

16 March 2022



58 Kilmore Street
PO Box 345
Christchurch 8140

P. 03 365 3828
F. 03 365 3194
E. ecinfo@ecan.govt.nz

Customer Services
P. 03 353 9007 or 0800 324 636
www.ecan.govt.nz

Irricon Resource Solutions
Limited (Ashburton)
Attn To: Gary Rae PO Box 584
Ashburton 7740

Dear Gary Rae

Request for Further Information

Response required by: 6 April 2022

Record Number/s: CRC221846

Applicant Name: S W Haugh & K A Marriott-Haugh

Activity Description: to discharge onsite wastewater to land

As you are aware, Elise Howe has been processing the above resource consent application.

The information listed in Attachment 1 to this letter is hereby requested under Section 92 of the Resource Management Act 1991 (the RMA). As this information is required in order to fully understand the potential effects of the proposal, we are unable to further process the application until it has been supplied.

The options available to you under Section 92A(1) of the RMA are summarised below. A response is required by 6 April 2022 - 14 working days. You must choose one of these options.

A. Supply the requested information by 6 April 2022 - 14 working days

If the information can be easily collated and supplied by this date, please provide it in writing (via email is fine) to trinity.white@pdp.co.nz.

B. Agree in a written notice by 6 April 2022 - 14 working days to supply the information requested

Sometimes technical information will take some time to collate or key contacts may not be immediately available. If you need more time to supply the information requested, please advise me in writing when you can provide the information. You can do this via email or letter.

C. Refuse in a written notice by 6 April 2022- 14 working days to supply the requested information

If you choose not to provide the requested information by the above date, or any date subsequently agreed to by the Canterbury Regional Council, then your application must be publicly notified and may be declined.

Public notification enables any member of the public, including potentially affected parties, to submit on your proposal. If submission/s are received on your application, then you can expect a hearing to be held. Information on [the notification process](#) and on the [likely costs](#) for notification and a hearing can be found on our website.

Please contact Elise via email (elise.howe@pdp.co.nz) or phone (021 524 315) if you have any questions.

Yours sincerely

A handwritten signature in black ink, appearing to read 'K Walker'.

Kelly Walker
Senior Consents Planner

ATTACHMENT 1

Information Requested under Section 92 of the Resource Management Act 1991

Application Number/s: CRC221846

Date: 16/03/2022

1. Effect of discharge of nitrate nitrogen and pathogens

Technical Specialist Mark Trewartha has reviewed the section 92 response and documents received on the 15 February 2022 and has identified the need for further information. These can be discussed directly with the Environment Canterbury technical specialist Mark Trewartha.

- a) The Nitrogen assessments for recirculation in Appendix 6 and 7 of the Section 92 response refer to "OSET Trials" under note (1). Please can you provide these "OSET Trials" mentioned in this reference.
- b) Appendices 4 and 6 of the S92 response use a total N reduction factor of 35% for both sand bed assessments citing Crites et al 1998 Table 11-13 p 743. This reference is for the performance of sand filters when recirculating. However, Appendix 4 does not have any proposed recirculation. Please provide clarification on how this reference is applicable to both assessments OR an alternative justification for the 35% total N reduction factor chosen in Appendix 4.
- c) Appendices 5 and 7 of the S92 response have used a total N reduction by denitrification value of 20%. This is cited with Gardner et al 1997. There is no evidence to support the assumption that denitrification will occur here. Please provide evidence to support the assumption that denitrification will occur OR provide an updated assessment of the nitrogen reduction below the dripline land application system.
- d) Appendices 5 and 7 of the S92 response use value of 150 kg/ha/yr for N reduction through plant uptake. Please provide a description of how this value was determined.
- e) Please provide an assessment of how the impacts of the proposed activity relate to groundwater quality limits and targets in Table 13(i) of the Land and Water Regional Plan.

Table 13(i): Limits/Targets for Groundwater

Contaminant	Measurement	Limits/Targets
Nitrate-N	Annual average concentration ¹	6.9 mg /L (Target to be met by 2035)
<i>E. coli</i>	Annual median concentration ¹	< 1 organism/100 millilitres (Limit)
Other contaminants ²	Any sample ¹	<50% MAV ³ (Limit)

¹ Groundwater quality is determined as the median concentration across the Canterbury Regional Council's quarterly groundwater monitoring bores (screened <30 m below the ground level).

² Other contaminants of health significance as listed in NZ Drinking-water Standards

³ Maximum acceptable value (as listed ² above)

- f) The N mixing model parameters (Appendix 8 and 9 of the S92 response) appear to vary from the conceptual model presented (Titled "Guidelines for Determining significance of Environmental Impacts resulting from use of water for irrigation"). Please provide clarification on why they are different and justification for the choice of values. This can be discussed directly with the technical specialist.