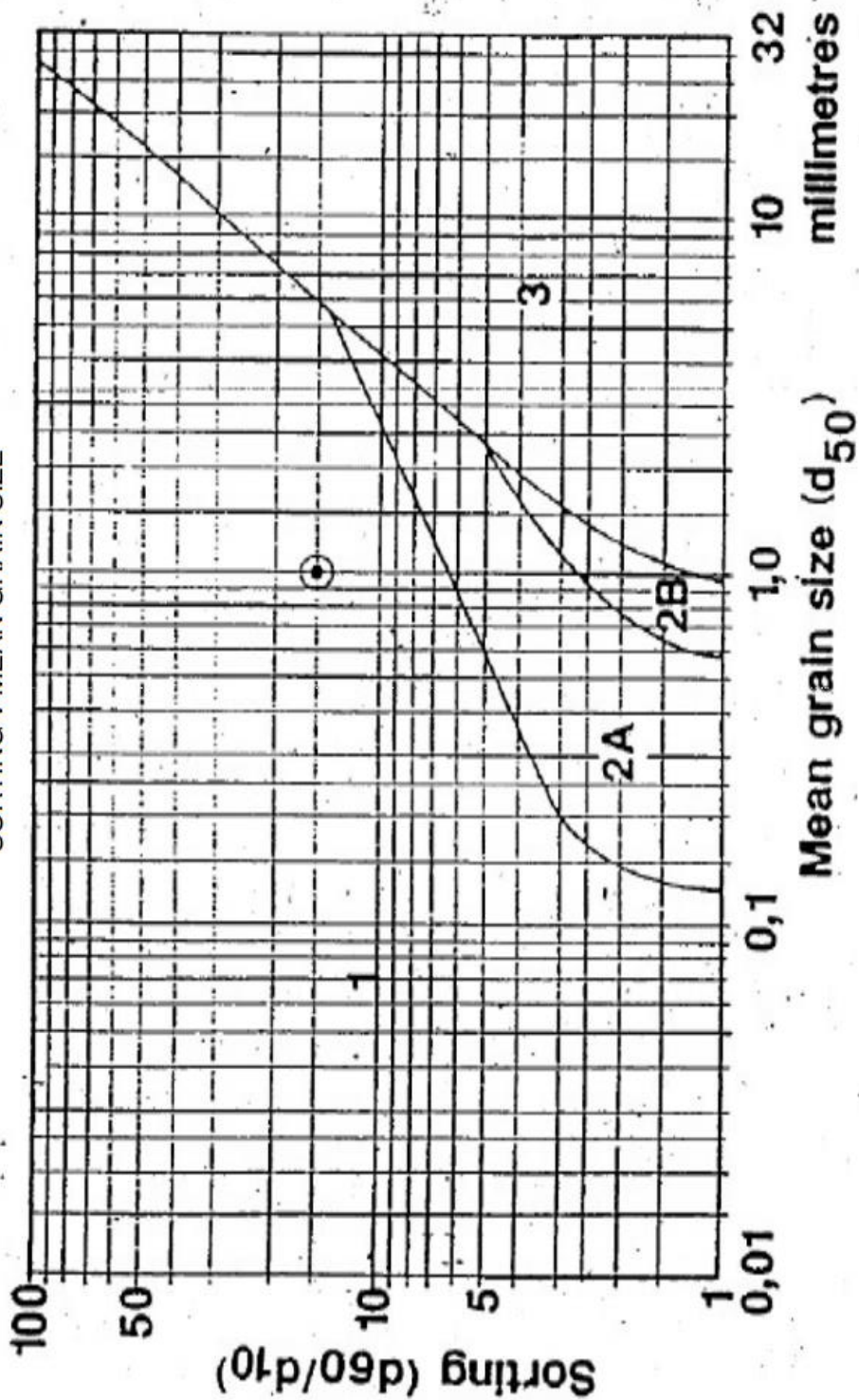


Plan CRC181666B



DIAGRAM ONE

SORTING v MEAN GRAIN SIZE



APPENDIX 2: SECTION 42A ADDENDUM

LEGAL AND PLANNING MATTERS:

Land and Water Plan:

Under Rule 5.9 of the proposed Land and Water Regional Plan the activity is considered:

☐ Permitted ☒ Restricted ☐ Non-complying ☐ Prohibited
Discretionary

Because: The discharge cannot comply with:

- Condition 1 as the discharge volume will exceed 2m³ per day; and
- Condition 3(h) as the depth to groundwater is less than 1m

Overall status:

The overall legal status of the activity is considered:

☐ Permitted ☒ Restricted ☐ Non-complying ☐ Prohibited
Discretionary

OBJECTIVES AND POLICIES

I have had regard to the planning provisions listed below which are considered relevant to this proposal. I consider the proposal is generally consistent with the objectives and policies of these planning provisions.

NATIONAL ENVIRONMENTAL STANDARD FOR SOURCES OF HUMAN DRINKING WATER

Regulations 7 and 8 – (Relevant to activities which have the potential to affect a registered drinking-water supply that provides no fewer than 501 people with drinking water for not less than 60 days each calendar year.)

- ☐ Regulation 7 - Granting of water permit or discharge permit upstream of abstraction point where drinking water meets health quality criteria
- ☐ Regulation 8 - Granting of water permit or discharge permit upstream of abstraction point where drinking water not tested or does not meet health quality criteria

Regulation 12 (Relevant to activities that have the potential to affect a registered drinking-water supply that provides no fewer than 25 people with drinking water for not less than 60 days each calendar year.)

- ☐ Regulation 12 – (Conditions on resource consent if activity may significantly adversely affect registered drinking-water supply)

REGIONAL POLICY STATEMENT 2013

- ☒ Objective 7.2.1 (Sustainable management of fresh water)

- ☒ Policy 7.3.6 (Fresh water quality)

- ☐ Policy 7.3.3 (Water quality and land uses- to avoid remedy or mitigate adverse effects of changes land uses on the quality of freshwater)

Adequate treatment will be provided by the wastewater treatment system to avoid adverse effects on freshwater quality

As above.

LAND AND WATER REGIONAL PLAN

Objectives

<input checked="" type="checkbox"/> <u>Objective 3.1</u> (recognise and enable Ngāi Tahu culture, traditions, customary uses and relationships with land and water)	<p>Considered relevant policies of IMP above. Not likely to impact cultural values</p> <p>As above.</p>
<input checked="" type="checkbox"/> <u>Objective 3.2</u> (ki uta ki tai – recognising the connectivity between surface water, groundwater, fresh water, land and the coast)	
<input type="checkbox"/> <u>Objective 3.5</u> (Land uses develop and change in response to socio-economic and community demand)	
<input type="checkbox"/> <u>Objective 3.6</u> (Intrinsic values of water)	
<input type="checkbox"/> <u>Objective 3.7</u> (Fresh water is managed prudently as a shared resource with many in-stream and out-of-stream values)	
<input checked="" type="checkbox"/> <u>Objective 3.8</u> (Safeguard the life-supporting capacity of ecosystems)	<p>Adequate treatment provided, unlikely to be any impacts on ecosystems.</p>
<input checked="" type="checkbox"/> <u>Objective 3.8A</u> (High quality fresh water is available to meet actual and reasonable foreseeable needs for community drinking water supplies)	<p>Discharge will not impact on availability of drinking water supplies</p> <p>As above.</p>
<input type="checkbox"/> <u>Objective 3.12</u> (When setting and managing within limits, regard is had to community outcomes for water quality and quantity)	
<input checked="" type="checkbox"/> <u>Objective 3.14</u> (High quality fresh water is available for community drinking water supplies)	
<input type="checkbox"/> <u>Objective 3.15</u> (Valued parts of rivers / lakes are suitable for contact recreation)	
<input type="checkbox"/> <u>Objective 3.16</u> (Freshwater bodies and their catchments are maintained in a healthy state, including through hydrological and geomorphic processes such as flushing and opening hāpua, flushing algal and weed)	
<input type="checkbox"/> <u>Objective 3.17</u> (significant indigenous biodiversity values of rivers, wetlands..)	<p>Application rate is appropriate for the soils and erosion will not occur.</p> <p>Adequate treatment and LAS proposed.</p>
<input type="checkbox"/> <u>Objective 3.18</u> (Maintain Wetlands that contribute to cultural / community values, biodiversity, water quality, mahinga kai, water cleansing & flood mitigation)	
<input checked="" type="checkbox"/> <u>Objective 3.23</u> (Soils are healthy and productive, and human induced erosion and contamination are minimised)	
<input checked="" type="checkbox"/> <u>Objective 3.24</u> (Activities operate at good environmental practice or better to optimise efficient resource use and protect freshwater resources)	
<input type="checkbox"/> <u>Policy 4.1</u> (Lakes, rivers, wetlands and aquifers should meet freshwater outcomes)	
<input checked="" type="checkbox"/> <u>Policy 4.2</u> (The management of freshwater will take account of the fresh water outcomes, water quantity limits and the individual and cumulative effects of land uses, discharges...)	<p>Consider that suitable treatment is proposed. Cumulative effects will not result in limits being breached.</p>
<input type="checkbox"/> <u>Policy 4.4</u> (Groundwater is managed so that (e) overall water quality in aquifers does not decline)	

- ☐ Policy 4.5 (Water is managed through the setting of limits to safeguard the life-supporting capacity of ecosystems, support customary uses, and provide for group of community drinking water...)
- ☒ Policy 4.7 (Resource consents not granted where quality limit breaches or will be breached)
- Activity and resource policies*
- ☒ Policy 4.12 (No direct discharges to surface water bodies or groundwater)
- ☐ Policy 4.14 (Limits on discharges of contaminants into or onto land)
- ☐ Policy 4.14A (The disposal of domestic effluent and wastewater shall be managed so as to avoid any adverse effect is more than minimal on surface and ground waters.
- ☐ Policy 4.23 (Protect drinking water supplies from discharge of contaminants)
- ☐ Policy 4.29 (Effectively treat the discharge and allow distance to other discharges)
- ☐ Policy 9.4.1 (Protect the high quality, untreated groundwater sources available to Christchurch City as a potable water supply in the area shown on Planning Maps)

As above.

The discharge is proposed via land application treatment system.

Discharge will not exceed natural capacity of soil, raise groundwater, result in the land or water being unsuitable for future uses.

Population is greater than 1000 persons but the applicant is proposing secondary treatment and effects of wastewater system considered to be acceptable.

OTHER PLANS

- ☐ Policy of Regional Plan
- ☐ Policy of Regional Plan

PART 2 MATTERS

Section 5: Purpose

- (1) *The purpose of this Act is to promote the sustainable management of natural and physical resources.*
- (2) *In this Act, sustainable management means 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 wellbeing 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.*

☒ Meets the purpose of the RMA

Section 6: Matters of National Importance - recognise and provide for the following:

- ☐ (a) *the preservation of the natural character of the coastal environment, wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development.*
- ☐ (b) *the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development.*
- ☐ (c) *the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.*
- ☐ (d) *the maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers.*
- ☒ (e) *the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu, and other taonga.*
- ☐ (f) *the protection of historic heritage from inappropriate subdivision, use, and development.*
- ☐ (g) *the protection of recognised customary activities.*

Section 7: Other Matters - have particular regard to the following:

- ☒ (a) *kaitiakitanga.*
- ☒ (a) *the ethic of stewardship.*
- ☐ (b) *the efficient use and development of natural and physical resources.*
- ☐ (b) *the efficiency of the end use of energy.*
- ☒ (c) *the maintenance and enhancement of amenity values.*
- ☒ (d) *intrinsic values of ecosystems.*
- ☐ (f) *maintenance and enhancement of the quality of the environment.*
- ☐ (g) *any finite characteristics of natural and physical resources.*
- ☐ (h) *the protection of the habitat of trout and salmon.*
- ☐ (i) *the effects of climate change.*
- ☐ (j) *the benefits to be derived from the use and development of renewable energy.*

Section 8 Treaty of Waitangi

- ☒ Take into account the principles of the Treaty of Waitangi