BEFORE THE WEST COAST REGIONAL COUNCIL

IN THE MATTER OF	the Resource Management Act 1991
AND	
IN THE MATTER OF	applications by Taylorville Resource Park Limited for a discharge to land consent (RC-2024-0122) and variation of resource consent (RC2021-0097-V10) to enable the exercise of the discharge consent where that could lead to the discharge of contaminants off-site at Taylorville Recovery Park, Taylorville

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DECISION OF COMMISSIONERS DAVID CALDWELL AND ANTHONY CUSSINS

Dated 20 November 2025

Hearing Held: Wednesday 3 and Thursday 4 September 2025

Appearances:

Regional Council:

Dr Michael Durand, Planner

Mr Carl Steffens, Hydrogeologist and Environmental Scientist

Mr Jarred Arthur, Ecologist

Applicant:

Mr Andrew Schulte, Legal Counsel

Ms Ellen Taylor, Applicant representative

Ms Laura Drummond, Ecologist

Mr Mark Broughton, Geotechnical Engineer

Mr Sean Berry, Hydrogeologist

Mr Richard Griffiths, Chartered Engineering Geologist and Contaminated Site Specialist

Mr Karl Cook, Planner

Submitters

Ms Antoniette Besier Legal Counsel for Mr Adrian van Dorp and Ms Christine Mehrtens

Ms Phillipa Lynch for Te Rūnanga o Ngāti Waewae

Ms Geraldine Biggs and Mr Jonathon Sylvester, Legal Counsel for Grey District Council, together with:

- Mr Kurtis Perrin Smith, Group Manager Operations at Grey District Council
- Ms Natalie O'Rourke, Senior Contaminated Land Consultant

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Introduction and Background

1. This is the decision of Independent Hearing Commissioners David Caldwell (Chair) and Anthony Cussins. We have been appointed by the West Coast Regional Council (**WCRC**) under s34A(1) of the Resource Management Act 1991 (**RMA**) to hear and decide this application.

2. In reaching the following decision, the Panel have read, heard and considered all relevant evidence and information provided by the Applicant, WCRC and the submitters. In preparation for the hearing, we read the original application along with the relevant planning provisions. The Panel undertook a site visit to familiarise ourselves with the subject site, the immediate receiving environment and surrounding area. As well as spending considerable time on the site, we observed the identified streams, the roading network and culverts, and viewed the Grey District Council (**GDC**) drinking water treatment plant and its location. The site visit was helpful in our understanding of the receiving environment of the site.

3. The application was lodged in September 2024 seeking consent for two activities being:

   (a) RC-2024-0122 for a short-term discharge permit; and

   (b) RC-2021-0097-V9 to change condition 11 of RC-2021-0097.

4. The application was limited notified on 9 May 2025 to GDC, Sewell Peak Farms Limited, Quadrello Holdings Limited, Adrian Van Dorp and Christine Mehrtens, and Te Rūnanga o Ngāti Waewae.

5. Submissions were received from Te Rūnanga o Ngāti Waewae, Quadrello Holdings Limited, Adrian Van Dorp and Christine Mehrtons, and GDC.

6. The matters raised in the submissions were summarised in Dr Durand's s42A Report.[1]

7. Dr Durand identified what he described as a late part of the submission from GDC, where GDC submitted that a deferral of the temporary discharge and s127 applications should occur so they can be heard together with a comprehensive application which was lodged during the submission period.

8. We confirm that we have been provided with, and read the application and accompanying documents, the submissions lodged, the evidence given at the hearing, legal submissions, joint witness statements, and the officer's reports in reaching our decision. While we do not necessarily address each and every issue raised in the submissions and the documents provided, we confirm that they have all been considered.

[1] Officer Report dated 12 August 2025 at para [86]

Procedural Issues

9. Following our appointment, we issued a Minute on 29 July 2025[2] in relation to the hearing and making directions in relation to the timing of the officer's report, Applicant's evidence and submitter expert evidence. The Minute recorded that we wished to undertake a site visit on the afternoon of 2 September 2025 and that if there were any particular locations or viewpoints the submitters wished us to visit, that information should be provided to the hearing administrator ten working days prior to commencement of the hearing.

10. We received a Memorandum of Counsel for the Applicant dated 19 August 2025 where Mr Schulte identified a potential issue in relation to a suite of documents provided to the reporting officer on or about 25 November 2024 which were not referenced in his report. Mr Schulte identified it was possible or even probable that those documents were not included – as part of the application – in the bundle of documents provided to the limited notified parties, or the West Coast Regional Council's own experts.[3] Mr Schulte did not seek any action other than noting the omission and continuing with preparations for the hearing.

11. In response to that memorandum, we issued Minute No 2[4] directing the reporting officer provide his response to the matters raised by Mr Schulte. We indicated our view that if the position as identified by Mr Schulte was correct, the hearing could not proceed in the week scheduled and should be adjourned or put on hold to enable caucusing to occur. We advised that we were available for a hearing in the week commencing 29 September 2025.

12. In response to our Minute No 2, we received a Memorandum from Counsel for GDC dated 22 August 2025.[5] Counsel requested directions as to an adjournment and a new timetabling for submitters' expert evidence. In essence, Counsel were concerned that they would not have sufficient time to prepare expert evidence if the due date for that evidence remained as Tuesday 26 August 2025.

13. Counsel raised concerns that it had been prejudiced by not having the documents referred to above earlier, and by the continued uncertainty as to whether they now "had everything".[6] The Memorandum also addressed caucusing and suggested alternative timetabling directions.

14. By Supplemental Officer Report, Dr Durand provided a response to Minute 2. That provided an assessment of the various documents which had been supplied to affected parties and WCRC experts.

15. Dr Durand recorded that in relation to documents supplied on 25 November 2024, some were not supplied in the notification bundle and one was not supplied to the WCRC experts,

[2] Minute No 1 of Hearing Commissioners dated 29 July 2025
[3] Memorandum of Counsel for the Applicant dated 19 August 2025
[4] Minute No 2 of Hearing Commissioners Addressing Matters Relating to Hearing and the Memorandum of Counsel for the Applicant dated 19 August 2025, dated 21 August 2025
[5] Memorandum of Counsel for Grey District Council in Relation to Minute 2 of the Hearings Commissioners Addressing Matters Relating to the Hearing and the Memorandum of Counsel for the Applicant dated 19 August 2025, dated 22 August 2025
[6] Memorandum of Counsel for Grey District Council dated 22 August 2025, para [6]

although that had now been seen as part of the Applicant's evidence. Overall he concluded that no party was prejudiced by the oversight. His advice was that the hearing not be delayed to enable caucusing to occur and recommended that the hearing takes place and the application determined as scheduled.

16. By Minute No 3[7] we again recorded our preliminary view in relation to expert conferencing and how that should proceed. We expressed our view that it was likely our decision-making would be better informed by that expert conferencing occurring, and repeated that we were available to commence the hearing on 29 September 2025. We requested Mr Schulte provide a response on that day if at all possible.

17. We received a further Memorandum from Counsel for GDC.[8] They again advised that they continued to seek the timetabling directions proposed in their earlier Memorandum. They submitted that an adjournment of the hearing to 29 September 2025 was modest in the circumstances and would not cause prejudice to the Applicant and would additionally enable expert conferencing to occur prior to the hearing.

18. Mr Schulte responded to that Memorandum.[9] He recorded the Applicant's preference remained to proceed to hearing as scheduled. He acknowledged our desire for expert evidence to have been filtered to the extent possible by caucusing but agreed with WCRC that this could still occur within the scheduled timeframes.

19. We issued a further Minute[10] advising that if we were to proceed to the hearing as scheduled, we intended to extend the date for receipt of GDC's expert evidence to 4.00pm Thursday 28 August 2025, and that we would require expert conferencing of the technical witnesses with joint witness statements by Friday 29 August 2025.

20. We sought a response from Counsel for GDC as to whether that process would still result, in their view, in material prejudice.

21. Counsel for GDC confirmed[11] that the extension of time for its expert evidence would address the material prejudice but again considered the timeframe for joint witness statements unlikely to be sufficient and suggested extending it until Monday 1 September 2025 at 4.00pm. The Memorandum suggested further issues for the hydrogeological experts to address in conferencing.

[7] Minute No 3 of Hearing Commissioners Seeking Applicant's Response to Minute No 2 of 21 August 2025 and Subsequent Responses dated 22 August 2025
[8] Second Memorandum of Counsel for Grey District Council in Relation to Minute 2 of the Hearings Commissioners Addressing Matters Relating to the Hearing and the Memorandum of Counsel for the Applicant dated 19 August 2025, dated 22 August 2025
[9] Further Memorandum of Counsel for Applicant to the Independent Commissioners dated 22 August 2025
[10] Minute No 4 of Hearing Commissioners Addressing Potential Adjournment of Hearing dated 25 August 2025
[11] Memorandum of Counsel for Grey District Council in Relation to Minute 4 of the Hearings Commissioners Addressing Potential Adjournment of Hearing dated 25 August 2025

22. By further Minute,[12] we made directions that GDC lodge its expert evidence no later than 4.00pm Thursday 28 August 2025; that the expert witnesses confer in their areas of expertise with their joint witness statements to be provided to WCRC no later than 4.00pm Monday 1 September 2025.

Post-hearing Procedural Matters

23. The Applicant, by Memorandum of 9 September 2025, sought an adjournment for its right of reply. This was responded to by WCRC and GDC in separate responses of 9 September 2025.

24. We issued a Minute on 15 September 2025[13] confirming the adjournment and extension of time for completion of the hearing. We considered the overall interests of the community in obtaining a properly reasoned and considered decision outweighed the effects of delay in the hearing process, noting that the Applicant sought the extension.

25. That Minute included directions requiring the Applicant to provide information and advice as to planning matters agreed, matters still to be agreed, providing joint witness statements as appropriate, and an explanation of proposed conditions by 10 October 2025.

26. Our Minute provided the submitters and WCRC an opportunity to provide further comments no later than 4.00pm Friday 17 October 2025, and directed that the Applicant lodge its final reply no later than 4.00pm Wednesday 22 October 2025.

27. We received a Memorandum of Counsel for GDC on 16 October 2025.[14] That sought a brief extension of time for GDC's comments to be provided. It sought an extension to 4.00pm on Monday 20 October 2025.

28. Having considered that request, we agreed to a brief extension and provided consequential extensions for WCRC to provide any further comments to 4.00pm Monday 20 October 2025, and for the Applicant's final reply to be provided by 4.00pm Thursday 23 October 2025.

29. On 17 October 2025, we received a further Memorandum from Counsel for the Applicant. This identified and provided additional information that the Applicant wished to bring to the Panel's and the parties' attention. That identified trigger levels for particular contaminants in the retention pond basin that could potentially be included in a further condition. While we had not sought that additional information, we have received and considered it.

30. We received the Applicant's final reply on Thursday 23 October 2025 and closed the hearing on 30 October 2025.

[12] Minute No 5 of Hearing Commissioners in Relation to Proceeding with the Hearing and Expert Witness Conferencing dated 25 August 2025
[13] Minute No 6 of Hearing Commissioners Addressing Applicant's Memorandum of Counsel Regarding Adjournment of the Hearing Pending the Applicant's Final Reply, Including Additional Information and Conferencing dated 15 September 2025
[14] Memorandum of Counsel for Grey District Council Seeking An Extension of Time dated 16 October 2025

The Application and Background

31. The Applicant currently operates a landfill at Taylorville. The Applicant holds resource consents from WCRC and GDC which were obtained in 2021. These were:

    (a) RC-2021-0097-01 land use consent to undertake earthworks including land based gravel extraction to construct, operate and rehabilitate a demolition fill site at Taylorville;

    (b) RC-2021-0097-02 discharge permit to discharge demolition waste to land, Taylorville.

32. The consents were granted for a 20 year term from August 2021. We were advised that subsequent variations to the above consents allowed asbestos and coal tar contaminated material to also be accepted in two lined cells. The consent conditions also allow for 'other hazardous materials' at the discretion of the WCRC. The application recorded that the latest variation (RC-2021-0097-V3) was subject to various conditions including restrictions on location of depositing fill material, limitations on asbestos and coal tar or coal pitch to an existing ACM cell and a new application area lined cell. The consent holder was required to install an appropriate sediment pond in areas specified for asbestos and other hazardous materials.

33. Condition 11 provides:

> *The consent holder shall ensure that there is no contamination of groundwater or surface water outside of the areas of the site (…) as a result of the exercise of this consent.*

34. Condition 12 provided that notwithstanding Condition 11, the consent holder is to install and maintain a groundwater monitoring bore in the approximate location identified and attached the consent. The conditions required annual groundwater bore monitoring for a number of parameters including pH, BOD, nitrate nitrogen, ammoniacal nitrogen, arsenic, aluminium, cadmium, benzo, copper, chromium, zinc and similar.

35. Condition 13 requires annual surface water monitoring at identified locations, with the parameters identified. This includes nitrate nitrogen, chromium, arsenic, lead, dissolved reactive phosphorus and other potential contaminants.

36. Other conditions required an inspection of the site and materials deposited, confirmation that the materials deposited were consistent with what was consented, and that any materials deposited that are not so consistent be removed.

37. We note that the facility has been subject of enforcement action by way of abatement notices. These were addressed by Ms Taylor in her evidence.

38. We were advised that this proposal arises because, contrary to the Applicant's expectations, leachate has been generated in the cells. We were advised that the Applicant has sought to

manage leachate on an interim basis by storing it on the site through containment ponds and bladders until discharge permits for the site enable it to be discharged to land.

39. This application seeks, in essence, a temporary discharge consent to manage the water levels in the ponds, and to create freeboard by discharging water from those ponds into a constructed pit on site. The water is intended to soak into the ground.

40. Dr Durand summarised that what the Applicant now seeks is a discharge consent to discharge to land, together with a s127 application to change condition 11 of RC-2021-0097 so that it now reads:

> *The Consent Holder shall ensure that there is no contamination of groundwater or surface water outside of the site (~~Secs 1-3 5-6 Pt Secs 4 & 8 SO 11520 Sec 1 SO 3935 Sec 1 SO 3934 Lots 1 3 DP 2432 Lots 1-5 DP 3265~~ Lot 1-2 DP584105) as a result of the exercise of this consent unless, and only to the extent that, a separate discharge permit has been obtained from the West Coast Regional Council.*

41. Dr Durand identified that the rationale for the changes was expressed in the application as being:

> *The site operations include two large water treatment / retention devices with a combined capacity of approximately 15,000m^3 for treated leachate and stormwater captured by the onsite operations. The devices are currently at capacity and with heavy rainfall predicted for the coming months, the Applicant is seeking temporary consent to discharge water to land, to help in creating a freeboard within the retention pond. This will assist in avoiding any uncontrolled discharges.*

42. The proposal is described in some detail in the application documents. Dr Durand summarised those as:[15]

    (a) Construct, to the immediate east of the currently-developed site, a soakage pit of dimensions 20m x 20m and 2m depth;

    (b) Pump contaminated water (comprising mixed leachate and stormwater) from the retention pond to the soakage pit, and allow it to soak into the ground;

    (c) Ensure the soakage pit does not overflow and that there is adequate freeboard maintained at all times (with a regime of inspections proposed);

    (d) Monitor groundwater levels in the immediate vicinity to ensure the extent and height of groundwater mounding does not create risks of springs forming and of heightened groundwater interacting with landfill cell linings and their material;

    (e) Monitor concentrations of contaminants in groundwater and surface water in the vicinity;

[15] Officer Report dated 12 August 2025 at para [27]

(f) Pump water to the extent possible whilst operating within mounding and contaminant limits, with a view to creating freeboard in the main retention pond.

43. Again, from Dr Durand's summary, the purpose of creating freeboard is expressed as being to ensure future leachate generated by rainfall can be held and an uncontrolled discharge therefore avoided. The total volume of water to be pumped into the soakage pit was originally stated as up to 800m^3 per day, but following the close of submissions that was revised downwards to 300m^3 per day.[16]

44. The application proposes monitoring of the level of water in the soakage area and ensuring that pumping rates from the retention pond do not exceed the rate of soakage, and that contaminants in groundwater are monitored at a series of locations. At the time of the hearing, Dr Durand noted that no contingency measures had been proposed other than ceasing the discharge if the monitoring limits or triggers are met or exceeded.

Further Consents Sought But Not Before Us

45. Dr Durand set out the consenting history. He also addressed further applications (which are not before us). Dr Durand advised that Class 2 landfill applications had been lodged in June 2025. These included resource consent applications to both WCRC and GDC. By way of summary, Dr Durand advised us that the new consent applications seek a suite of all necessary consents to operate the site as a Class 2 (WasteMINZ classification) facility in the long term. These include a range of land use and discharge permits from WCRC, and a land use consent from GDC. The comprehensive consents sought would replace the existing consents, together with the consent sought under the present application, should the ultimate comprehensive consents be granted.

46. This application is therefore for a short-term discharge only (six months). We stress that our decision in relation to the particular application before us should not be seen as in any way indicating the likely outcome of the more comprehensive consents sought.

The Hearing

47. The hearing was held in the WCRC Chambers on 3 and 4 September 2025. During the hearing, the Panel directed questions to the Applicant, submitters and the reporting officers to clarify factual matters, to test assumptions and to ensure that we had a full understanding of the evidence before us. The Panel posed questions in relation to planning, technical and legal matters, and sought additional explanation where necessary to provide the basis for our deliberations on expert conclusions, appropriateness of methodologies, factual assertions and other relevant matters.

[16] Officer Report dated 12 August 2025 at para [28]

Appearances for the Applicant

48. **Mr Andrew Schulte** appeared as Counsel for the Applicant. Mr Schulte provided submissions on the context, and made a number of introductory comments submitting that the application was for a specific solution to address an issue that had started to become an emergency in 2024, being the danger, as a result of the inability to release water stored in the retention pond, of it overtopping in high rainfall conditions.[17] Mr Schulte stressed that it is important to be clear about what the proposal is and what it is not: it seeks consent, on a temporary basis, to discharge leachate water that he submitted had already been treated to remove some contaminants and reduce the levels of others. He submitted the application sought to resolve an issue faced by an existing consented activity which has been assessed and modelled. He submitted the findings for potential off-site adverse effects are minimal to negligible.[18] He stressed that it was not seeking to expand the activity, alter the waste acceptance criteria, or install a permanent discharge.

49. He helpfully summarised the submissions. He described the proposal as an environmentally measured response to an existing issue that requires an interim solution, in order to ensure that a potentially significant adverse event (the overtopping and loss of integrity in the detention pond) will not occur.[19]

50. Mr Schulte addressed the statutory framework and the approach to risk under the RMA.

51. **Ms Ellen Taylor**, a spokesperson for the Applicant, advised that the site was undeveloped pastoral land until 2011, when it became part of an area that was consented for quarrying and the disposal of fill material. She advised those activities were carried out but were halted. She was unsure as to whether or not those activities were fully remediated. In August 2021 resource consent (RC-2021-0097) was granted by WCRC. That consent was for the disposal of cleanfill, demolition and construction waste.

52. Ms Taylor advised that leachate was not identified by the consultants engaged to complete that application for consent. She noted that the use of the site evolved along with variations to the consent. She advised that demolition waste and cleanfill was disposed of in unlined Cell A and described the conditions in relation to the demolition waste and what that included. She stated that with hindsight, the potential for such waste to result in leachate should have been provided for but while sediments were to be allowed to settle in a settlement pond, no separate process for leachate was provided or required under the consent.

53. Ms Taylor advised that the Applicant endeavours to ensure that activities are carried out in accordance with the resource consents and, despite what she described as some apparent documented shortcoming or failures, the site has been maintained in a workmanlike condition and any issues of compliance quickly addressed. She advised that “we” are not aware of any

[17] Legal Submissions on behalf of TRPL 3 September 2025 at para [5]
[18] Legal Submissions on behalf of TRPL 3 September 2025 at para [6]
[19] Legal Submissions on behalf of TRPL 3 September 2025 at para [12]

significant offsite adverse effects from the activities or onsite. She also advised that the Applicant recognises concerns with offsite adverse effects, particularly in relation to the GDC water treatment plant and bores.

54. Ms Taylor also discussed an abatement notice received from the EPA in March of 2024. That required works to redirect collated leachate contaminants to a lined storage facility with a suitable holding capacity and away from the unlined sediment pond. It also required the removal of the stored remaining contaminants from Cells A, B and C, and from the unlined sediment pond either to an authorised lined storage facility with suitable holding capacity or to an authorised facility offsite. She advised that the abatement notice was withdrawn on 2 September 2024 after the sediment pond had been fully drained.

55. She summarised the treatment of the water stored in the retention pond, including flocculant, aeration by a pond fountain and, more recently, efforts to chemically treat water to remove additional contaminants.

56. She described a heavy rain event in late winter 2024 which started the ponds filling at a higher rate than expected. She described discussions with the WCRC officers in terms of options, noting that the then officers advised that if trucking the water offsite was not feasible, that a consent application needed to be prepared.

57. She described delays with the notification process and advised that a decision was made to install a 500,000 litre temporary storage device (bladder) to prevent overtopping of the storage pond and that in August of 2025, a second 500,000 litre bladder had been installed.

58. Ms Taylor addressed the Applicant's consideration of alternatives including trucking of the discharge to GDC's wastewater treatment plant. She advised that GDC had confirmed that they would not accept that discharge as they consider it would overload the WWTP. She advised that discharge to land for irrigation was also raised with the WCRC but not accepted as a viable option.

59. She discussed the longer term plans, including the consents lodged with both WCRC and GDC to operate the site as a Class 2 landfill with two additional future landfill cells. She advised that the Applicant had requested public notification of those applications.

60. **Ms Laura Drummond** provided expert ecological evidence. Ms Drummond specialises in freshwater and coastal ecology and prepared the ecological reports applicable to this consent. She identified two perennial streams which were assessed during investigations undertaken on 2 and 3 October 2024, these being Noname Creek and the Grey Tributary.

61. She advised that qualitative assessments of the water bodies were undertaken including of stream habitats for fauna and stream characteristics such as substrate type, hydrological variation in riparian vegetation composition. Relying on modelling and the engineering evidence, she considered the discharge to land should not result in alterations or degradations of aquatic communities and habitats within the surface water systems as it should be

magnitudes below trigger levels which cause ecological harm. She noted that where discharge contaminants may enter the Grey Tributary via either Noname Creek or constructed drain, contaminants should be well below the 95% species protection level and should not result in a reduction in the water quality within the stream that will result in ecological harm.

62. She concluded that the ecological value of Noname Creek and Grey Tributary are of moderate ecological value with the macro invertebrate communities within Noname Creek indicating a good level of habitat quality, whereas the Grey Tributary macro invertebrate communities indicated a lower level of habitat quality. She concluded that the ecological effects of the proposed discharge result in an overall low level of effect to freshwater ecosystem and ecological health of the waterways.

63. **Mr Mark Broughton** provided expert engineering evidence addressing the global slope stability of the site and on the suitability of the geotechnical information used to inform the design.

64. He advised his evidence relied on previous reporting undertaken by ENGEO which he referenced. After reviewing the existing geotechnical investigations, he concluded that they were sufficient to inform the detailed design of the storage basin and they evaluated its effect on the overall stability of the site. He considered the global stability of the entire site indicates that adequate factors of safety are achieved despite an increase in the water level table resulting from the discharges. He advised that water was lighter than gravel and therefore a lower driving force to cause instability and that there was no above-ground embankment which could fail. He advised that the existing retention pond was not classifiable and so the Building (Dam Safety) Regulations 2022 do not apply.

65. **Mr Sean Berry**, a groundwater specialist who holds the position of senior hydrogeologist with ENGEO Limited, provided expert evidence in relation to the hydrogeological and hydrological related risks from the discharge of water via onsite soakage. He advised that the work undertaken to assess the risk was based on a combination of technical inputs from onsite testing and monitoring, analytical and numerical assessment, and scientific first principles. He considered the analysis shows that groundwater mounding will not result in adverse affects to Noname Creek; anticipated water flows resulting from the proposed discharge are within the capacity of existing infrastructure; and Noname Creek can accommodate flows 10 times the combination of proposed discharge and estimated creek flow without inundating adjacent properties.

66. He considered that the hydrogeological understanding of the site indicates no viable direct groundwater flow pathway linking the proposed onsite point of discharge to the public supply abstraction well GRE001 and discussed a proposed water monitoring plan.

67. **Mr Richard Griffiths**, a chartered engineering geologist and contaminated site specialist, provided expert evidence on matters within his area of expertise. He concluded that based on ENGEO's investigations, the risk to the receiving downgradient environment arising from the

proposed temporary discharge is low, and that it could not be established that effects would be more than minor. That was on the basis that the mudstone is an aquiclude and the conceptual site model relevant to discharges from the site cannot establish a complete linkage between leachate discharge to ground and the GDC town supply.

68. He advised the modelled contaminant concentrations at the site boundary were predicted to be within ambient conditions and a monitoring plan is to be implemented that will trigger a requirement to cease discharges should elevated levels of contaminants be recorded above adopted human health and ecological risk levels. He discussed the discharge monitoring plan.

69. **Mr Karl Cook** provided planning evidence for the Applicant in which he identified and discussed the context and scope of the application. He considered the application was supported by extensive information addressing actual and potential effects, including information submitted with the applications, additional and updated information in response to requests from WCRC, and evidence for the hearing, including the joint witness statements following expert conferencing. Based on his understanding of the expert evidence and subject to consent conditions, he was satisfied that any adverse effects would be appropriately avoided, remedied or mitigated and that appropriate conditions can be imposed to ensure that.

70. He advised that the planning framework at national and regional level anticipates there may be a need for discharges. He described a particular focus of the planning framework as being on managing freshwater including improving water and ensuring the adverse effects are avoided, remedied or mitigated and that this application is consistent with policies to avoid, remedy or mitigate effects and was neutral, but not contrary, to those relating to improvement of water quality.

71. He identified that there remained disagreement around the degree of certainty regarding the level of potential effects on drinking water supply in particular. Based on the relevant joint witness statement for hydrogeology and environmental evidence, he considered there was agreement on a way in which conditions can be prepared to ensure that sufficient confidence can be reached that adverse effects will be avoided. He considered that adverse effects could be acceptable, particularly given the proposed monitoring programme which would enable further monitoring and specified actions to be taken at appropriate thresholds. He discussed positive effects.

Appearances for Submitters

Adrian van Dorp and Christine Mehrtens

72. **Ms Antoinette Besier** provided legal submissions on behalf of the submitters Adrian van Dorp and Christine Mehrtens. Ms Besier's submissions articulated the submitters' concerns and discussed the content of the application including the production of what she described as large quantities of leachate. She described Mr Schulte's characterisation of the failure to address leachate in the 2021 consenting processes as an oversight as straining credulity. She

raised natural justice concerns in relation to post-hearing preparation of conditions and submitted that the failure to address key issues at the outset meant the Applicant had put everyone in catchup mode, creating deficiencies in the process. Ms Besier addressed uncertainty in the threshold for decision-making and highlighted the "high level of scientific uncertainty" with respect to this application. She submitted there was a significant scientific uncertainty with considerable work still needed to be done.

73. Ms Besier identified and discussed the Supreme Court decision in *King Salmon*.[20] She described the requirements in relation to adaptive management as including:

    (a) There will be good baseline information about the receiving environment;

    (b) The conditions provide for effective monitoring of adverse effects using appropriate indicators;

    (c) Thresholds are set to trigger remedial action before the effects become overly damaging; and

    (d) Effects that might arise can be remedied before they become irreversible.

74. Her submission was that the "relative luxury" the Supreme Court had did not apply here as leachate is already held onsite in containment ponds and there was uncertainty in terms of whether those ponds had been successful in preventing contamination of soil and groundwater. She submitted that the information supplied was in the "territory of ss104(6) and (7)" and that consent should be declined on that basis. Ms Besier submitted that given the potentially catastrophic impact on the GDC water supply, consent should only be granted if there is a high level of confidence that it can be managed to avoid any effect on the water supply and the evidence demonstrated there was no such confidence. She submitted that leachate onsite needs to be transported and lawfully disposed of offsite as there was too much scientific uncertainty in relation to impacts on the GDC water supply to enable a grant.

Ngāti Waewae

75. **Ms Philippa Lynch** appeared by AVL for Ngāti Waewae. She spoke to that submission, advised that Ngāti Waewae were aware of the GDC concerns but that they were the more appropriate party to address those concerns. She identified that all water is taonga and Ngāti Waewae was concerned with the health of all water, noting the importance of mauri.

76. She expressed some concern in relation to the limited notification, not adopting a strict position on that but noting that full notification may have led to greater involvement of the rūnanga. She advised that the rūnanga are supportive of new development and identified the main concerns as adequacy of information. She noted a number of information gaps which need to be addressed, and identified the number of areas of disagreement in terms of hydrogeology that

[20] *Sustain Our Sounds Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 40

appeared even following the JWS. She agreed that any management plan may be feasible but it needs to be based on considerably more information and peer reviewed.

77. She discussed other matters including reduction of waste and also discussed a bond to ensure that any remediation could be undertaken. She discussed the need for a suite of conditions making clear that all waste etc was inspected and there was clarity about where it was coming from and the potential contaminants. She agreed with Dr Durand in relation to s104(6) as there was so much uncertainty.

Grey District Council

78. Opening legal submissions were presented by **Ms Geraldine Biggs** and **Mr Jonathan Sylvester**. By way of summary of the comprehensive submissions, there were five "levels" of submissions as follows:

    (a) The applications contain inadequate information to determine the application and should be declined pursuant to s104(6) of the RMA;

    (b) The applications trigger prohibitions under the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 and s107 of the RMA;

    (c) Even if the prohibitions are not triggered, we should decline the applications due to the potential for significant adverse effects including on the Grey district drinking water supply;

    (d) Even if we were minded to grant the consents, there is insufficient information to determine appropriate conditions, submitting that if they are not going to be sufficient from the outset, the applications should be declined; and

    (e) If the consent is granted, conditions need to be stringent, cautious and avoid the risk to the Grey drinking water supply materialising.

79. **Mr Kurtis Perrin-Smith**, the Group Manager Operations at GDC, provided evidence. He advised that the Council's position is clear in that it opposes the variation and application to discharge because it represents risk to Council's greater Greymouth water supply. Further, if contamination of the abstraction bores was to materialise, it would represent a serious risk to public health and significantly compromise Council's ability to provide a critical potable water supply to the greater Greymouth community.

80. He described the supply. He advised that the water take and treatment plant comprise the sole source of drinking water for around 10,000 people, described the take from three shallow groundwater bores located in a gravel beach beside the Grey River with a fourth bore currently being commissioned, and discussed the treatment process. He advised that process did not treat contaminants such as heavy metals, PFAs, hydrocarbons, nitrogen compounds, or

volatile organics. He described the drinking water safety plan and the perceived risks from the TRPL operation. He discussed what conditions would be required if we were to determine that the consent should be granted.

81. **Ms Natalie O'Rourke**, Senior Contaminated Land Consultant at Tonkin & Taylor Ltd, provided expert evidence on behalf of GDC. This related to hydrogeology, particularly in so far as it related to the potential effects on GDC's potable water supply. She identified a number of information gaps. At the time of the hearing, based on the information available, she could not confirm the appropriateness of the existing groundwater monitoring wells for obtaining representative data and was unclear if there were preferential flow paths within the Pleistocene gravel, noting Pleistocene gravel is not homogenous and preferential flow paths within zones of higher hydraulic conductivity could theoretically occur.

82. At the time of the hearing she considered it unclear if the fracture flow systems present in the Kaiata formation, which may increase infiltration, are present. She considered the investigations undertaken to be very limited with some of the investigations providing confounding information and warranting further investigation. She considered that there are potential contaminants that had not been tested for and, as a consequence of the information gaps, she considered the groundwater and surface water quality conditions and discharge have not been adequately established.

83. She was concerned in relation to a number of assumptions used in the Hantush modelling and that overall the extent of mounding that might occur was unclear. Further, she considered that the contaminant fate and transport modelling presented to be of little utility for reasons she discussed.

84. Ms O'Rourke participated in expert conferencing. She provided commentary on the oral evidence that had been given at the hearing in so far as it related to her area of expertise. Overall, she considered the proposed activity could pose a risk to the GDC water supply.

Reporting Officers

85. **Mr Carl Steffens**, a Technical Director, Water Services at Pattle Delamore Partners Ltd, provided expert hydrogeology evidence. Mr Steffens specialises in groundwater assessments, including in relation to landfill related projects.

86. His evidence described the hydrogeological and hydrological setting, a review of the Applicant's effects assessments, identified outstanding concerns and provided commentary on potential effects. His evidence will be discussed further in the body of this decision but he expressed concerns in relation to the RSC5 contaminant modelling, identified potential pathways for contaminants to impact on the GDC treatment plant, including effects related to mounding, and overall concluded that additional site specific investigations should have been carried out, there was uncertainty in relation to sampling available from the ponds, and that

while the risk to the GDC water supply were in his opinion low, not all uncertainties had been adequately addressed.

87. **Mr Jarred Arthur** provided ecological evidence. Mr Arthur came in somewhat late in the piece but adopted evidence which had been prepared by Dr Duncan Gray, and provided commentary on the same.

88. **Dr Michael Durand** discussed his s42A Report. He described the site and the proposal in its context, the consent history, the surface and groundwater environment, including identifying the proximity of the GDC Municipal Water Supply Intakes noting the water supply intakes are a particularly sensitive part of the environment. Dr Durand addressed the submissions before discussing the statutory framework and relevant statutory documents, and addressed environmental effects and their significance.

89. The above narrative in relation to the hearing is very much a summary. We discuss relevant evidential matters as we proceed through the hearing. We note that the hearing was public, livestreamed and recorded. It is publicly available.

Principal Matters in Contention

90. Based on the submissions, evidence and other documents provided, the principal matters in contention relate to:

    (a) Scope of s127 to change condition 11 of RC-2022-0091;

    (b) Sufficiency of information – uncertainty;

    (c) Consistency or otherwise with the relevant statutory documents and policies; and

    (d) Effects, particularly potential effects on the GDC water supply and treatment plant.

Existing Environment

91. The site is adjacent to Taylorville Road (to the south) and Noname Creek (to the north and west). The proposed discharge location is within the footprint of the Applicant's site but outside of the areas developed into landfill sites to date. The site and surrounds are well described in the AEE.[21] It notes that the application site is located to the west of the township of Taylorville approximately 3.5km east of Greymouth. The overall area is 19ha and is positioned on the northern side of Taylorville Road. The Grey River is located to the south of the application site. The GDC water treatment plant is also located to the south of the application site. This is fed by three shallow groundwater bores located on a gravel beach beside the Grey River. A fourth groundwater bore is consented and is being commissioned.

[21] AEE 19 September 2024 at Section 3

92. The site is described as located in a flat to gently undulating area on the northern side of the Grey River and is located between the floodplain of the Grey River and the channel of Noname Creek, which forms a downstream tributary of the Grey River. Noname Creek is described as flowing in a southwest direction approximately 15m from the north-northeast boundary of the site. It notes that that receives water from fill operations located on the adjacent landholding to the west of the site. It runs through a culvert under the Taylorville Road and discharges into an unnamed tributary/wetland on the south side of the road, before joining the Grey River approximately 350m westward (downstream) of the confluence with the wetland.

93. It notes that the western portion of the application site, being approximately 12.5ha, has been developed with three waste cells (Cells A – C) with one cell (Cell D) identified for future development. Cell B is closed and capped, while Cells A and C remain active. As identified, the regional consent allows for the disposal to land of demolition waste (including cleanfill), asbestos, coal tar and coal pitch, shredded tyres and other hazardous materials approved by the consent authority.

94. There is an onsite stormwater management system which the AEE describes as being currently primarily focused on the diversion of clean water from the waste cells and mitigation measures to prevent sediment loading in stormwater. Stormwater that falls on or immediately adjacent to Cell A, Cell C, the retention pond and settlement pond, is directed into the cell/pond to prevent erosion and scouring of the cell/pond bunding, and stormwater that falls onto Cell B (which is closed and capped) runs off the cell surface due to the contouring of the cap.

95. The site presently includes leachate management. Cell A is captured via a sump installed west of the cell. Cell A is unlined and the AEE notes that the sump could potentially be receiving groundwater that intersects with the base of Cell A. It describes the sump and submersible pump on a float switch system at the first stage of the lined settlement pond, with an estimated flow from Cell A in the order of 100-150m^3/day.

96. Leachate from lined Cell B and C is collected via sumps and risers installed in the cells and pumped west through a GM700 hydrogen sulphide scrubbing system. The AEE notes that Cell B has been capped and that no leachate has been observed flowing from the site for the past 18 months, but it is possible that negligible amounts may be generated. From the scrubbing system, the leachate is piped to the pumping station and into stage 1 of the lined sediment pond. That pond has a capacity of approximately 2,700m^3 which allows for approximate residence time of 135-180 days. Following settlement in stage 1, the water decants over a baffle into stage 2, which has a capacity of approximately 1,300m^3. Stage 2 is equipped with a float switch that, when triggered, pumps the water to a flocculation system that includes two tubes of poly-aluminium chloride and three sealed and baffled containers for additional removal of sediment and insoluble materials. The treated water decants to the retention pond for storage.[22]

[22] AEE 19 September 2024 at page 10

97. Water from the retention pond is piped through a siphon system to draw water through an additional treatment stage comprising two pumice pods and an additional baffled container that feeds into a DC/C3 sump which has a cutoff valve currently preventing discharges from the retention pond. In the interim, the water is directed back to the settlement pond for on-site recirculation. There are two large bladders providing additional storage.

98. The AEE describes the surrounding locality noting the immediately adjoining neighbour to the north and east is a dairy farm and the immediately adjoining neighbour to the west has a regional discharge permit for the discharge of demolition waste and cleanfill to land. The closest residential unit to the application site to the west is 173 Taylorville Road approximately 170m east of the application site's western boundary.

99. The GDC's public water supply intakes and treatment plant (GRE001) are located opposite the application site on the southern side of Taylorville Road, approximately 430m south of the application site. This supplies drinking water to approximately 10,000 people in the area. The AEE identifies the source of the water supply (RC01092.3) is a subsurface infiltration system that takes water from the Grey River for treatment and distribution from bores located 320-420m to the south-southeast from the application site.

100. The AEE continues in its description of the surrounding locality by identifying that Noname Creek flows in a southwest direction approximately 15m from the north-northeast boundary of the site. It states that the creek also receives water from the property to the west that includes a filling operation located 100m west of the site. It notes that the creek is located approximately 60m from the fill operation. The AEE identifies that the creek runs through a culvert under Taylorville Road and discharges into an unnamed tributary/wetland on the south side of the road, before joining in the Grey River approximately 350m westward of the confluence of the wetland.

101. Finally, the AEE identifies that the GDC's waste management centre, McLean's Pit Landfill and Recycling Centre, is located approximately 900m as the crow flies to the north of the application site at 142 McLeans Pit Road.

102. The above description is, as noted, taken from the AEE.[23] Dr Durand, in essence, adopted that description.

Site Visit

103. We undertook a site visit on 2 September 2025. We viewed the neighbouring properties, particularly those involving submitters, from the road and from the site. We were escorted by an officer of the WCRC who was not providing evidence. We drove from the WCRC office out to the site. We stopped on a number of occasions to view particular areas which had been

[23] AEE 19 September 2024 at pages 7-11

addressed in the evidence. We were able to observe a number of the named creeks, culverts, the roadside drains and similar, and GDC's water treatment plant.

104. We were escorted on the site by representatives of the company who again did not provide evidence, and it was necessary for us to be escorted to meet health and safety requirements. We spent some time on the site traversing the areas presently forming part of the existing disposal activity on site, including the retention ponds. We walked over the area of the proposed disposal pit, and walked down to Noname Creek. The site visit was helpful.

Alternatives to Proposed discharge methodology/options

105. We address this issue in our subsequent discussion in relation to s105.

Other Preliminary Legal and Planning Issues

Section 91

106. GDC submitted that the WCRC should defer the hearing of this application so that this application could be heard together and jointly with the June 2025 applications pursuant to ss91, 102 and 103 of the RMA. It submitted that good resource management practice requires that all consents for a project are carefully identified from the outset and applications for them should generally be made so they can be considered together or jointly. It also submitted that there was significant uncertainty about the future management of the onsite leachate and deferring the consent applications to enable a joint hearing process of all consents before both consenting authorities would enable all relevant information to be considered.[24]

107. Dr Durand agreed that it is good practice if all resource consents for a project are carefully identified from the outset, but he considered the submission misunderstands or misstates the "project" as being something more than short-term discharge of leachate to create freeboard in the retention pond. Dr Durand considered the scope of s91 to be relatively narrow, only applying where further resource consents would be required for a proposal.[25]

108. He noted that the proposal is not to continue operation and associated activities at the landfill site as they are already consented. We accept Dr Durand's advice. Further consents for this proposal are not required[26] and we do not consider we need to have the June 2025 applications before us to better understand the effects of this activity.

Section 127

109. GDC and Ngāti Waewae's submissions raised the question of whether the change to condition 11 of RC-2021-0097 was within scope of changes that can be made under s127. Ngāti

[24] GDC Submission at paras [73] – [75]
[25] Officer Report dated 12 August 2025 at para [164]
[26] Officer Report dated 12 August 2025 at para [166]

Waewae stated they take comfort in the condition as it provides for a level of protection outside of the site.

110. GDC's submission stated that the Applicant was now seeking to materially change the activity to allow this contamination and enable future discharges, and that s127 cannot be used for what is essentially a new activity, without a thorough reconsideration of the conditions of the whole activity. It submitted that the variation should be treated as a new activity under s104.

111. Dr Durand considered that the application to change condition 11 is not, in itself, an application for a materially different activity and, if granted, the new condition would not, in itself, authorise a materially different activity or materially different effects.[27] Additionally, he noted that no changes had been sought to the underlying activity – the operation of the landfill, but rather the activity of discharging leachate to land and the associated effects on the groundwater are subject to a separate resource consent application and assessment, and the discharge and its effects could only occur if they were authorised by this separate discharge permit.[28]

112. In summary, Dr Durand's opinion was that the change to condition 11 is within scope of s127 because the change would not, on its own, enable any additional, new or different activity and would not provide for any contamination of water or land to occur outside of the site. Rather, the responsible discharge and effects could only occur if it is also authorised by a separate resource consent. He considered this differentiates this application under s127 from others which might, in themselves, seek to change the scope of a consented activity and its effects.[29]

113. In response to GDC's submission, he considered that the proposal would not be assessed any more thoroughly, and the scope for managing adverse effects would not be greater, if the Applicant was required to make a new application for RC-2021-0097 with the additional leachate discharge now proposed. He considered the same effects and policy framework would be in scope for assessment.

114. Mr Schulte for the Applicant submitted that the proposed change is itself contingent on there being a further consent in place that confirms that any proposed discharge is acceptable. He submitted that when considering the original condition and whether there is proper justification to depart from it, there is no danger that the original purpose of the condition will be ignored: it becomes a factor in the new, required, discharge application.

115. He submitted that for the change application to be inappropriate and instead require a new application it must materially alter the underlying activity. He submitted that here the underlying activity remains unchanged, submitting that while the previous consent decisions (including changes) did not deal effectively with leachate, the generation of that leachate is plainly a consequence of the exercise of that consent.[30] He submitted that the discharge, which is the

[27] Officer Report dated 12 August 2025 at para [149]
[28] Officer Report dated 12 August 2025 at para [151]
[29] Officer Report dated 12 August 2025 at para [153]
[30] Legal Submissions on behalf of TRPL 3 September 2025 at para [19.5]

new application, may therefore also be considered consequential but can only be entertained if accompanied by the proposed change. He repeated that there should be no reduction in confidence regarding offsite effects because (a) the discharge still requires consent and (b) the further controls in ss105 and 107 (and elsewhere), must also be considered and provided for as part of that consent.[31]

116. While this matter was not actively pursued during the hearing, we accept the assessment of Dr Durand, and Mr Schulte's submissions, and are satisfied that the use of s127 enables a full and appropriate assessment of all the relevant effects.

Consent Status

117. Resource consent is required pursuant to the operative provisions of the Regional Land and Water Plan. The consents required pursuant to that plan were summarised by Mr Cook in his evidence.[32]

118. He advised that pursuant to Rule 71, the discharge of any contaminant, or water to water, not complying with Rules 63 to 70 is a discretionary activity. It is therefore a discretionary activity under Rule 71.

119. He identified further that pursuant to Rule 91, discharges to land provides that any discharge of contaminants into or onto land is a discretionary activity, unless it is permitted or controlled by the specified rules. Again, the activity is not captured within those exceptions and is a discretionary activity pursuant to Rule 91.

120. And finally, as identified earlier, pursuant to s127, the change of conditions of a resource consent is a discretionary activity. Overall, the application is to be assessed as a discretionary activity.

Section 104 and Section 104B

121. Section 104(1) of the RMA sets out the matters which we must have regard to in consideration of the application, subject to Part 2.

122. Section 104(1)(a) addresses actual and potential effects on the environment of allowing the activity.

Assessment of Effects

123. In assessing effects, we are to disregard the effects on any person who has given written approval – s104(3)(a)(ii). We note no written approvals were provided.

[31] Legal Submissions on behalf of TRPL 3 September 2025 at para [19.7]
[32] Brief of Evidence of Karl Peter Cook 18 August 2025 at para [3.24]

124. Pursuant to s104(2), we have a discretion to disregard any effect of an activity on the environment if, relevantly, the plan permits an activity with that effect. There is no relevant permitted baseline.

125. 'Environment' is defined, on a non-exclusive basis, as:

> *(a) ecosystems and their constituent parts, including people and communities; and*
>
> *(b) all natural and physical resources; and*
>
> *(c) amenity values; and*
>
> *(d) the social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) or which are affected by those matters.*

126. Section 3 defines 'effect' as follows:

> *In this Act, unless the context otherwise requires, the term **effect** includes—*
>
> *(a) any positive or adverse effect; and*
>
> *(b) any temporary or permanent effect; and*
>
> *(c) any past, present, or future effect; and*
>
> *(d) any cumulative effect which arises over time or in combination with other effects—*
>
> *regardless of the scale, intensity, duration, or frequency of the effect, and also includes—*
>
> *(e) any potential effect of high probability; and*
>
> *(f) any potential effect of low probability which has a high potential impact.*

127. Section 104G is relevant to our overall effects assessment. This provides:

> *When considering an application for a resource consent, the consent authority must have regard to—*
>
> *(a) the actual or potential effect of the proposed activity on the source of a drinking water supply that is registered under section 55 of the Water Services Act 2021; and*
>
> *(b) any risks that the proposed activity may pose to the source of a drinking water supply that are identified in a source water risk management plan prepared in accordance with the requirements of the Water Services Act 2021.*

<u>Approach to assessment of effects - Risk</u>

128. Mr Schulte for the Applicant addressed the approach to be taken to risk under the RMA. He identified that pursuant to s3 of the RMA, the definition of effect includes any potential effect

of low probability with a high potential impact and submitted that the existence of such an effect does not mean that the effect will occur;[33] or mean that the activity must be avoided.

129. He submitted that the question is whether, as a matter of judgement, based on evidence that is available regarding the extent of the risk, and with a consideration of any safeguards including conditions that can reduce that risk, there is a likelihood that the effect can be avoided, mitigated or remedied sufficiently to enable the discharge to be acceptable.[34] He reminded us that the RMA is not a "no risk" statute, that precaution or the pursuit of a precautionary approach is hardwired into the consenting considerations under ss104, 105 and 107.[35] He recorded that it is also augmented by the ability to impose, or volunteer, conditions that can provide further safeguards as well as processes to monitor the progress and results of the proposal.[36]

130. He characterised the opposing submissions as, to a large extent, being based on the idea that there is scientific uncertainty in respect of effects, in which case the consent should be declined. He recorded the Applicant's position that there is in fact limited actual uncertainty, given the investigations that have been carried out and the understanding that now exists of the geology and hydrology of the site. He submitted that whether the hypotheses that suggest uncertainty in this case are sufficient to credibly establish the potential effect, is a key question. He did not question the importance of the water supply, but his submissions were aimed at testing the quantification of the risk.[37]

131. Mr Schulte's submissions recorded that the Applicant acknowledges and has recognised that there is, to some degree, an inherent risk in being located in the vicinity of the GDC water treatment plant and says that it has provided for that.[38]

132. He submitted that the extent of the risk is indicated in the GDC water safety plan which engages s104G and identifies that the Applicant's activity is a medium risk on account of the potential for leachate to enter the groundwater, the intakes and the water supply. This is discussed further in our discussions.

133. The opening submissions for GDC also addressed this issue. They noted in particular that s3(f), regarding an effect of low probability which has high potential impact, and cited *Shirley Primary School v Christchurch City Council* as interpreting potentiality as a real risk.[39] They also addressed the High Court's discussion of the approach to the assessment of effects in *RJ Davidson Family Trust v Marlborough District Council*.[40] The submissions record that approach as follows:[41]

[33] Counsel's emphasis
[34] Legal Submissions on behalf of TRPL 3 September 2025 at para [50]
[35] Legal Submissions on behalf of TRPL 3 September 2025 at para [51] citing *Shirley Primary School v Christchurch CC* [1999] NZRMA 66 (EnvC)
[36] Legal Submissions on behalf of TRPL 3 September 2025 at para [51]
[37] Legal Submissions on behalf of TRPL 3 September 2025 at para [52]
[38] Legal Submissions on behalf of TRPL 3 September 2025 at para [54]
[39] Opening Submissions on Behalf of Grey District Council 4 September 2025 at para [12]
[40] *RJ Davidson Family Trust v Marlborough District Council* [2017] NZHC 52 at para [129]
[41] Opening Submissions on Behalf of Grey District Council 4 September 2025 at para [13]

(a) Determining actual effects on the environment is relatively straightforward because it concerns existing factual circumstances that can be proved on the balance of probabilities;

(b) However, the authority must also take into account potential effects on the environment. The word "potential" denotes something other than proof, and cannot be assessed on the balance of probabilities. Instead, it was appropriate to assess risks that carry less than a 50 per cent chance of eventuating;

(c) In particular, the risk of species extinction is much less than 50 per cent and it cannot be proved that extinction is more likely than not to occur. Instead, it is appropriate to assess existing facts on the balance of probabilities and consider whether any particular evidence is provided to that standard. The assessment of potential effects then depends on an evaluation of all the evidence but does not depend on proving that potential effect will more likely than not occur.

134. Counsel cited the Court's discussion as to probabilities which summarises the law requires that the authority or the court be satisfied on the balance of probabilities that the risk of some future event occurring is likely, albeit that it is a low probability event. The Court stated further that is not the same as requiring that the future event is proved on the balance of probabilities. Counsel submitted that similar considerations apply here and in the context of landfill discharges to water or land, the Courts have recognised that the level of certainty for environmental effects must be high given the clear significant adverse consequences of effects.[42]

135. The submissions for GDC address the precautionary approach noting that approach may also require an activity to be prohibited where the evidence of effects on the environment are uncertain, unknown, or little understood but potentially significantly adverse, until further information is available, rather than an adaptive management approach being taken.[43]

136. Finally on this issue, they submitted that the Supreme Court had noted that *"normally one would expect there to be sufficient baseline information before any adaptive management approach could be embarked on (as against prohibition until any deficiency in baseline information is remedied)"*.[44] Counsel noted that the information deficit there was able to be eliminated before the farms were stocked and feed levels increased.

137. As noted in the introductory narrative, Ms Besier also addressed the issues of uncertainty in the threshold for decision-making and again identified the requirements in relation to adaptive management from *King Salmon*.

[42] Opening Submissions on Behalf of Grey District Council 4 September 2025 at para [15] citing *Te Rūnanga o Ngāti Whātua v Auckland Council* [2024] NZHC 3794 at para [119]
[43] Opening Submissions on Behalf of Grey District Council 4 September 2025 at para [18] citing *Sustain Our Sounds Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 40 at para [129]
[44] *Sustain Our Sounds Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 40 at para [135]

138. We appreciate, and have considered, the submissions on this issue, and particularly in relation to the approach to risk. We agree with Mr Schulte's submission that the RMA is not a no risk statute and accept that in assessing risk, consideration of the conditions is appropriate. We have considered carefully the matters raised by Counsel for GDC, and by Ms Besier, and have borne all of the legal submissions in mind in undertaking our assessment of effects.

Relevant Effects

139. The AEE[45] provides an assessment of wider effects of the proposal, and it considers that effects in relation to the following matters are relevant:

(a) Effects on groundwater quantity;

(b) Effects on groundwater quality;

(c) Effects on surface water quality and aquatic ecosystems;

(d) Effects on the quality and safety of human and animal drinking water;

(e) Effects on Tangata Whenua Values; and

(f) Effects on amenity values.

140. We concur that the effects identified in the AEE and in the s42A report are relevant to the application, and note that a number of areas of contention have arisen between the experts in relation to those effects. We do not repeat information and/or evidence that is agreed by the parties, other than in summary form where appropriate. Rather, we focus on specific areas in contention, and the degree to which those have been resolved by the parties during and subsequent to the hearing.

141. In his evidence[46], Mr Cook noted that the application is supported by extensive information addressing actual and potential effects, including the information submitted with the applications and lodged, additional and updated information in response to request from WCRC and evidence for the hearing.

142. Based on his reliance on the evidence of the Applicant's technical experts and the conditions that have been proposed, Mr Cook was satisfied that any adverse effects will be appropriately avoided, remedied or mitigated. He further considered that appropriate conditions can be imposed to ensure that the discharge will be carried out in a way that will ensure this.

<u>Effects on groundwater quantity</u>

143. The AEE[47] provides the following summary in relation to effects on groundwater quantity:

[45] AEE, at section 6.4
[46] Brief of evidence of Karl Peter Cook, dated 18 August 2025, at paragraphs 2.2 and 2.3
[47] AEE, at section 6.4.1

ENGEO report that the proposed discharge from the retention pond to land will contribute approximately 800m^3 of treated water to the unconfined aquifer. Based on the results of the ENGEO Hantush model, this will result in a maximum mounding of 0.55m directly below the discharge area, with a perturbation of the water table elevation extending approximately 250m from the source; however, the effect is minor (<0.01 m) beyond approximately 75m. While it is possible that the change in hydraulic head below the discharge area may result in an increase of the groundwater flowrate, it states that this effect will likely not persist beyond the mounding area or have an effect that it outside the range of natural variability.

The absolute potential radius for any effect on groundwater quantity is limited due to seepage outflow where the contact between the unconfined Gravel 1 aquifer and underlying Kaiata Formation is exposed. Following the derived groundwater flow gradient as illustrated within Figure 4 of the ENGEO report, the maximum potential flowpath in the unconfined aquifer before daylighting is approximately 420m.

Consequently, any potential adverse effects relating to groundwater quantity is considered to be less than minor.

144. The Applicant set out its assessment of effects on groundwater mounding, groundwater quality and quantity in the AEE and primarily in the evidence of Mr Berry, Mr Broughton and Mr Griffiths. We note that the Applicant's assessment of effects is based on analytical results, expert assessments and numerical modelling, both for infiltration rates, and contaminant fate and transport.

145. In his statement of evidence dated 19 August 2025[48], Mr Berry presented a summary of ENGEO's work to assess the hydrogeological and hydrological related risks associated with discharge of water via onsite soakage. It was Mr Berry's contention that his analysis showed:

(a) Groundwater mounding will not result in adverse affects to Noname Creek,

(b) Anticipated water flows resulting from the proposed discharge are within the capacity of existing infrastructure, and

(c) Noname Creek can accommodate flows 10 times the combination of proposed discharge and estimated creek flow without inundating adjacent properties.

146. Mr Berry further contended, at that time, that his hydrogeological understanding of the site indicates no viable direct groundwater flow pathway linking the proposed onsite point of discharge to the public supply abstraction well GRE001[49]. Further investigations undertaken by the Applicant amended some elements of his evidence, as detailed in ENGEO's updated Hydrogeological Assessment for Temporary Discharge report[50].

[48] Evidence in Chief of Sean Berry, dated 19 August 2025
[49] We note that the abstraction well GRE001 is referred to by GDC as Well 1
[50] Updated Hydrogeological Assessment for Temporary Discharge - Taylorville Resource Park – 287 Taylorville Road, Coal Creek (ENGEO, August 2025)

Conceptual site model

147. In his evidence[51], Mr Griffiths stated that, to inform their risk assessment, a conceptual site model (CSM) was developed to determine likely downgradient receptors that could be at risk from inadvertent discharge from the site. Based on the adopted CSM, the most likely pathway for water discharged to ground will be horizontally through upper gravel layer, discharging into drains on Taylorville Road, and then to the Grey River via connecting tributaries.

148. The CSM informed probabilistic modelling of known contaminants based on direct measure of surface water in retention ponds on site which contain a dilute treated leachate. Mr Griffiths stated that "*the models predict that, for contaminants presenting heath or ecological risks and exceeding ambient groundwater conditions, the concentrations leaving the site will have sufficiently mixed back down to ambient conditions and below safe risk thresholds*".

149. Models in the hydrogeological assessment report were originally based on a 200 m setback from receptor, however subsequent re-calculations were made based on 100 m setback. Mr Griffiths contended that contaminant flow through the underlying Kaiata Mudstone towards the Grey River terrace, and the town supply, is highly unlikely. His conclusion was on the basis that the mudstone has a permeability in orders of magnitude less than the overlying gravels, forcing water to flow preferentially towards surface water bodies.

150. Mr Griffiths recommended an adaptive monitoring programme to 'ground truth' and validate probabilistic models, while offering opportunity to prescribe appropriate actions to monitor and assess ongoing risk, and "*indeed terminate the proposed activity where a viable off-site effect was likely to occur*".

151. In his Statement of Evidence dated 18 August 2025[52], Mr Broughton provided geotechnical evidence as to the suitability of the geotechnical design of the soakage basin currently proposed. He confirmed[53] that the proposed soakage basin is located at least 100 m away from Noname Creek in the eastern part of Site where treated water from an existing retention pond will be discharged to land.

152. Mr Broughton told us at the hearing that the soakage basin has been conceptually designed with an approximate size, depth and configuration provided in the drawing attached to his evidence[54], but that it is subject to engineering design which is envisioned to be undertaken after resource consent is obtained. The soakage area originally measured approximately 10 m x 10 m with a depth of at least 2 m, but was later enlarged as part of the detailed design process, which we describe below.

[51] Summary of evidence of Richard Griffiths, dated 3 September 2025, at para [19 (j)]
[52] Statement of evidence of Mark Broughton, dated 18 August 2025
[53] *Ibid*, at para [7]
[54] Proposed Water Management System Revision, dated 14.08.2025

153. He recommended a resource consent condition requiring that '*the soakage basin shall undergo detailed engineering design by a suitably qualified geotechnical professional*' be incorporated into the consent conditions. We discuss the detailed design below.

Work plan

154. To address information gaps identified during the hearing, the Applicant undertook additional investigations to augment the information provided to that point. The scope of work was outlined by the Applicant in the Outline Work Plan[55], with the stated objectives being to:

(a) Investigate potential preferential flow paths within underlying gravels and Kaiata Mudstone Formation (fracture flow).

(b) Provide additional detail on the baseline (i.e. existing) water quality in the upgradient and downgradient of the proposed discharged point

(c) Improve understanding of upgradient and downgradient surface water quality for additional contaminants of concern.

155. In his Memorandum[56], Dr Durand outlined WCRC's response to the Applicant's proposed Outline Work Plan. It identified WCRC's specific requirements around planning, hydrogeology, ecology and water quality monitoring suite.

156. The further works programme was set out in the ENGEO memorandum[57], and was provided to the Panel and the parties on 9 September 2025. The further information was provided to the parties on 10 October 2025, following the 1-month adjournment period[58]. The Applicant confirmed[59] that while a substantial proportion of the works programme was able to be completed, there were constraints that restricted the ability to carry out the entire programme as envisaged.

157. The Applicant provided a memorandum dated 10 October 2025 confirming the additional information in accordance with the ENGEO work programme. The additional information provided included:

(a) Summary of works and outcomes to date

(b) Addendum to the hydrogeological report

(c) Soakage basin detailed design report

(d) Leachate management options assessment

[55] Taylorville Temporary Discharge – Outline Work Plan (ENGEO, 9 September 2025)
[56] Hearing adjournment and work program, Memorandum of Dr Michael Durand, dated 9 September 2025
[57] Summary of addendum works completed Memorandum. ENGEO, dated 10 October 2025
[58] Temporary Discharge Consent Hearing – Summary of addendum works completed Memorandum. ENGEO, dated 10 October 2025
[59] Applicant's final reply dated 23 October 2025, at para [43]

(e) Enviro-Hydro-Geo joint witness statement

(f) Ecological memorandum

(g) Ecological joint witness statement

(h) Revised draft conditions of consent

Soakage basin detailed design

158. As noted above, ENGEO subsequently undertook the detailed design[60] of a new soakage pit on the Site. The configuration of the proposed soakage pit is summarised below, with drawings provided in Appendix 1 of the ENGEO report:

(a) The internal batter slopes are 1V:2.5H.

(b) Crest level of existing ground level at approximately RL 51.97 m.

(c) Embankments are constructed from cutting into in situ sandy gravels.

(d) The pit has maximum footprint of 12 m x 12 m in plan with a design volume of 115 m^3 and a maximum depth of 2.0 m at RL 49.97 m.

(e) Maximum pumped inlet flow capacity of 100 l/min (0.0167 m^3/s).

(f) The base of the pit is lined with riprap over a geotextile.

159. During normal operation, the soakage pit receives pumped leachate from the retention pond (100 l/min) via a 75 mm ID layflat hose, which discharges into the riprap lined base of the pit. Leachate then percolates through the sandy gravel subgrade. Under abnormal or extreme rainfall conditions, the supply pump can be turned off or throttled back as required with an inline butterfly control valve to prevent potential overtopping of the soakage pit.

160. Slug testing[61] was undertaken by ENGEO at groundwater monitoring bores to estimate the hydraulic conductivity in the Pleistocene gravels[62]. A range of hydraulic conductivity values have been collected across the entire site within the Pleistocene gravels, ranging from 4.2 x 10^{-6} m/s up to 8.1 x 10^{-5} m/s. An average hydraulic conductivity of 4.4 x 10^{-5} m/s was adopted for design with a sensitivity check undertaken adopting the lowest hydraulic conductivity of 4.2 x 10^{-6} m/s.

[60] Taylorville Resource Park Soakage Pit Detailed Design Report – 287 Taylorville Road, Coal Creek, Executive Summary at page i
[61] A slug test is a field test performed in a borehole when a borehole's water level is instantly changed by adding or removing a solid object (a "slug") and then monitoring how long it takes for the water level returns to its original state. The rate at which the water level recovers is used to calculate the hydraulic properties of the surrounding geology.
[62] Hydrogeology Addendum: Updated CSM (ENGEO Limited, 2025c)

161. Based on groundwater levels in the closest borehole (MB13) to the soakage pit location encountered groundwater at 7.43 m below ground level (44.87 m RL). For its analysis, ENGEO adopted a groundwater level of 45.0 m RL.

162. To support a conservative and future-resilient design, ENGEO adopted a 1 in 100-year storm event (1% AEP) with a 24-hour duration. The total inflow to the soakage pit was calculated by combining the pump discharge volume with runoff generated by the design storm. A maximum pump rate of 100 l/min was adopted which ran for a period of 10 hours per day (0700-1700).

163. In relation to freeboard, ENGEO noted that water level will not permanently hold constant in the soakage pit. It will be surrounded by bunds reduce the risk of surface water ingress, and there are operational constraints to restrict the pumped inflow. Accordingly, ENGEO adopted a reduced minimum freeboard level of 0.6 m above the maximum reservoir surface during the inflow design flood (IDF). The maximum reservoir surface that results during the IDF was determined to be 1.27 m (or RL 51.2 m) above the base of the pit. ENGEO noted that during normal operation (with no storm events), the maximum water level of the soakage pit will be 0.79 m (or RL50.76 m) above the base of the pit.

164. To address any uncertainty related to the models, Mr Griffiths noted that the Applicant had proposed a revised Groundwater Discharge Monitoring and Response Plan[63]. The revised plan includes provision for a minimum four-week period of pre-discharge baseline sampling to improve its understanding of ambient conditions, leachate quality and an expanded range of contaminants.

165. Given that Updated Hydrogeological Assessment dated August 2025 is an updated revision of the Preliminary Hydrogeological Assessment[64], we will refer herein to the updated report, unless specified. Where relevant, we consider the updated information provided by the Applicant through the work programme.

166. In its updated Hydrogeology Addendum[65], ENGEO reported its updated understanding of the hydrogeology of the site and provided further information relating to potential groundwater flow pathways.

Groundwater mounding effects

167. In response to concerns raised in s42A report regarding the extent of groundwater mounding effects, Mr Berry contended[66] that groundwater mounding is a limiting factor in the discharge of runoff via an infiltration basin. He noted that groundwater mounding will be further assessed during assessment for long-term operational needs by means of numerical modelling. He concluded that while variations to local groundwater flows will occur, these variations will be limited to the unconfined gravel aquifer system below the site.

[63] This plan is referred to in proposed conditions as the Groundwater Monitoring and Response Plan (GMRP)
[64] Preliminary Hydrogeological Assessment (ENGEO, September 2024)
[65] Hydrogeology Addendum: Updated Conceptual Site Model, dated 10 October 2025
[66] EIC of Sean Berry, dated 19 August 2025, at para [38]

168. Mr Berry considered that mounding effects are not physically possible in either the wider Kaiata Mudstone hydrogeological regime, due to differences in hydraulic conductivity being a practical no-flow boundary, and beyond Taylorville Rd or Noname Creek due to the 'daylighting' of the shallow groundwater regime.

169. The Applicant contends[67] that "*while some mounding will occur, and while some flow may occur to the north and south across gradient, the prevailing flow remains to the south-west. Only a portion of groundwater and consequently contaminant load is likely to move across gradient. The updated hydrogeological model gives confidence in the proposed design that surface effects such as flooding will be avoided, and any mounding effects (creation of alternative contaminant transport pathways) can be managed through operation*."

170. In his s42A Addendum report, Mr Steffens set out his outstanding concerns prior to receiving the Applicant's additional information on 10 October 2025, and the degree to which they have been addressed. His assessment is summarised in the following paragraphs. These include:

    (a) The feasibility of discharging sufficient volumes of wastewater into the Pleistocene gravels

    (b) The potential for transport of wastewater via fractures within the Kaiata Mudstone that underlies the Pleistocene gravels

    (c) The quality of the discharge had not been adequality defined

    (d) Concerns regarding the accuracy of the RISC5 modelling simulations

171. With regard to the feasibility of discharging sufficient volumes of wastewater into the Pleistocene gravels, Mr Steffens notes that the additional slug test data, combined with the previous information, indicates variable hydraulic conductivity. Mr Steffens opines that the additional mounding calculations provided by the Applicant are highly theoretical and based on simplistic assumptions of the bulk hydraulic conductivity of the Pleistocene gravels.

172. He concluded that the actual limit on the rate of discharge can only be confirmed via carrying out the activity. In his view, the available information indicates mounding will be large (and likely limiting), irrespective of the rate that can be discharged onsite. However, he considered effects from mounding should be manageable, provided that there are limits on the mounding and that flooding at the surface does not occur. We agree with Mr Steffan's conclusion on this point.

173. In this regard, he notes that the GMRP[68] outlines the proposed methodology for monitoring of mounding effects surrounding the basin, including surface water channels in proximity to the discharge basin. He notes that it outlines alert and alarm level actions required where

[67] Temporary Discharge Consent Hearing – Summary of addendum works completed. ENGEO report dated 10 October 2025
[68] Groundwater Monitoring and Response Plan (GMRP)

mounding reaches the trigger levels. While Mr Steffens considers that the proposed methodology and alert/alarm actions appear reasonable, in his opinion the triggers should be established prior to any decision on the consent application.

174. However, Mr Steffens also considered[69] the most significant issue with regard to mounding is that it will limit the potential volumes of water that can be discharged to ground. He predicted that, based on the available slug test data, that very low volumes of discharge will be accepted by the Pleistocene strata and therefore the objectives of TRPL may not be met, which were to create freeboard in the onsite storage ponds to prevent overflows.

175. Mr Berry noted that uncertainty will remain, and can never be exhaustively satisfied, regarding potential variabilities and the capacity of the infiltration basin. He considered such matters to be an operation constraint and risk, as the physical performance criteria for avoidance of seepage and adverse mounding effects will be monitored under the proposed conditions of consent. We concur with his assessment on this point.

176. Mr Berry concluded that empirical approximation of the anticipated timeframes for mounding dissipation indicates that under extreme worst case ground conditions, mounding effects are not anticipated to be cumulative between working weeks. Such extreme worst case ground conditions are not anticipated, which is supported by the addendum testing around the infiltration basin.

Panel finding on effects on groundwater quantity

177. While mounding effects have the potential to induce alternative contaminant transport pathways or induce surface flooding, we find that these effects can be effectively managed through implementation of the GMRP and relevant conditions.

178. Further to monitoring in the surrounding bores, water level monitoring at the point of discharge should also be carried out, and the maximum operational elevation of the water surface in the soakage pit of RL 51.2 m incorporated into the consent conditions.

179. Accordingly, we find that mounding effects on contaminant migration and flooding can be avoided, remedied or mitigated through proposed consent conditions. We find that any potential adverse effects relating to groundwater quantity will be no more than minor.

Slope stability

180. With regard to slope stability, with up to 2 m of sandy gravel removed to form the soakage basin which weighs approximately 18 kN/m^3, Mr Broughton contended that any hydrostatic pressure acting on the base of the soakage basin from up to 2 m of water (which weighs 9.81 kN/m^3) is much less than the weight of the existing soils that were present. Mr Broughton told us that with a net reduction in the load acting on the ground, the slope is less likely to fail.

[69] Joint witness statement for hydrogeology and environmental evidence, dated 1 September 2025, at para [16]

181. Based on his updated geological ground model for the site[70], Mr Broughton's revised analysis indicated that the factor of safety (FoS) were 1.7 (Section C-C) and 1.4 (Section D-D) with groundwater levels raised approximately 1 m above the median measured groundwater levels.

182. He concluded that the slope remains stable as evidenced by a FoS>1.0, where industry recognised standards typically require a FoS>1.2 for this temporary load case brought about by an elevated water table.

183. We concur with Mr Broughton's assessment, and find that any effects arising from slope stability in relation to the discharge will be less than minor.

Effects on groundwater quality

184. The AEE[71] provides the following summary in relation to effects on groundwater quality:

> *ENGEO outline within their report that the application site is located at the westernmost extent of the Pleistocene glacial outwash deposits (e.g. Gravel 1). The contact between Gravel 1 and the mudstone (Kaiata Formation) is located on the exposed slope, approximately 10m above the surrounding ground level. Groundwater that daylights will be captured in the drain that runs around the site's western property boundary and along Taylorville Road. Any water that does infiltrate to ground will be confined by the alignment of Noname Creek.*
>
> *Consequently, ENGEO confirm that there is no hydraulic connection between the application site and off-site Holocene aquifer and the effect of the proposed discharges to off-site groundwater quality is likely to be less than minor.*

185. In his Evidence in Chief dated 19 August 2025, Mr Berry concluded[72], based on ENGEO's investigations and analytic modelling, that the risk to the receiving downgradient environment arising from the proposed temporary discharge is low, and "*it cannot be established that any short-term effects will be more than minor*".

186. He contended that surface water drainages (Constructed Drain and Noname Creek) have adequate capacity to convey anticipated flows. He noted that while the capacity of the culvert beneath Taylorville Road is the limiting factor for potential flooding, the anticipated flows in Noname Creek are within the culvert capacity.

187. In Mr Berry's opinion[73], there is "*no viable direct groundwater flow pathway linking the point of discharge to the Holocene gravels adjacent to the Grey River (where the town supply abstraction wells are located)"*

188. Development and implementation of the RISC5 model is described in detail in application. ENGEO used RISC5 software to estimate key contaminant concentrations at the nearest receptors and at monitoring bores situated 20 m from the proposed discharge. RISC5 simulations carried out by ENGEO include the following:

[70] Statement of evidence of Mark Broughton, dated 18 August 2025, at para [18]
[71] AEE, at section 6.4.2
[72] Brief of evidence of Sean Berry, 19 August 2025, at paragraphs [44-47]
[73] *Ibid*, at para [46]

(a) Based on the maximum contaminant concentrations measured in the treatment system, the RISC5 model has been used to predict the expected concentrations 20 m distant from the point of discharge.

(b) Estimations of the maximum concentration of contaminants that could be discharged to ground at the site whereby the relevant drinking-water (only health-based MAV values) and ecological (95 % species protection) limits will not be exceeded.

189. Mr Steffens addressed the issue of the quality of the discharge and RISC5 modelling[74]. In his Table 1[75], Mr Steffens presents the highest measured concentrations of key parameters from any of the water treatment system locations. He considers these to be key parameters because, with the exception of the PFAS parameters also included in his Table 2, the measured maximum concentrations in the proposed discharge water have exceeded either relevant drinking-water or ecological limits.

190. Mr Steffens notes that the results of the additional sampling (two rounds post-hearing) are generally consistent with the pre-hearing results from the treatment system. However, a notable exception is the concentrations of metals in the onsite storage bladders, which are generally higher than the other treatment system concentrations. Of particular note are the two recorded sample results for dissolved lead from Bladder 1 (0.134 mg/L and 0.112 mg/L).

191. Mr Steffens also undertook a review of the most recent iteration of modelling. He expressed concerns in relation to some parameter inputs and/or assumptions used in the model, and contended that there is significant uncertainty in its findings.

192. Based on the lack of a reliable assessment, Mr Steffens considers that *"the only way to set safe triggers at present is to restrict the activity so that the discharge concentrations do not exceed any of the relevant drinking-water or ecological limits*". He sets out trigger levels that he considers appropriate in his Table 2. In his opinion, the trigger levels should be applied at the point of discharge.

193. While Mr Steffens acknowledges that the recommended triggers in his Table 2 likely to be considerably restrictive to the Applicant, in his opinion *"less conservative triggers cannot be determined without a reliable assessment of water quality effects resulting from the proposed discharge*". However, given that none of the trigger concentrations in Table 2 exceed either drinking-water or ecological limits, he considers that water quality monitoring downgradient of the discharge would not be a requirement based on his recommended discharge concentration limits.

[74] S42A addendum report, at Section 3.3
[75] S42A addendum report, at Table 1

194. In response, ENGEO[76] contended that the reasons stated by Mr. Steffens in his letter illustrate an incomplete understanding of the fate and transport modelling and obfuscate the key takeaways of the RISC5 modelling exercise:

(a) *"of the determinands modelled, ammoniacal-nitrogen is the only realistic contaminant of concern in the discharges, but even in a highly unlikely scenario whereby the discharge water migrated directly on a flow path towards the receptors, cross gradient to the flow of groundwater–dispersion and dilution will reduce the concentrations below a level where they cause an exceedance",* and

(b) *"even in a Kd=0 scenario, inorganic concentrations reduce by at least one order of magnitude before reaching the receptor distance".*

195. The Applicant stressed in its final reply[77] that the temporary discharge activity does not start from the position that leachate water should be discharged in an uncontrolled fashion. The premise, as stressed, "*is that the discharge can only occur if the levels of contaminants are within a range that ensures no adverse effects beyond the boundary of the site. Using a risk-based approach based on DWS[78] and DGV95[79], that are set to avoid adverse effects on drinking water supplies, human health and ecological values, the Applicant has consistently shown that the risk of adverse effects on sensitive receptors is low to negligible"*.

196. The Applicant further contends that[80] the likelihood of an impact on the GDC water supply from this temporary discharge is remote and may even be *de minimis* given the levels of dilution that would occur, assuming a pathway was to eventuate, which the evidence suggests is unlikely.

197. The Applicant states[81] that the conditions on the grounds continue to be exacerbated by the passing time. It notes a concern that the continued pressure on the water storage on-site might lead to fugitive discharges that TRPL has, so far, generally avoided.

198. We address effects on sensitive offsite receptors (in particular the GDC water supply), and discharge trigger levels later in our decision.

199. ENGEO reported that the dataset as at 7 October 2025 included 3 rounds of source/discharge water monitoring, 3 rounds of surface water monitoring and 1 round of groundwater monitoring for newly installed shallow wells.

200. Mr Griffiths noted[82] that of the contaminants that had not been previously tested (PFAS, BTEX, phenols, cyanide, VOCs and SVOCs), of these contaminants only PFAS has been detected

[76] Sulphate Discharge - WCRC Affirmation Response Memo Date 23 October 2025
[77] Applicant's final reply, dated 23 October 2025 at para [26]
[78] Water Services (Drinking Water Standards for New Zealand) Regulations 2022
[79] ANZG 2023 interim default guideline value (DGV) at 95% level of protection
[80] Applicant's final reply, dated 23 October 2025 at para [33.3]
[81] *Ibid*, at para [15]
[82] Joint Witness Statement (JWS, 1 September 2025) for hydrogeology and environmental evidence

(other than one SVOC compound in one location that was being investigated as potential field sampling cross-contamination).

201. Mr Griffiths advised that low levels of PFAS have been detected in the source/discharge water and surface water, but not in groundwater in the vicinity of the soakage pit. He confirmed that PFAS concentrations in the source/discharge water have been below the 95% ANZG DGV for ecosystems and drinking water MAVs. Mr Griffiths stated that PFAS had been detected in surface water offsite, with some concentrations above the 99% DGV (and below 95% ANZG DGV and MAVs).

202. Mr Berry contended that the ENGEO models show that groundwater mounding effects will not extend to either the gully line of Noname Creek, or to the roadside embankment along the northern side of Taylorville Road above the GDC abstraction bore surface water catchment. In his opinion, flow through the underlying Kaiata Mudstone towards the Grey River terrace (and the town supply) is highly unlikely, primarily because the mudstone has an intact permeability 2 orders of magnitude less than the overlying gravels on site, and 4 orders of magnitude lower the gravels from which the town supply bores abstract. He concluded that groundwater is forced to flow preferentially through the gravels units towards surface water bodies.

203. Mr Berry noted that fracturing was observed in the weathered Grey River cliff embankment, however, was considered of the slacking ('frittering') rock mass nature, as described in geological literature, with no indication of dilation in structural fractures.

204. In the Joint Witness Statement (JWS, 1 September 2025) for hydrogeology and environmental evidence[83], the experts agreed that the Grey District Council (GDC) town water supply is a particularly sensitive receptor. Two potential flow paths were considered in the JWS, as set out in the following paragraphs.

205. The first potential flow path between the source area and GDC receptor was generally agreed upon by all participants to be seepage from the proposed infiltration basin into groundwater within the Pleistocene strata and transport through that strata to the extents of the terrace where flow could then enter the roadside drain and transported via culverts (near sample location TRD2) onto the south side of Taylorville Road. The JWS noted that the main concern for this flow path is transport into the stream closest to the GDC water supply (referred to as Noname Creek 2 in Dr. Gray's evidence), with infiltration from this stream to the underlying gravel on the south side of Taylorville Road.

206. In terms of the second pathway, it was inferred by technical representatives for GDC and WCRC that flow in this area could potentially reach the GDC supply bores via seepage into the underlying Kaiata Formation, and then to the Holocene gravels along the Grey River from which the bores abstract, in close enough proximity that this infiltration may be within the

[83] Joint Witness Statement for hydrogeology and environmental evidence. Dated 1 September 2025

pumping radius of influence and therefore potentially be drawn into the water supply. ENGEO did not consider the second flow path to be a credible flow path.

207. All participants agreed that transport from the drains or the downgradient surface water bodies to a fracture network within the mudstone, and then reaching the GDC water supply bores (i.e. combination of the agreed upon and contended flow paths), is unlikely.

208. ENGEO summarised the outcomes of its ongoing investigations undertaken since the hearing, and took into account feedback from submitting parties during the course of the consent hearing and ongoing caucusing, with the objective of providing further information that builds confidence that any arising effects can be managed through implementation.

209. In summary, ENGEO contend[84] that the investigation work completed supports evidence originally heard at the hearing in September 2025, and re-affirms their understanding of the geological model, ground water conditions and the quality of the proposed discharge, and that data obtained has been utilised to develop a more robust conceptual site model guiding risk assessment and more detailed appraisal of alternative options.

210. ENGEO concluded that[85]:

(a) The hydrogeological investigations demonstrate that there is no observable fracturing in the Kaiata Formation mudstone beneath the site, and supports the original conclusions that a pathway to the town supply is highly unlikely / implausible.

(b) Additional soakage testing targeting the mudstone demonstrates low permeability, orders of magnitude below the overlying gravels.

(c) Additional soakage testing within the upper gravels shows a highly variable alluvial sequence with varying hydraulic conductivities, and while definitive preferential pathways cannot be readily defined, the range of testing completed allows us to sense check and analyse likely groundwater mounding response and contaminant flow paths in response to the proposed discharge under a range of varying flow conditions.

(d) While some mounding will occur, and while some flow may occur to the north and south across gradient, the prevailing flow remains to the south-west. Only a portion of groundwater and consequently contaminant load is likely to move across gradient.

(e) The updated hydrogeological model gives confidence in the proposed design that surface effects such as flooding will be avoided, and any mounding effects (creation of alternative contaminant transport pathways) can be managed through operation.

(f) The additional environmental testing confirms that baseline conditions understood as part of the TDHA are consistent, however detectable PFAS compounds are present in

[84] Summary of Works to Date (Temporary Discharge Assessment) dated 10 October 2025
[85] Summary of Works to Date (Temporary Discharge Assessment) dated 10 October 2025, at Section 3

the proposed discharge. To date, the reported PFAS concentrations are below appropriate drinking water standards (DWS) and ecological criteria (DGV95).

(g) Additional testing completed within on-site bladders reports elevated concentrations of heavy metals compared to that within the retention pond, but as part of the management controls water retained in the bladder till require additional on-site treatment and discharge to untreated leachate settlement pond before it is allowed to be discharged to ground. Water will draw from an abstraction point 2m below the retention pond surface to avoid collecting surfactant foam.

211. ENGEO contended that the information obtained from the additional works does not ultimately change their understanding of the risk, as defined by updated conceptual site models and risk assessment completed in the Discharge Monitoring and Response Plan (DMRP). As described by the updated CSM within the DMRP, pathways for contaminants at risk levels to enter the town supply through the mudstone (lack of fracture zone) or via overland flow paths remain implausible.

212. ENGEO concluded that with further confidence from refined modelling, there remains confidence that contaminants associated with the temporary discharge will not leave the site exceeding DWS and DGV95.

213. Trigger values for decision making through the discharge monitoring period have been refined by ENGEO based on their understanding of the mounding from which a conservative source zone has been defined, and taking mid to high range hydraulic conductivities. Alert levels were derived assuming that the baseline dilute leachate conditions will not change, rather than allowing the maximum possible amount of contaminant to be discharged. With decisions to be made based on reported concentrations within 20 m downgradient sentinel bores, this gives ample time for any adaptive or remedial action to be employed in the unlikely event an alarm level exceedance is reported.

214. ENGEO reported that seepage velocity calculations based on maximum hydraulic conductivity values within the gravel anticipate that water will flow to the southern boundary within a range of ~6 to ~115 months (based on average k value within the gravel, this will take 15 months). ENGEO maintain that this gives *"reasonable time for any risk assessment and mitigation action, if required, to be implemented".*

215. ENGEO confirmed that all laboratory data will be included in a final version of the DMRP, which will provide updated baseline and trigger values for action for WCRC review prior to implementation.

216. Mr Steffens[86] accepts the ENGEO reasoning for the RQD % of 0 recorded at the top of the mudstone which is that this is likely a result of using sonic drilling through the Pleistocene

[86] s42A Addendum report of Carl Steffens

gravels and upper parts of the mudstone prior to switching to rotary core drilling. He agrees this is reasonable based on the consistent RQD % 100 readings once penetration into the mudstone exceeds 1 to 2 m, and is supported by his review of the borehole logs and photographs that have been provided. The photographs of the core show that a generally intact core (albeit weak) was obtained during the drilling process with no observable indication of significant fracturing.

217. Mr Steffens notes that ENGEO provided additional information which included reanalysis of the slug testing data. Based on the results from all the updated and completed slug testing analyses, the estimated hydraulic conductivities range from 0.0001 to 0.0124 m/day. Mr Steffens concludes that these results indicate the hydraulic conductivity of the mudstone is significantly lower than those obtained from the Pleistocene gravels.

218. Mr Steffens notes that the ENGEO hydrogeology addendum also includes additional theoretical information relating to the scale of potential groundwater flow through rock fractures and there is also a summary of onsite observations of the mudstone during a site walkover. ENGEO conclude that appreciable fracturing and dilation of fractures would be required to enable a significant fracture flow pathway and the site walkover indicated there was no evidence for significant fracture sets from locations in close proximity of the proposed soakage pit.

219. In relation to the potential for fracture flow between the discharge point and the GDC bore field, Mr Berry considered there to be no viable pathway for the following reasons[87]:

    (a) Following Cubic Law for Fluid Flow in a deformable Rock Fracture, a 3 cm wide fully dilated fracture ('fissure') from source to receptor would convey approximately 240 L/day, which he considered to be negligible.

    (b) Mr Berry maintained that any fracturing would be in from of a 'fractured zone', following the same method above a 5mm dilated fracture (more representative of conservative real-world conditions) would convey 1 L/day, requiring an extensively fractured area to convey any appreciable volume of water.

    (c) No evidence of extensive fracturing has been observed by in either ENGEO drill core from Kaiata Mudstone onsite, exposures of Kaiata Mudstone in the road cutting along Taylorville Road, review of drill logs for the TRPL site prior to ENGEOs engagement. Mr Berry contended that any extensive fracturing the Taylorville Road roadcut would likely manifest as pervasive stability issues, which have not been observed.

220. Based on the additional information provided by ENGEO, Mr Steffens was satisfied that "*a significant groundwater flow pathway from the soakage pit to the GDC water supply bores is*

[87] Summary of evidence of Sean Berry, dated 3 September 2025 at paragraphs [16.1-16.4]

very unlikely and therefore risks to the GDC supply via this flow pathway are low[88]". We concur with Mr Steffan's conclusions.

Panel finding regarding a potential fracture flow path within the Kaiata Mudstone.

221. We have considered all of the relevant evidence related to the fracture flow path within the Kaiata Mudstone. We find that a significant groundwater flow pathway from the soakage pit to the GDC water supply bores is very unlikely and therefore risks to the GDC supply via this flow pathway are low.

222. Notwithstanding, we are persuaded by the evidence before us that a viable contamination pathway, which does rely on the Kaiata Formation, exists between the point of discharge and the GDC water supply. We will return the implications of this finding later in our decision.

Effects on Surface Water Quality and Aquatic Ecosystems

223. The AEE provides the following summary in relation to effects on surface water quality and aquatic ecosystems[89].

> *The only surface water near this application site is Noname Creek which is located over 100m away from the proposed soakage area within the site. Engeo calculated the load of contaminants in the proposed discharges and the dilution factor in Noname Creek and the Grey River (i.e., assuming an undiluted discharge into the receiving waterbody). Contaminant loading was calculated based on the maximum concentrations detected in samples collected from the water treatment system and the maximum discharge rate (800m^3 of water per day). Furthermore, to be conservative, ENGEO used the low flow of 0.02m^3/s and 80m^3/s for Noname Creek and the Grey River, respectively.*
>
> *Based on the loading calculations, a direct discharge to Noname Creek would potentially result in an exceedance of one or more of the assessment criteria. However, the creek is located at least 100m away from the proposed discharge area and 310m away along the inferred direction of groundwater flow. Any contaminants in the discharges will be diluted significantly in groundwater prior to entering Noname Creek and it is highly unlikely that the diluted concentrations will exceed the range of natural variability or analytical error.*
>
> *Direct discharge to the Grey River would result in concentrations of contaminants that are orders of magnitude below any of the assessment criteria. We further note that, based on local topography (e.g., ridge on south side of Taylorville Road) and infrastructure (Taylorville Road), discharging in the Grey River above the GRE001 abstraction would be a practical impossibility.*
>
> *Based on the calculated load of contaminants and resulting concentrations in the receiving waterbodies, the effect of the proposed discharges to surface water quality is highly likely to be less than minor.*
>
> *Consequently, the proposal is unlikely to have any potential adverse effects on surface water quality and aquatic ecosystems.*

[88] S42A Addendum report of Carl Steffens
[89] AEE, at section 6.4.3

224. Ms Drummond assessed two perennial streams on 2 and 3 October 2024[90]. These streams were Noname Creek and the Grey Tributary, which were identified as water bodies which may intercept water from the proposed discharge to land.

225. Ms Drummond undertook qualitative assessments of the waterbodies, including instream habitats for fauna and stream characteristics such as substrate type, hydrological variation, and riparian vegetation composition. Fauna communities were assessed in Noname Creek and Grey Tributary, which included macroinvertebrates and fish, upstream and downstream of the point of potential interception of the discharge. Her findings can be summarised as follows:

    (a) Macroinvertebrate communities within Noname Creek was indicative of hardbottomed watercourses with pollutant sensitive species, whereas macroinvertebrate communities within the Grey Tributary represented soft-bottomed watercourses with pollutant tolerant species.

    (b) Two longfin eels were captured in the Grey Tributary during the fish survey. No fish were captured or observed during the fish survey within Noname Creek. Noname Creek and the Grey Tributary were considered to be of moderate ecological value when assessing against the EIANZ guidelines[91].

    (c) Roadside drains, present around the site, were considered to be of negligible ecological value. Noname Creek 2, located to the south of the Site was not subject to ecological investigations as ENGEO reporting indicates this waterbody should not intercept water from the discharge, due to the discharge flow path moving downgradient and away from this waterbody.

    (d) The temporary discharge and soakage pit is located at least 100 m away from Noname Creek. Ms Drummond notes that hydrogeological modelling undertaken by ENGEO indicates small volumes of water may daylight within Noname Creek and the roadside drains, and subsequently the Grey Tributary, if groundwater mounding intercepts the catchment. As modelled and reported by ENGEO, residual contaminants within the discharge should disperse and absorb into the ground prior to intercepting and daylighting in the surface water systems. Were this to occur, Ms Drummond contended that contaminant loading models show the contaminants should be below trigger levels, and within the 95% species protection limit.

226. Based on the above assessment, Ms Drummond concludes that the discharge to land should not result in alterations or degradations of aquatic communities and habitats within the surface water systems as the discharge should be (orders of) magnitude below trigger levels which would cause ecological harm.

[90] Summary of evidence of Laura Ellen Drummond, dated 3 September 2025
[91] Ecological Impact Assessment Guidelines – New Zealand-specific best practice standards for conducting Ecological Impact Assessments (EcIA)

227. Ms Drummond opines that discharge contaminants where they may enter the Grey Tributary via Noname Creek or the constructed drains should be well below the 95% species protection level, and should not result in reduction in water quality within the stream or result in ecological harm.

228. Ms Drummond notes that plume modelling undertaken by ENGEO following the discharge shows ammoniacal plumes may intercept the headwaters of Noname Creek two years following the discharge, in which concentrations, at this point in time, will be below the 95% species protection limit. She further contends that long term modelling then shows this plume migrating away from the headwaters with contaminant concentrations further reducing over time. She concludes therefore, no long-term ecological effects to surface water systems *should*[92] occur.

229. Ms Drummond confirmed that the proposed discharge had been assessed against the guidelines for protection of aquatic ecosystems, and she concluded that no adverse effects to water quality or stream health should occur within the surface water systems[93].

230. Referring to the Ecology - Joint Witness Statement, prepared by herself and Mr Arthur, Ms Drummond noted that different positions regarding ecological effects is the result of differing opinions and reports provided by hydrogeologists on which they had based their evidence and ecological effects opinions.

231. Ms Drummond concluded that the ecological value of Noname Creek and Grey Tributary are moderate. The macroinvertebrate communities within Noname Creek indicate a good level of habitat quality, whereas the Grey Tributary macroinvertebrate communities indicates a lower level of habitat quality.

232. While Ms Drummond noted that the proposed discharge to land is located at least 100 m from Noname Creek, there is the potential for the discharge to intercept Noname Creek and the constructed drains. However, Ms Drummond contends that the level of contaminants within this intercepted discharge is shown, by ENGEO, to be within the 95% species protection level, and below the trigger limits that would cause harm to freshwater values and ecosystems. Therefore, she concludes that the proposed discharge should not result in changes to water quality, habitat suitability or ecological health of the waterbodies.

233. Ms Drummond further concludes[94] that the ecological effects of the proposed discharge result in an overall low level of effect to freshwater ecosystems and ecological health of the waterways.

[92] In response to questions from the panel, Ms Drummond confirmed that in this context, the word '*should'* can be taken to mean 'is likely to'.
[93] Under the EIANZ guidelines, this equates to a low magnitude of effect and an overall low level of effect for moderate value streams.
[94] Summary of evidence of Laura Ellen Drummond dated 3 September 2025 at para [18.3]

234. A conference of the Ecology experts was conducted on Wednesday 8 October 2025 and a Joint Witness Statement (JWS) prepared[95]. This JWS was produced following evidence presented at the hearing and new information, and is supplementary to the pre-hearing JWS for Ecology experts produced 1 September 2025. Participants were Ms Drummond and Mr Arthur.

235. In terms of existing ecological values, the JWS noted that Noname Creek 2 had been ecologically surveyed since the hearing, and is considered by both experts to be of at least moderate value[96]. A high value fish community, including 'Threatened – nationally vulnerable' lamprey, was found during the electric fishing survey. No barriers to fish passage are known to be present in Noname Creek 2. It noted that eDNA results were not available at the time of the conferencing on 8 October. Ms Drummond and Mr Arthur agreed that the values and ecology of Noname Creek 2 should be protected from the effects of the discharge by way of management of leachate to ensure adverse effects are avoided.

236. Noname Creek (located to the west of the TRPL site) had also been surveyed since the hearing through a more intensive electric fishing survey. Banded kōkopu and shortfin eel were found. eDNA results were not available at the time of the conferencing. The experts agreed the stream is of moderate value, and is consistent with the previous JWS.

237. Fish surveys were undertaken in the Grey Tributary. Longfin eel, īnanga and common bully were found. The experts agreed the stream is of moderate value, and is consistent with the opinions outlined in the pre-hearing JWS.

238. While no macroinvertebrate samples were collected in Noname Creek, Noname Creek 2 or Grey Tributary due to flood conditions, the experts agreed the macroinvertebrate communities will likely be similar between Noname Creek and Noname Creek 2.

239. Ms Drummond and Mr Arthur noted that there are potential barriers to the upstream passage of some fish species into the Grey Tributary and Noname Creek from the Grey River. The targeted fish passage assessment indicates this barrier prohibits swimming fish from accessing Noname Creek. No known barriers are associated with Noname Creek. The experts remain of the opinion the roadside drains contain negligible ecological values based on both ecologist's independent site visits.

240. The experts acknowledged that riverine wetland systems are present downgradient of the landfill and proposed disposal to land area. These wetlands are mostly associated with the floodplain of the Grey River and Grey Tributary. While additional wetlands were identified at the headwaters of Noname Creek, the values of these wetlands were considered by the experts to be low due to the dominance of exotic species.

[95] Joint witness statement for Ecology, dated 8 October 2025
[96] Joint witness statement for Ecology, dated 8 October 2025 at para [6.1]

241. Ms Drummond and Mr Arthur concluded that, "*based on the information provided and collected, there are no points of disagreement*".

242. In relation to potential and actual ecological effects, the experts briefly reviewed the single round of water quality monitoring results available at the time of conferencing and JWS preparation. However, in the absence of a more complete set of monitoring results, and information from the hydrogeologists on contaminant pathways and fate, the experts could not form a robust opinion on the potential and actual adverse effects.

243. In their Ecology JWS, the experts reported on existing ecological values of receiving environments, and potential and actual ecological effects on surface water environments. In relation to effects, the experts were generally agreed that:

    (a) Potential adverse effects are likely limited to those relating to water quality impacts resulting from groundwater contaminants arising in surface waterbodies.

    (b) An acknowledgement that, at the time the JWS was prepared, there has been uncertainty and/or disagreement between hydrogeologists around potential groundwater mounding, contaminant pathways, and resulting groundwater/surface water quality effects from the proposed discharge to land. To adequately address questions on potential effects on surface water ecosystem values, both ecologists require some form of agreement or shared position between groundwater experts. This would aid them to form opinions and, if possible, come to a shared agreement on effects to ecology.

    (c) Given surrounding stream environments have moderate ecological values, receiving water quality should not degrade attribute bands as set out in the National Policy Statement for Freshwater Management 2020. Likewise, resulting toxicants in receiving surface waters should be within 95th percentile protection concentrations as per Australian and New Zealand Guidelines for Fresh and Marine Water Quality.

    (d) Monitoring of surface water bodies to monitor and manage effects on ecology may be a useful inclusion in the conditions of consent. However, this is subject to further discussions between hydrogeology experts on contaminant pathways and timelines, and the overall duration of the consent. They were uncertain how sensitive the floodplain wetlands are to potential contaminant discharges from the proposed disposal area. However, they considered that contaminant effects would likely be commensurate with any water quality impacts modelled to occur on the Grey Tributary. Wetland effects may require additional consideration or assessment if an effect is found to be likely on the Grey Tributary due to their hydrological connection (subject to the opinion of hydrogeologists).

244. The experts noted that while they do not formally have any disagreements around potential or actual effects of the proposal on surface water ecosystems, they note that the evidence of

each ecologist, to date, has come to different conclusions, primarily due to the different hydrogeological information sources/opinions that their evidence was based upon. For that reason, the ecologists required greater certainty in groundwater contaminant pathways and loading to surface water systems before forming individual positions on the extent and magnitude of ecological effects in receiving environments.

245. The experts agreed that agreement, or a shared position, between hydrogeologists would provide greater certainty for ecologists to form individual opinions on potential and actual impacts to the ecology of downstream receiving environments.

246. In his s42A addendum report, Mr Arthur noted that following the hearing process, the outstanding issues pertaining to ecological effects from the proposed discharge were the significance of ecological values at receiving environments in the vicinity of the proposed discharge site and the effects of the discharge on receiving waterbodies, which is dependent on hydrogeological modelling for which there was uncertainty at the time of the hearing. His s42A addendum report addressed these discrete points and provided recommendations for ongoing monitoring and management of the discharge if the resource consent is granted.

247. Counsel for GDC in its further submission[97] addressed the Joint Witness Statement and Additional Ecological Investigations Report in some detail. They submitted that the exceedances of the 99% DGV and resulting implications for ecological risk assessment did not appear to have been discussed in the Additional Ecological Investigations Report, or in the GRMP, and that the Ecology JWS did not comment on the screening criteria or risk assessment for PFAS.

Panel findings on effects on surface water quality and aquatic ecosystems

248. Having carefully considered the relevant evidence before us, we are satisfied that the effects on surface water quality and aquatic ecosystems will be no more than minor, subject to appropriate conditions, including consent conditions proposed by the Applicant which include the proposed monitoring programme set out in the Temporary Discharge Groundwater Monitoring and Response Plan.

249. In reaching our finding, in relation to recorded PFAS concentrations, we note that no exceedances of the 95% DGV for PFOS or PFOA were recorded, but that the 99% DGV for PFOS would be exceeded. Based on the recorded concentrations, we find that the potential for bioaccumulation and biomagnification effects are low, particularly in the context of a short term discharge consent.

[97] Further Submission of Grey District Council on Additional Information Provided on Adjournment, 20 October 2025

Mitigation

250. In regard to potential mitigation measures, ENGEO stated[98] that if mitigation works are needed (i.e. for an alarm Level exceedance in groundwater), the SQEP shall assess for the appropriate response based on the location of the exceedance (distance to the site boundary), results of a Tier 2 assessment, and the magnitude and type of parameter (e.g., heavy metals vs hydrocarbons).

251. ENGEO contended that potential mitigation options include (but not limited to):

(a) In situ chemical oxidation (ISCO) / stabilisation

(b) Permeable reactive barrier

(c) Air sparging

(d) Ex situ treatment

(e) Interception of surface water seepage and redirection of water in roadside drain

(f) Addition of Granular Activated Carbon filters as pre-treatment process prior to discharge to ground.

252. ENGEO contended that the most conservative case (highest conductivity) modelling, the timescale for discharges to reach the receiving environment is likely to be on the scale of months to years, allowing ample time to assess the exceedances, select a mitigation action, and commence mitigation works.

253. While we accept that the mitigation measures proposed are technically feasible, we are not persuaded, based on the evidence before us, that any one of the measures would be effective, within an appropriate timeframe, in preventing adverse effects on sensitive receptors, particularly the GDC water supply which we address below.

254. We are cognisant, as noted by the Applicant above, that contamination in groundwater may take a significant time to become evident in groundwater, and potentially after the 6-month post-discharge monitoring period.

Greater Greymouth drinking water supply (GDC Water supply)

255. A series of three post hearing caucus meetings was held between expert witnesses, the first of which[99] was 25 September 2025. At that meeting, the Applicant provided an update on works completed to date, clarified the proposed work plan, provided summary discussion of findings, and outline pathway to completion of the JWS for 10 October 2025. ENGEO indicated

[98] Leachate Temporary Discharge – Groundwater Response and Monitoring Plan dated 9 October 2025, at section 7.9
[99] Caucus meeting #1, dated 25 September 2025

it would undertake PFAS testing, and conduct direct sampling and testing of deeper groundwater wells fully installed into the Kaiata Formation mudstone.

256. In their Joint Witness Statement[100], the participants agreed that the GDC water supply is a particularly sensitive receptor, and that "*generally agreed contaminant pathway includes seepage of contaminants in the discharge water into groundwater within the Pleistocene strata and transport through that strata to the extents of the terrace where the contaminants could then enter the roadside drain*".

257. In its updated JWS, the experts considered the flow path via groundwater to offsite drains and culverts is potentially complete[101]. However, the experts disagreed on the potential effects on the GDC water supply. The ENGEO experts considered the potential effects to the town supply via this pathway will be less than minor, while Mr Steffens and Ms O'Rourke considered that there is significant uncertainty regarding the potential effects of this flow pathway on the GDC bores on the basis that there is not enough information on discharge water quality.

258. The second theoretical flow path considered by the experts is transport of contaminants downwards through the Pleistocene Gravels directly into fractures (if present) within the underlying mudstone (Kaiata Formation). If fractures were present and extensive, the concern expressed by the experts was a potential pathway to the gravels on the south side of Taylorville Road and travel to where the contaminants could intercept the radius of influence of the GDC supply bores.

259. Again, the experts disagreed on the nature and extent of this potential pathway. The ENGEO experts considered the fracture flow pathway in the mudstone is not a viable pathway and contaminants will not reach the GDC bores via this pathway. Mr Steffens and Ms O'Rourke considered there has been insufficient investigation to rule out this flow pathway and further work was required.

260. In her Summary of Evidence of 2 September 2025[102], Ms O'Rourke contended that the updated Hydrogeological Assessment contained information gaps that affect the assessment of effects, including the appropriateness of the existing groundwater monitoring wells for obtaining representative data with respect to groundwater levels (and therefore flow directions), groundwater quality and the hydrogeological properties of the formations.

261. Ms O'Rourke considered that the contaminant fate and transport modelling presented in the updated Hydrogeological Assessment is of little utility, given that *inter alia*, information gaps in the understanding of the site-specific hydrogeology. With respect to the contamination Conceptual Site Model, in her opinion there is at least one potentially complete pathway for contaminants to reach the GDC water supply bores. This pathway is "*groundwater discharging into the roadside drain to the south of the TRPL site then transport in surface water to the Grey*

[100] Joint witness statement for hydrogeology and environmental evidence, dated 1 September 2025
[101] Updated Joint Witness Statement for hydrogeology and environmental evidence, dated 10 October 2025, at para [13]
[102] Summary of evidence of Natalie O'Rourke, dated 4 September 2025

River terrace and seepage into the Holocene gravel. The roadside drain on Taylorville Road crosses beneath the road near sampling location TRD2[103] *into an unnamed creek* referred to as "Noname Creek 2"[104].

262. Ms O'Rourke notes that the Pleistocene Gravel is not homogenous, and preferential flow paths within zones of higher hydraulic conductivity could theoretically occur. These flow paths (if present) could influence groundwater flow directions, discharge points and travel times for contaminant transport, and could alter the assessment of effects. We concur with Ms O'Rourke on this point. In response to our questions in relation to the Pleistocene Gravels, Mr Berry agreed that the gravels are likely heterogenous (have varying properties) and anisotropic (have directional differences in properties).

263. Following her review[105] of the addendum documents, Ms O'Rourke considers that the level of assessment remains "*insufficient to assess the potential effects of the proposed discharge on human health and the environment".* She contends that further investigation and interpretation is still being undertaken by the Applicant, and not yet reported on, and as a consequence the GMRP is only partially complete.

264. In his evidence[106], Mr Perrin-Smith stated that the Greater Greymouth drinking water supply is significant infrastructure for the district and is deemed a lifeline under the Civil Defence Emergency Management Act 2007. He stated that it is the sole source of drinking water for around 10,000 people across the Greater Greymouth area, including the hospital, schools, rest homes, and businesses.

265. Mr Perrin-Smith told us the supply comes from three shallow groundwater bores located in a gravel beach beside the Grey River, with a fourth bore currently being commissioned. Once water is extracted from the bores, the treatment process includes ultraviolet disinfection, chlorination, and pH correction via lime dosing. He emphasised that while this treats for bacteria and protozoa, it does not treat contaminants such as heavy metals, PFAS, hydrocarbons, nitrogen compounds, or volatile organics.

266. In his s42A report, Dr Durand's noted that[107] it was not possible to give regard to the content of a Water Safety Plan (the source water risk management plan component), "*possibly* because no Water Safety Plan exists". However, Mr Perrin-Smith confirmed that GDC has a Drinking Water Safety Plan for its Greater Greymouth Water Supply, which includes a Source Water Risk Management Plan. Mr Perrin-Smith confirmed that the most recent version of the Drinking Water Safety Plan is dated August 2024 and has previously been submitted to Taumata Arowai[108].

[103] Updated Hydrogeological Assessment, at Figure 15
[104] Mr O'Rourke notes that "Noname Creek 2" is located east of the GDC water supply plant, and its proximity to GDC bores is shown on Figure 10 of the Updated Hydrogeological Assessment
[105] Hydrogeology Review of Addendum Information, Tonkin & Taylor Ltd, dated 20 October 2025
[106] Summary of evidence statement of Kurtis Perrin-Smith, dated 4 September 2025
[107] Officers report, at para [199 (e)]
[108] Taumata Arowai is the Independent Water Services Regulator established under the Water Services Act 2021

267. The Source Water Risk Management Plan identifies in detail the potential risks associated with the TRP site, which is located "*in the catchment immediately north of the extraction bores*"[109]. Mr Perrin-Smith told us the Source Water Risk Management Plan recommends that further work is required by technical experts to understand the geology of the area, including geological cross sections of the area between TRP and the extractions bores; and identification of geological and hydrological features including flow paths. In addition, it should provide recommendations on monitoring well locations, following determination of the risk, and any mitigation measures considered necessary to remove risks posed by TRP to the water supply source water. We note that such investigations have now been commissioned by GDC[110].

268. Mr Perrin-Smith noted that the drinking water safety plan and source water risk management plan are currently under review by GDC as significant new information has become available since the August 2024 document, and is in discussion with Taumata Arowai on this matter. GDC considers the explicit prevention of contamination of surface water and groundwater under existing condition 11 to be an "*important safeguard for the environment and protection of the Greater Grey mouth Water Supply extraction bores".*

269. Mr Perrin-Smith contends that, given the limited information about groundwater flows, monitoring is unlikely to be a complete solution, and that installing additional wells for monitoring would not guarantee early detection as laboratory testing and results of testing, does take days, meaning by the time results become available, contamination could have already entered the water supply.

270. Mr Perrin-Smith notes that the TRP operational site is about 400 metres from the extraction bores and located uphill, which he contends results in a direct risk of contaminants migrating into the source water and water supply. He stated that independent hydrogeological experts have confirmed there are potential pathways for leachate contamination, including through groundwater, surface water, and fractured mudstone. We note here that the experts have concluded the fractured mudstone contamination pathway is unlikely.

271. Mr Perrin-Smith contends that if contamination reached the extraction bores, the supply would be "*compromised very quickly*". He notes the GDC main Omoto treated water reservoir holds operational storage of 6-10 hours, with some other minor reservoirs holding up to 24 hours storage volumes. However, this storage will also be dependent on the filling cycle of a reservoir at the time of any event (storage can be less).

272. As a consequence, Mr Perrin-Smith stated that there is no immediate alternative source water supply for the entire Greater Greymouth Water Supply. He notes that "*if a contamination event was to occur from TRP, Council would need to understand if the contamination had occurred from surface water or ground water. It would need to isolate the extraction bores, issue urgent*

[109] Summary of evidence statement of Kurtis Perrin-Smith, dated 4 September 2025, at paragraph 10
[110] Further submission of Grey District Council on additional information provided on adjournment, dated 20 October 2025. At para [22]

notices to the community and urgently seek alternative water sources"[111]. He further contended that "*realistically, this would not be achievable within the limited timeframe available, when consideration is given to maintaining a supply. Major treatment plant upgrades would likely be required, at a cost of many millions, to ensure the removal of specific contaminates, testing and commissioning, before normal water supply could be returned to the Greater Greymouth Water Supply consumers"*.

273. Mr Perrin-Smith stated[112] that the drinking water system represents a very significant financial investment for the community. He noted that the current replacement cost is currently being reviewed but is likely to be in excess of $20 million. He also confirmed that GDC is currently working towards the installation of a filtration system to assist with removal of chlorine byproduct production, with an estimated value of $8.5 million in the 2025/26 and 2026/27 financial year.

274. Mr Perrin-Smith concluded that "*a contamination event would have catastrophic impacts on the Greater Greymouth Water Supply, significant costs would be seen to resolve any issue and Council would likely face liability under the Water Services Act 2021*[113]*"*.

275. With respect to the potential risk to the GDC water supply bores, Ms O'Rourke contends[114], that the source(s) of PFAS at the site require further investigation to understand potential cumulative effects from the proposed discharge. It is her contention that "*while the addendum information has attempted to address the outstanding queries, there are many substantial unresolved issues which affect the assessment of potential effects from the proposed discharge at this point in time, and it is unlikely if the additional information currently being collected will address these matters. As such the assessment is considered to be incomplete"*.

276. GDC contended that[115] the identification of PFAS as contaminants for the TRPL site and particularly in sample TRD2 has significant implications for GDC as the registered supplier under the Water Service Act 2021. GDC has now had to engage its own PFAS sampling and specialist advice. GDC noted that the Applicant has not carried out any groundwater monitoring on GDC's land "*despite this being recommended by T+T as part of the work plan during the adjournment"*.

Discharge trigger levels

277. The Applicant prepared an updated DMRP, which included carrying out and documenting additional surface and groundwater sampling and laboratory testing, updating ambient and baseline levels of contaminants (including in the discharge, receiving groundwater and surface

[111] Summary of evidence statement of Kurtis Perrin-Smith, dated 4 September 2025, at para [16]
[112] *Ibid*, at para [8]
[113] Summary of evidence statement of Kurtis Perrin-Smith, dated 4 September 2025
[114] Hydrogeology Review of Addendum Information Tonkin & Taylor Ltd. Dated 20 October 2025 at paragraphs [68-71]
[115] Further submission of Grey District Council on additional information provided on adjournment, dated 20 October 2025, at para [22]

water bodies), and updating modelling and risk assessments, including specific consideration of the GDC Water Supply bores.

278. The Applicant recognised[116] WCRC's cautionary approach and to facilitate this requested that ENGEO propose a more appropriate set of 'alarm' levels at the point of discharge that were derived on the basis of maximum observed data points with a reasonable buffer to account for localised, temporary variability an upper bound for which is determined based on the range of data observed to date.

279. The Applicant identified[117] trigger levels for particular contaminants in the retention pond water that could be included in a further condition to its draft set of conditions that would apply as limit/levels for the discharge. This further condition was in response to a request from WCRC to include a set of 'alarm' limits for contamination levels prior to or at the point of discharge, which would result in temporary cessation of the activity and implementation of alarm limit controls in the draft DMRP.

280. ENGEO[118] presented alarm limit levels in addition to those set out within the draft DMRP for cessation of the proposed activity recorded from samples collected prior to or at the point of discharge. The proposed levels are set out in Table 1[119], and were "*intended to capture whether the concentrations in the discharge are reasonably different to those that would be expected based on the current dataset. Where exceeded, any ongoing discharges will cease and alarm limit protocols per the draft-DMRP will be actioned"*

281. ENGEO recommended the provisions of the draft-DMRP as stated (monitoring from the point of baseline and downgradient alert and alarm levels) remain, along with the proposed response protocols. It contends that the additional alarm limit levels provide an extra layer of control to aid in mitigating the effects of the activity beyond that described in the plan, and that the provisions shall be updated in the final version 'for implementation' DMRP.

282. In response, Mr Schulte contended at his paragraph [55][120] that the alternative suggested by Dr Durand to set alarm limits at the most conservative guideline value is a ""*comparatively blunt instrument that ignores the fundamental site context*". It applies a receptor-based standard directly to the source, completely disregarding the well-documented and significant attenuation (dilution, dispersion, and sorption) over the, at least, 100-meter subsurface flow path.

283. We concur that Dr Durand set out alternative trigger levels[121] that are very conservative and precautionary. We find that such trigger levels would render the discharge permit unlikely to

[116] Applicant's final reply, dated 23 October 2025, at para [102]
[117] Further memorandum of counsel for Applicant re further information provided on additional works program and discussions with parties, ENGEO dated 17 October 2025 1, at attachment marked 'A'
[118] Additional information request - confirmation of discharge monitoring, ENGEO. Dated 17 October 2025
[119] *Ibid*, at Table 1
[120] Applicant's final reply, dated 23 October 2025, at para [55]
[121] Officer Addendum report (planning) of Dr Michael Durand

be able to be exercised until the discharge could be effectively treated to an acceptable standard.

284. Mr Schulte[122] stated that while it is expected that these efforts will assist with future operations, "*they do not remove need for a temporary discharge now, given the situation at hand"* and in the meantime the site continues to operate and efforts to manage water storage to prevent any unintended discharges are ongoing.

285. Mr Schulte[123] also confirmed that "*a water treatment option that has shown real promise that it can ensure the quality of any discharge will be at permitted levels regarding all contaminants – including PFAS – may soon be confirmed"*. In his opinion, implementation of this system could potentially occur in the next 6 months with on-site operational testing possible late in the first quarter of 2026.

286. In his s42A report, Dr Durand addresses s104 and NES-SHDW regulation 7 in relation to the GDC water supply. With regard to application of s104G, Dr Durand noted that the GDC water supply is registered in accordance with s55 of the Water Services Act which states that:

> *When considering an application for a resource consent, the consent authority must have regard to—*
>
> *(a) the actual or potential effect of the proposed activity on the source of a drinking water supply that is registered under section 55 of the Water Services Act 2021; and*
>
> *(b) any risks that the proposed activity may pose to the source of a drinking water supply that are identified in a source water risk management plan prepared in accordance with the requirements of the Water Services Act 2021.*

Under part (b) of s104G, regard must be given to risks posed to source water that are identified in a source water risk management plan. A source water risk management plan[124] is part of a water safety plan[125], which is required to be held at all times by a registered drinking water supplier[126].

287. Dr Durand notes that the NES-SHDW regulation 7 may be relevant to the application because the water supply currently meets health quality criteria but the discharge

> *has 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*[127].

288. Regulation 7 requires that:

[122] Applicant's final reply, dated 23 October 2025, at para [18]
[123] *Ibid*, at para [19]
[124] Water Services Act 2021 at [43]
[125] Water Services Act 2021 at [31]
[126] Water Services Act 2021, at [42]
[127] Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007

A regional council must not grant a water permit or discharge permit for an activity that will occur upstream of an abstraction point […] if the activity is likely to:

(a) introduce or increase the concentration of any determinands in the drinking water, so that, after existing treatment, it no longer meets the health quality criteria; or

(b) introduce or increase the concentration of any aesthetic determinands in the drinking water so that, after existing treatment, it contains aesthetic determinands at values exceeding the guideline values.[128]

289. The meaning of "meets the health quality criteria" is given in the NES-SHDW regulation 5[129] and refers to table A1.3 in Appendix 1 of the Drinking-water Standard.

290. Dr Durand notes that "*whilst the application AEE noted the proximity of GRE001[130], no assessment was made against the Drinking-water Standard or the NES-SHDW. Instead TRPL has relied on their assessment that the NES-SHDW does not apply, as the discharge is not "upstream" of the water supply*".

291. The Applicant's assessment on the NES-SDW[131] concludes that there is no basis for declining the discharge as it will not be likely to result in community drinking water becoming unsafe for human consumption. The Applicant contends that while GDC considers that there is inadequate information to demonstrate this, the Applicant's position is that the information is extensive.

292. The source water risk management plan[132] describes the catchment area north of the well field[133]. is shown in detail in Figure A.3. Its conclusions in relation to this discharge application are as follows:

(a) The main recharge source of the well ground water is assessed to be the Grey River with some recharge from ground water associated with the small catchment north of the wells. It is considered that the small catchment north of the wells contribute mainly to water pumped from Well 1, with little or no contribution to wells #2, #3 and #4. It notes that "*while all human activities in the catchment present some contamination risks, the TRP site is considered to present the greatest risk to the source water, particularly well 1"*.

(b) The source water risk management plan concludes that the TRP managed waste area poses a medium risk to the Greater Greymouth Water Supply. This conclusion is based on the unknown hydrogeology of the area between the TRP site and the well field and potential incomplete containment of the leachate discharge system.

[128] *Ibid*, at [7]
[129] *Ibid*, at [5]
[130] AEE section 3.1
[131] Applicant's final reply, dated 23 October 2025. At [78.2]
[132] Drinking Water Safety Plan - Greater Greymouth Water Supply. Grey District Council, dated August 2024. At Appendix A - Source water risk management plan
[133] *Ibid*, at Appendix A: Source Water Risk Management Plan

(c) The Risk Assessment & Management (Table 6.1) Hazard description identifies "*Contaminates disposed of at the TRP managed waste site produces leachates that discharge into the ground water system, enter the intake wells and the water supply".*

(d) On the 15th of April 2023, discolour discharge was observed in the roadside drain that drains to road culvert B[134]. Investigation by the WCRC determined contaminants had been discharged from the TRP site and on the 14th of May 2023, WCRC issued an abatement notice to TRP to cease their unauthorised discharge of contaminants to land.

(e) To mitigate the risk posed by the TRP site, further technical investigations are recommended to confirm the hydrogeology of the area and to identify potential flow paths, and recommend the location of monitoring wells if they are considered necessary.

Panel findings in relation to effects on the quality and safety of human and animal drinking water (including the GDC water supply)

293. When considering an application for resource consent[135], the consent authority must have regard to any actual and potential effects on the environment. In relation to potential effects, s3(e) and (f) of the RMA identifies an effect can be "any potential effect" but must be either "of high probability" or "of low probability which has a high potential impact".

294. When considering what is an effect on the "environment", s2 of the RMA defines the environment as including:

(a) Ecosystems and their constituent parts, including people and communities; and

(b) All natural and physical resources; and

(c) Amenity values; and

(d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) or which are affected by those matters.

295. In relation to the precautionary principle, Dr Durand pointed us[136] toward an "other matter" (s 104(1)(c)) to give regard to includes the principles of drinking water safety identified by the Havelock North Drinking Water Inquiry, in particular to protect source water (above all else), embrace a high standard of care, maintain multiple barriers against contamination and make decisions that are preventive in their management of risks. We concur with Dr Durand that the principles of drinking water safety apply to this discharge application.

[134] *Ibid*, as shown in Figure A3
[135] Resource Management Act 1991, at Section 3 (e) and (f)
[136] Officer Report dated 12 August 2025 at paragraphs [183-191]

296. Having carefully considered the evidence before us, we find that the potential for contamination of the GDC water supply to be of low probability, but high potential impact. Accordingly, we find that, potential adverse effects on the GDC water supply are more than minor. Our reasons are as follows:

(a) We conclude there remains uncertainty in relation to the contaminant modelling undertaken by the Applicant, and relied upon to back-calculate appropriate discharge concentrations that are protective of sensitive offsite receptors, including the GDC water supply.

(b) Accordingly, we are not satisfied that the Recommended 'Alarm Limit' Trigger Level at Point of Discharge proposed by the Applicant[137] can be relied upon to ensure that effects on the GDC water supply can be avoided, remedied or mitigated.

(c) The GDC evidence is that adverse effects on the GDC water supply are potentially very significant. This is exacerbated by the presence of PFAS compounds within the source area for GDC water supply (both Onsite, and adjacent to the Site). We note that the installation of sentinel wells within the GDC water supply source area would likely provide an 'early warning' to the presence of contamination in groundwater that presents and imminent risk to the water supply.

(d) The GDC source water risk management plan concludes that the TRPL managed waste area poses a medium risk to the Greater Greymouth Water Supply. Further technical investigations are to be undertaken by GDC to define contaminant fate and transport flow paths and update the characterisation of risk posed to the water supply. We consider such investigations to be appropriate and precautionary based on current evidence with respect to the requirement of the NES-SDW.

(e) We find that while the contamination pathway identified by the experts is potentially complete and viable, the likelihood of contamination of the GDC water supply is low. However, the potential impacts are high. We find that adverse impact on the GDC water supply is not *de minimis* (as suggested by the Applicant), in the event that contamination of the water supply with PFAS exceeding the relevant MAV occurs.

(f) We are not persuaded that, in the event that PFAS is detected in groundwater within radius of influence of the GDC water supply, that remedial measures can be effective or timely to prevent a significant adverse effect on the GDC water supply. GDC's treatment processes do not currently screen for or treat PFAS, and as noted by Mr Perrin-Smith, GDC relies on high quality raw drinking water for the drinking water supply. An exceedance of PFAS in the GDC water treatment plant raw water would likely result in a review of risk posed to the water supply, and/or the requirement for

[137] Applicants final reply, at Appendix marked "A" Table 1

additional treatment systems to reduce PFAS concentrations to achieve ongoing compliance with drinking water standards.

(g) WCRC has proposed alternative trigger levels which, as outlined earlier in our decision, while appropriately conservative and precautionary, we determine to result in a discharge permit that is unlikely to be unable to be exercised until the discharge could be effectively treated to that standard.

Effects on Tangata Whenua Values

297. With regard to effects on Tangata Whenua values, the AEE provides the following summary:

> *The Site is not listed as a site of significance to Ngāi Tahu, nor is it located within a Statutory Acknowledgement Area, a silent file, or within an archaeological site. Furthermore, there are no Heritage New Zealand sites or New Zealand Archaeological Association sites registered on the property. Consequently, there are no specifically identified cultural values associated with this site. However, below the site there is groundwater aquifers that may have cultural value to Ngāi Tahu.*

298. The following is noted with regard to avoiding any potential adverse effects on Tangata Whenua values:

- *All works will be subject to the ESCP, which will assist in preventing contaminant and sediment discharge from the application site;*
- *The ENGEO report concludes that based on modelled maximum concentrations to the nearest receptor, the effect of the proposed discharge to receptors (human or ecological) are highly likely to be less than minor; and*
- *The discharge will be for a short term, involves a comprehensive monitoring programme and an adaptive approach will be taken.*

299. The AEE concludes that:

> *Taking the above into account, it is considered that the proposal will not cause any significant effects on natural resources including water (waterways, waipuna (springs), groundwater, wetlands); mahinga kai; indigenous flora and fauna; cultural landscapes and land and they will therefore be adequately protected.*

300. Ngāti Waewae remain opposed to the application, based on their view that there was still insufficient information upon which to make a decision. The Applicant contends that an underlying issue is that Ngāti Waewae appears not to trust TRPL's evidence[138]. Ngāti Waewae do make suggestions regarding further delaying a decision until further talks have occurred between experts and a further independent expert has confirmed that the evidence supporting the application is reliable.

[138] Applicant's final reply, dated 23 October 2025, at [80]

301. As noted earlier in this decision, Ms Lynch appeared for Ngāti Waewae. She identified that all water is taonga and that Ngāti Waewae was concerned with the health of all water. She discussed the importance of the mauri of the wai. In discussions at the hearing, she identified that the main concerns related to the adequacy or inadequacy of the information. Ms Lynch expressed a concern in relation to information gaps and the areas of disagreement between the experts. She advised that Ngāti Waewae needed to see a shared position in relation to ecological issues. She expressed concern in relation to the risk if contaminants spread into the wider environment, and the need for a clear understanding of the history of the materials. She identified, for example, the introduction of contaminated plants, coal tar and similar. She also stressed the need for a proper treatment system.

302. Its further response[139] confirmed that Ngāti Waewae had not changed its position and remained opposed to the application. It identified concerns with the lack of information and gaps around the site and discharge, and that the discharge itself impacts the certainty around the Applicant's modelling and their assumptions and predictions about potential effects on receiving waterbodies.[140] It also identified concerns about the lack of the ability for robust discussions between technical evidence.

303. The further submission also identified that the Applicant's proposed Temporary Leachate Discharge – Groundwater Monitoring and Response plan (DMRP) failed to include baseline and trigger values. Ngāti Waewae strongly opposed the Applicant's suggestion that a finalised version of the DMRP could be provided with the updated and complete set of baseline limits and trigger values for action after the consent is granted. It submitted that information around baseline limits should form part of the consent application.[141]

304. Again, that submission identified concerns with the incomplete nature of past caucusing and the recent additional information, that further caucusing occur especially in relation to establishing the baseline values/discharge limits or trigger limits that the discharge will operate under, and that types of actions and responses to be taken if any exceedances occur. The submission sought that in any finalised baseline and trigger limits be provided to the Panel to review and decide on and not left to certification by WCRC once consent is granted.

305. The further submission identified a concern about the nature of the discharge and the lack of justification around the analytical suite for sampling given the landfill material accepted on site.

306. It noted that the submission encouraged the Applicant to investigate improving/upgrading the current treatment plant to ensure leachate was treated to the highest possible standard which would ensure certainty around the effects of the discharge and reduce the Applicant's reliance on groundwater dilution to reduce contaminant concentrations and help to ensure the mauri of the groundwater is not degraded.

[139] Response from Te Rūnanga o Ngāti Waewae 20 October 2025
[140] Response from Te Rūnanga o Ngāti Waewae 20 October 2025 at para [10]
[141] Response from Te Rūnanga o Ngāti Waewae 20 October 2025 at para [13]

307. The further submission also recorded that Ngāti Waewae was concerned and not confident the Applicant had yet provided adequate information about the discharge and site and that impacted on the certainty around the Applicant's modelling and the assumptions and predictions about potential effects on the receiving waterbodies. It sought further caucusing and technical reviews so that it had confidence that any established limits were appropriate to protect the mauri of groundwater and surface water.[142]

Panel finding on Cultural values

308. We have carefully considered the submission, evidence given by Ms Lynch and the further response provided by Ngāti Waewae.

309. It is our understanding that the impacts on tangata whenua values will, on Ms Lynch's evidence, depend on the degree of certainty in ensuring that any adverse environmental effects are less than minor.

310. Having considered all the relevant evidence, and taking into account the consistent position of Ngāti Waewae in its opposition to the application, we find the effects on cultural values are potentially more than minor.

Amenity Effects

311. Mr Cook addressed matters of amenity and odour, noting they had been raised in submissions by the neighbours. It was his opinion that while they are relevant matters to the operation of the landfill in a general sense, there were no amenity effects resulting from the discharge of contaminants relevant to this application. He considered it important that this application is not conflated to the extant consent or the future application and therefore effects as to odour, traffic, noise and landscape are not relevant.

312. While this is of course a fully discretionary activity, we agree that amenity effects are not a key determinant at this time.

Positive Effects

313. Dr Durand noted that while not assessed or quantified in the AEE, the granting of the resource consent would enable management to some extent of freeboard in the landfill's retention pond (subject to a discharge being possible under the mounding and contaminant discharge controls) and that in turn would assist in avoiding uncontrolled discharge from an overtopping pond. We accept that that is potentially a positive effect.

[142] Response from Te Rūnanga o Ngāti Waewae 20 October 2025 at para [22]

Other Matters

Past Conduct – Compliance History

314. This issue was discussed in the evidence of Mr Perrin-Smith.[143] That evidence identified that Abatement Notices dated 4 May 2023 and 14 March 2024 by WCRC and the Environmental Protection Authority were served. It noted that they related to a discharge observed on 15 and 16 April 2023. Mr Perrin-Smith identified that the Abatement Notices recorded that the discharges show the presence of heavy metals and that the primary offsite discharge from the site was via a groundwater spring/seep on the western side of the property.

315. His evidence acknowledged that the appropriateness or otherwise of the original consents, and past compliance issues, are not issues the Commissioners can address within these applications. He stated that given the lack of available information about the waste that had been accepted onsite, the Applicant's handling procedures, previous compliance issues and potential for contamination to have already occurred at the TRPL site, all have a continued impact in relation to the effects of the current discharge application.

316. We record that a further Abatement Notice has been issued, that is subject to appeal.

317. This application precedes the recent changes to the RMA in relation to the relevance of enforcement and compliance matters in consenting processes. We have not relied on those matters of non-compliance in reaching our overall decision. We have taken the approach of assuming compliance with any conditions, albeit that the issues identified above do illustrate that this is a site which needs to be carefully managed.

Section 104(6)

318. GDC submitted that the information supporting the applications were incomplete; uncertain, relies on unsupported assumptions and conceptual modelling; and relies on incomplete and non-representative data.[144] Counsel identified that s104 of the RMA enables declining an application for resource consent on the grounds that it has inadequate information to determine the application. It noted that the adequacy of the information needs to be considered reasonably and proportionally to all the circumstances of the case before stressing that the presence of the water supply necessitates a higher level of information than may be ordinarily expected for landfills in other contexts. It was submitted that the presence of not just a sensitive receiver but a receiver that is regionally significant infrastructure and lifeline utility under the Civil Defence Emergency Management Act 2002 requires a high degree of certainty.

319. We agree that there were information gaps identified during the hearing.

[143] Statement of Evidence of Kurtis Ryan Perrin-Smith dated 28 August 2025 at paras [42] – [48]
[144] Opening Submissions on Behalf of Grey District Council 4 September 2025 at para [44]

320. We accept that the level of reliance on modelling, and the lack of monitoring, is somewhat problematic. However, the information we have received is sufficient for us to conclude that the actual and potential effects on the GDC drinking water sources, while low in probability, are of a high potential impact.

Section 104(1)(b) – Regional District Plan and Statutory Documents

National Policy Statement for Freshwater Management 2020 (NPS-FM)

321. Dr Durand advised that the NPS-FM applies as pursuant to clause 1.5 it applies to all freshwater (including groundwater) and, to the extent they are affected by freshwater, to receiving environments (which may include estuaries and the wider coastal marine area).

322. Dr Durand noted that recent amendments to the RMA meant that the objective of the NPS-FM (clause 2.1) and the hierarchy of obligations (clause 1.3(5)) are "out of scope for consideration under section 104".[145]

323. Dr Durand advised that notwithstanding those exclusions, regard must still be had to s104. That of course is correct. He identified notably clause 1.3: the six principles of Te Mana o te Wai, and clause 1.6: best information. This provides:

> *(1) In giving effect to this National Policy Statement, local authorities must use the best information available at the time, which means, if practicable, using complete and scientifically robust data.*
>
> *(2) In the absence of complete and scientifically robust data, the best information may include information obtained from modelling, as well as partial data, local knowledge, and information obtained from other sources, but in this case local authorities must:*
>
> *(a) prefer sources of information that provide the greatest level of certainty; and*
>
> *(b) take all practicable steps to reduce uncertainty (such as through improvements to monitoring or the validation of models used).*
>
> *(3) A local authority:*
>
> *(a) must not delay making decisions solely because of uncertainty about the quality or quantity of the information available; and*
>
> *(b) if the information is uncertain, must interpret it in the way that will best give effect to this National Policy Statement.*

324. Dr Durand discussed the "iterative process" which had been undertaken and described it as beneficial and progressive towards making the best information available but considered that the information was not complete, was uncertain, included data from modelling, did not include data from trials, and must be interpreted in a way that will best give effect to the NPS-FM.[146]

[145] Officer Report dated 12 August 2025 at para [107]
[146] Officer Report dated 12 August 2025 at para [111]

325. Dr Durand identified the relevant policies of the NPS-FM as follows:

(a) Policy 1: Freshwater is managed in a way that gives effect to Te Mana o te Wai.

(b) Policy 2: Tangata whenua are actively involved in freshwater management (including decision-making processes), and Māori freshwater values are identified and provided for.

(c) Policy 3: Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.

(d) Policy 5: Freshwater is managed (including through a National Objectives Framework) to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.

(e) Policy 9: The habitats of indigenous freshwater species are protected.

(f) Policy 15: Communities are enabled to provide for their social, economic, and cultural well-being in a way that is consistent with this National Policy Statement.

326. Mr Cook also addressed the NPS-FM identifying the objective. He considered the proposal to be consistent with that objective. Relying on the evidence of Mr Griffiths and Ms Drummond that the health and wellbeing of the waterbodies and freshwater ecosystems would not be compromised; the evidence of Mr Griffiths and Mr Berry that the proposed discharge "will not impact the drinking water supply" and through enabling the management of treated water from cells in a controlled manner and hence the safe operation of the landfill would enable the Applicant to provide for its economic wellbeing and that of the community using the facility.[147]

327. He considered Dr Durand's comments regarding the adequacy of information and advised that in his view the NPS-FM – Objective 1(b) in particular – did not seek absolute certainty. It was his view, considering both concerns about the Grey District water supply, ecological impacts and the context of the application, the information provided with the application and in the evidence is sufficiently certain and will give best effect to the National Policy Statement.[148]

328. Mr Cook identified Policies 1, 3 and 5 as relating specifically to the management of freshwater and considered that they generally provide regional councils with direction on how they should manage freshwater under the RMA. He considered here it was relevant that the effects on the receiving waterbodies and freshwater ecosystems had been assessed as no more than minor; whether the health and safety of water bodies and freshwater ecosystems is maintained should be considered in the context of the existing landfill noting that freshwater falls on the

[147] Brief of Evidence of Karl Peter Cook 18 August 2025 at para [6.2]
[148] Brief of Evidence of Karl Peter Cook 18 August 2025 at para [6.3]

site, enters the cells, resulting in leachate, the proposed discharge and associated treatment measures ensure that the discharge is treated on site to acceptable levels. Finally, he considered the discharge is of water treated to a suitable level to ensure that there is no known degradation of the water bodies or freshwater ecosystems.[149]

329. Mr Cook noted the proposed conditions included a monitoring programme with the monitoring to be undertaken prior to, during and following completion of the discharge and that would aide WCRC in achieving Policies 13 and 14.

330. It was his opinion that the proposed discharge would not impact upon the community's ability to provide for their social, economic and cultural wellbeing. He noted the nearest bore to the application site is over 1.3km to the west and that no drinking supply wells are affected by the proposal. He noted the proposal includes treatment and monitoring to ensure the discharge quality is of an acceptable level. He stated the water treatment plant to the south of the application site will also be "unaffected due to the location separation and water gradient, along with the positioning of the intakes within the Grey River".[150]

331. Ultimately, he considered that the application is arguably not consistent with the provisions of the NPS-FM, but nor was the proposed discharge contrary to the NPS-FM. Overall he considered the proposal was neutral.

332. Counsel for GDC addressed the NPS-FM, particularly in their further submission.[151] Counsel submitted that despite the adjournment the application was still not based on the best information as required by Clause 1.6 of the NPS-FM and submitted that the uncertainty had not been reduced sufficiently since the adjournment.[152] They further submitted that the directive policies of the NPS-FM would not be complied with including, in particular, Policy 5. They submitted the discharge of contaminants will not improve or maintain the health and wellbeing of freshwater ecosystems in connected water.[153] Again in terms of Policy 7, they considered that "entering contaminants", including PFAS to Noname Creek, Noname Creek 2, and the Grey River and its associated wetlands, would degrade their values.[154] Again they referenced Policy 9 summarising that as the habitats of indigenous freshwater species are protected. They submitted that indigenous species are present in the connected waterbodies and the discharge of contaminants, including PFAS to those habitats, is inconsistent with the high bar of protection.

333. We have considered all of the submissions and evidence in relation to this matter. Ultimately, it is our view that the consistency or otherwise with the provisions of the NPS-FM are largely

[149] Brief of Evidence of Karl Peter Cook 18 August 2025 at para [6.6]
[150] Brief of Evidence of Karl Peter Cook 18 August 2025 at para [6.10]
[151] Further Submission of Grey District Council on Additional Information Provided on Adjournment dated 20 October 2025
[152] Further Submission of Grey District Council on Additional Information Provided on Adjournment dated 20 October 2025 at para [67]
[153] Further Submission of Grey District Council on Additional Information Provided on Adjournment dated 20 October 2025 at para [67(a)]
[154] Further Submission of Grey District Council on Additional Information Provided on Adjournment dated 20 October 2025 at para [67(b)]

founded in our assessment of effects and the other relevant matters addressed. This includes particularly in relation to certainty or otherwise of the information provided and available. While at resource consenting stage we are not obliged to give effect to the NPS-FM, overall we consider that the proposal is not consistent with it.

National Policy Statement for Indigenous Biodiversity 2023

334. Counsel for GDC submitted that the conclusions in relation to ecological values "trigger" a number of identified considerations under the National Policy Statement for Indigenous Biodiversity 2023. It is, in our view, of peripheral relevance. It deals primarily with terrestrial ecosystems. We note that there are wetlands identified. However, in our view, the NPS-FM is much more relevant.

National Environmental Standard for Source of Human Drinking Water

335. The National Environmental Standard for Source of Human Drinking Water (**NES-SDW**) "sets the requirements for protecting sources of human drinking water from becoming contaminated" and requires regional councils to ensure the effects of activities on drinking water sources are considered.[155] Mr Cook noted that some overlap exists with s104G of the RMA.

336. Mr Cook's evidence was that there were no consented groundwater takes mapped on the West Coast GIS website within 1 km downstream of the site with the closest downgradient bore to the application site being located at 2 Sids Road, Coal Creek, which is approximately 1.3 km to the west of the application site's western property boundary.

337. Overall, on the basis of the Applicant's expert evidence on the likely impacts of the discharge, Mr Cook considered there was no basis for declining the discharges as it would not be likely to result in community drinking water becoming unsafe for human consumption following existing treatment.

338. On this particular issue, if it cannot be said that it is "likely" the discharge will result in community drinking water becoming unsafe, that does not of course lead to a conclusion that the proposal is appropriate. The impacts on drinking water are subject to the full assessment which we have undertaken.

New Zealand Coastal Policy Statement

339. Both planners identified the New Zealand Coastal Policy Statement as potentially being relevant. Dr Durand considered that the significance of effects to the coast is likely to small.[156] Mr Cook agreed as he considered the significance of effects to the coast were likely to be of such a small extent that they would not engage the possibly relevant policies, including Policy 23.

[155] Brief of Evidence of Karl Peter Cook 18 August 2025 at para [6.14]
[156] Officer Report dated 12 August 2025 at para [118]

340. Overall we agree that the Coastal Policy Statement, while we have considered it, does not form a critical part of our decision-making process.

West Coast Regional Policy Statement

341. Mr Cook assessed the relevant provisions of the West Coast Regional Policy Statement. He identified Chapter 2 in relation to regionally significant infrastructure which is defined as including:

> *n) Public or community solid waste storage and disposal facilities.*

342. He considered it met the definition of regionally significant infrastructure noting that solid waste storage and disposal facilities were a significant resource management issue for the West Coast.[157]

343. In terms of Chapter 3 Resource Management Issues of Significance to Poutini Ngāi Tahu, Mr Cook identified the two objectives which seek to take into account the principles of the Treaty of Waitangi and to recognise and provide for the relationship of Poutini Ngāi Tahu and their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga. He identified that there were five supporting policies that recognise the importance of consultation and active involvement of tangata whenua in considering an application. Mr Cook advised that the Applicant's team had had ongoing engagement with Te Rūnanga o Ngāti Waewae and he considered that process and continuing the conversations was the most appropriate way to hear and recognise cultural values and take into account the principles of the Treaty of Waitangi.[158]

344. We noted earlier in this decision the concerns that Ngāti Waewae has.

345. Chapter 4 Resilient Communities, again was identified in Mr Cook's evidence. He identified Objectives 1, 2 and 3, and overall he considered that the proposed discharge to enable the ongoing operation of the "resource park" which, as noted earlier, he considered to be regionally significant infrastructure. He considered the presence of that supports a resilient community.

346. Again, Mr Cook addressed Chapter 6 Regionally Significant Infrastructure. He advised that there was one objective supported by eight policies which he considered the proposal aligned with. We have had regard to those matters identified. One of the issues related to the GDC wastewater treatment facility. Mr Cook advised that the lack of effects of the proposed discharge on the water treatment plant had been discussed in the application documents and the evidence of Mr Griffiths, but on the basis of that evidence he considered that the proposal does not contradict Policy 8.

[157] Brief of Evidence of Karl Peter Cook 18 August 2025 at para [7.3]
[158] Brief of Evidence of Karl Peter Cook 18 August 2025 at para [7.5]

347. Again in terms of Chapter 7 Ecosystems and Indigenous Biological Diversity, Mr Cook's position was based on the evidence of Ms Drummond, as was Chapter 8 Land and Water. He considered again that at the high level, based on the evidence of Ms Drummond, the proposed temporary discharge would be suitably managed and treated prior to entering the water to ensure the effects are mitigated and water quality and ecosystems maintained. He considered it to be consistent with Policy 1.

348. Overall we have had regard to the Regional Policy Statement. They do provide a helpful oversight but in the context of this application, we are of the view that the more specific plan provisions, and of course the actual and potential effects, are more relevant.

Regional Land and Water Plan

349. Mr Cook provided a helpful discussion in relation to Chapter 3 of the West Coast Regional Land and Water Plan. He advised that Chapter 3 seeks to ensure that adverse effects on the existing natural and human use values supported on land or by water bodies are avoided, remedied or mitigated.

350. Mr Cook considered the proposal to be consistent with the relevant objectives and policies as:

(a) it provided for the continued use of the land in a way that was sustainable and where all adverse effects can be mitigated;

(b) There was a lack of any significant effects and the natural and amenity values of the Grey River and Noname Creek would not be compromised;

(c) On the basis of Mr Broughton and Mr Berry's evidence, would not exacerbate or create a natural hazard;

(d) There was no evidence of a hydrological connection between the discharge and the water supply, again based on the evidence of Mr Berry, and as such he considered the proposed discharge will not have an adverse effect on the existing GDC water treatment plant (Policy 3.3.1(3)).[159]

351. Dr Durand addressed Objectives 3.2.2 and 3.2.3. Objective 3.2.2 seeks:

> *To protect water bodies from inappropriate use and development by maintaining and where appropriate enhancing their natural and amenity values including natural character and the life supporting capacity of aquatic ecosystems.*

352. Objective 3.2.3 seeks:

> *To maintain and where appropriate enhance the spiritual and cultural values and uses of significance to Poutini Ngäi Tahu.*

[159] Brief of Evidence of Karl Peter Cook 18 August 2025 at para [7.16]

353. Dr Durand identified Policy 3.3.1. This requires:

> *In the management of any activity involving water to give priority to avoiding, in preference to remedying or mitigating:*
>
> *(1) Adverse effects on:*
>
> (a) *The habitats of threatened species identified in Schedule 7A; and*
>
> (b) *Water supply values identified in Schedule 7B.*
>
> (c) *Spiritual and cultural values and uses of significance to Poutini Ngäi Tahu identified in Schedule 7C;*
>
> (d) *The significant natural character of wetlands, and lakes and rivers and their margins;*
>
> (e) *Outstanding natural features and landscapes;*
>
> (f) *Significant indigenous vegetation and significant habitat of indigenous fauna assessed in accordance with Policy 9.2 of the West Coast Regional Policy Statement;*
>
> (g) *Existing public access to and along lakes and rivers;*
>
> (h) *Significant historic heritage;*
>
> *(2) …*
>
> *(3) Adverse effects on existing lawful uses including regionally significant infrastructure.*

354. Policy 3.3.1(3) identifies adverse effects on existing lawful uses including regionally significant infrastructure and again subject to the priority to avoiding in preference to remedying or mitigating any adverse effects.

355. We do not recite each and every objective and policy identified by the planners. We confirm that we have had regard to them all.

356. Dr Durand considered Policy 3.3.1 to be significant. As noted above, this provides (relevantly):

> *In the management of any activity involving water to give priority to avoiding, in preference to remedying or mitigating:*
>
> *(1) Adverse effects on:*
>
> (a) *…*
>
> (b) *Water supply values identified in Schedule 7B.*
>
> *…*
>
> *(3) Adverse effects on existing lawful uses including regionally significant infrastructure.*

357. Dr Durand considered the policy was predicated on the following applying:

(a) That the activity seeking consent "involves water". He considered in this case it does, and we agree that is clear and not a matter in dispute. Again, there is no dispute that the discharge of water will have entrained contaminants. Dr Durand considered there was potential to affect the source water for the municipal water supply.

(b) He noted that the water supply value identified in Schedule 7B is implicated or regionally significant infrastructure is implicated – in this case the GRE001 is listed as a water supply value in Schedule 7B and the water supply network as a whole is regionally significant infrastructure that is lawfully established and used.

(c) That there is an adverse effect on that water supply value (meaning, as per s3, an adverse effect that may be *potential*, or one of *low probability but high impact*), or an adverse effect on the use of the infrastructure.

(d) That a decision can be made to avoid that adverse effect.

358. Dr Durand considered that all of the matters he identified applied and if we were to accept that, then our decision must give priority to avoiding adverse effects on the water supply. It was Dr Durand's opinion that "priority" could only be given by refusing consent.

359. We agree that this policy is of particular relevance to this application and have given it careful regard. GRE001 is listed as a water supply value in Schedule 7B, and we accept that the water supply network as a whole is regionally significant infrastructure. We also agree that there is a potential adverse effect on that infrastructure which albeit of low probability, is of high consequence.

360. We have considered all of the relevant objectives and policies identified by the planning experts. Most, if not all of them, are engaged to some degree in this application.

Sections 105 and 107 Considerations

Section 105

361. Section 105 provides:

> *If an application for a discharge permit or coastal permit is to do something that would contravene s15 or s15B, the consent authority must, in addition to the matters in s104(1), 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 alternative methods of discharge, including discharge into any other receiving environment.*

362. Dr Durand identified that the Applicant had considered possible alternative methods and locations of discharge but recorded his view that the assessment was inadequate.[160]

363. The AEE identified alternatives including reticulated network, trucking to GDC wastewater treatment plant, and discharge to surface water bodies. The AEE concluded no feasible alternatives currently exist to the proposed temporary discharge.[161]

364. Mr Schulte addressed this in his opening submissions correctly identifying that it is a matter that we must have regard to and referring us to the relevant evidence where possible alternative methods explored were discussed. He accepted there was clearly a degree of sensitivity in the receiving environment and the GDC water treatment plant must be considered as a highly sensitive receiver.[162] He advised that the reasons for the temporary discharge were plain to see, particularly the threat to infrastructure both on and off site if there was overtopping.[163]

365. Ms Taylor noted GDC confirmed that they would not accept the Applicant's discharge, and that it had explored discharge to land for irrigation with WCRC but that was not accepted as a viable option by WCRC.[164]

366. Ngāti Waewae addressed this issue in its submission, seeking clarification as to whether leachate reduction or treatment strategies implemented at other landfill sites, including systems capable of achieving higher treatment standards, had been evaluated. It also identified clarity as to whether there was an opportunity to treat leachate to higher levels so that it could be used for alternative purposes or potentially irrigated to land.

367. Mr Perrin-Smith's evidence on behalf of GDC recorded a concern that alternative solutions had not been adequately explored by the Applicant. He noted that the EPA abatement notice required the Applicant to redirect all collected leachate contaminants to an authorised lined storage facility with suitable holding capacity and to remove all water containing leachates to either an authorised lined storage facility with suitable holding capacity or to an authorised facility off site.[165] Mr Perrin-Smith considered that given the need for freeboard, the holding pond currently used did not have suitable holding capacity to manage the volume of water containing leachate and again noted that it did not appear that the Applicant had removed any of this to an authorised facility off site.[166]

368. Mr Perrin-Smith advised that GDC did not consider what is proposed to be an appropriate solution to the "Applicant's predicament". He identified what he considered to be reasonable alternatives being those originally directed by the EPA being:[167]

[160] Officer Report dated 12 August 2025 at para [105(i)]
[161] AEE 19 September 2024 at pages 24 and 36
[162] Legal Submissions on behalf of TRPL 3 September 2025 at para [39]
[163] Legal Submissions on behalf of TRPL 3 September 2025 at para [40]
[164] Brief of Evidence of Ellen Taylor for TRPL 19 August 2025 at para [44]
[165] Statement of Evidence of Kurtis Ryan Perrin-Smith 28 August 2025 at para [53]
[166] Statement of Evidence of Kurtis Ryan Perrin-Smith 28 August 2025 at para [54]
[167] Statement of Evidence of Kurtis Ryan Perrin-Smith 28 August 2025 at para [55]

(a) Constructing a second lined storage facility to increase capacity for storing leachate, potentially until the Applicant is able to appropriately manage its leachate through treatment;

(b) Removing the water containing leachates to an off-site facility. He confirmed that the wastewater treatment plant did not have capacity to accept the volumes of leachate waters at issue here and stated further that it could not be accepted when the nature of the contaminants remains unknown;

(c) Finally he identified potential use of additional storage devices such as the bladders that are presently being used.

369. Following the hearing, Dr Durand[168] again advised that s105 of the RMA requires decision makers to have regard to alternatives. He contended that an adequate assessment of alternatives is not before the Hearing and none has been proposed in the Applicant's proposed work program. He concluded that if the Panel is to adequately understand alternatives these will need to be developed and described by the Applicant.

370. In response, the Applicant undertook an assessment of leachate management options[169]. It assessed and scored each option for technical feasibility, logistical feasibility and sustainability criteria (Table 3). Options considered included do nothing, diffuse spraying of treated leachate across open ground, treatment via wetlands, discharge to ground and attenuation to ambient conditions, and direct disposal off-site.

371. The assessment concluded that managed discharge to ground with monitored attenuation (Option 4), is shown as the most balanced and preferable solution. The Applicant contends that Option 4 directly addresses immediate capacity issues and provides the ability to implement robust monitoring systems for control and verification. It further contends that this solution offers a defensible and lower-risk pathway than other options considered and can be implemented while a more permanent leachate treatment solution for the site is investigated.

372. We have had regard to the relevant matters in terms of s105. We have had regard to the Applicant's reasons, and particularly the sensitivity of the receiving environment with a focus on the GDC drinking water treatment plant.

Section 107

373. Section 107 provides for the restriction on grant of certain discharge consents. Very much by way of summary, we are unable to grant a discharge consent if, after reasonable mixing, the discharge (either by themselves or in combination with the same, similar or other contaminants of water) is likely to give rise to any of the specified effects. These include the production of conspicuous oil, grease films, scums and similar and whether it would render freshwater

[168] Memorandum of Dr Michael Durand, dated 9 September 2025, at paragraphs 9-10
[169] ENGEO Temporary Leachate Discharge - Alternative Options Assessment, dated 3 October 2025

unsuitable for consumption for farm animals, or whether there are significant adverse effects on aquatic life.

374. Section 107(2) provides that we may allow any of those effects if there are exceptional circumstances justifying the grant, or it is of a temporary nature, or is associated with necessary maintenance work and is consistent with the purpose of the RMA to do so.

375. Again this was addressed in the AEE. Dr Durand addressed this briefly in his report noting that the principal concern around the application, being that the discharge may affect the GDC drinking water supply, was outside the scope of s107.[170]

376. Mr Cook considered the proposed discharge from the retention pond would be designed to ensure that it did not give rise to the relevant effects in s107.

377. Overall, and having considered the evidence on this issue, we do not consider there is anything in s107 which would prohibit us from granting the consent. We agree with Dr Durand that the principal concern, being the GDC drinking water, is outside of the scope of s107.

Part 2 Assessment and Overall Conclusion

378. The AEE contained a limited discussion on Part 2 matters. It identified s5; s6 – matters of national importance; s7 noting those matters included kaitiakitanga, the efficient use of natural and physical resources, the maintenance and enhancement of amenity values, and maintenance and enhancement of the quality of the environment.

379. It further identified s8 as it then was in relation to taking into account the principles of the Treaty of Waitangi. It concluded that as the proposal would *"have no adverse effects, and accords with the relevant RLWP objectives and policies, it is considered that the proposal will not offend against the general resource management principles set out in Part 2 of the Act"*.[171]

380. Dr Durand discussed the Court of Appeal decision in *RJ Davidson Family Trust v Marlborough District Council* and summarised that decision as finding it necessary to consider Part 2 in making decisions on consent applications, where it is appropriate to do so and that "appropriate" depends on the planning documents in question.[172] He noted that the Court of Appeal stated that consent authorities should continue to undertake a meaningful assessment of the objectives and policies of the relevant plan and where those documents have been prepared having regard to Part 2 of the RMA, and with the policies designed to achieve clear environmental outcomes, consideration of Part 2 is not likely to be necessary as *"genuine consideration and application of relevant plan considerations may leave little room for Part 2 to influence the outcome*".[173]

[170] Officer Report dated 12 August 2025 at page 23
[171] AEE at pages 23 and 24
[172] Officer Report dated 12 August 2025 at para [220]
[173] Officer Report dated 12 August 2025 at para [221]

381. Overall he was satisfied that with respect to the activity being considered, the policy documents give effect to Part 2 and he therefore made no specific Part 2 assessment.

382. Mr Schulte addressed the application of Part 2 in his opening submissions. He advised that s104 considerations are made subject to Part 2. He submitted that what this means in the aftermath of the *King Salmon* decision, where recourse to Part 2 and planning documents was prescribed, was determined in the case of *Davidson Family Trust v Marlborough District Council*. He summarised the *Davidson* case[174] as confirming that the words "subject to" mean what they say. Recourse can and in some cases must be had to Part 2 but the Court also observed that resource to Part 2 may add little to the consideration where policies promulgated to "give effect" to Part 2 are in place.

383. He submitted that possibly the key takeaway was that Part 2 should not be used to revive an application that up-to-date plan provisions deemed unacceptable.[175] He submitted that given the position that TRPL's application assumes in respect of the modelled absence of adverse effects (subject to conditions), and the fact that the relevant standards, plans, policies and rules do not, in those circumstances, militate against the grant of consent, it is unlikely to be the case that Part 2 would lead to a different outcome and accordingly a decision to grant consent is more likely than not to advance the sustainable management purpose of the RMA.[176]

384. We accept there is little benefit from a "traditional" Part 2 analysis. The relevant planning documents appear to largely capture the matters of national importance and the relevant s7 matters. As we addressed in the body of this decision, we heard from Te Rūnanga o Ngāti Waewae and have considered their kaitiaki responsibilities. These were described in the submission as responsibility to manage, protect and enhance where degraded natural resources within its takiwā. We have recognised its relationship with, in this context, the water, and have had particular regard to kaitiakitanga.

385. Overall, having considered all of the submissions and evidence and the relevant documents provided, we consider that there remains a degree of uncertainty as to the actual and potential effects on the GDC drinking water sources in particular. We find that there is uncertainty in relation to the contaminant modelling undertaken by the Applicant and relied on to calculate appropriate discharge concentrations that are protective of the sensitive offsite receptors, including the GDC water supply. We are not satisfied that the trigger levels at points of discharge proposed by the Applicant can be relied on to ensure the effects on the GDC water supply can be avoided, remedied or mitigated.

386. We accept the GDC evidence that adverse effects on the GDC water supply are potentially very significant and as noted, that is exacerbated by the presence of PFAS compounds within the source area for the GDC water supply. We find that the likelihood of contamination of the

[174] *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316 (CA)
[175] Legal Submissions on behalf of TRPL 3 September 2025 at para [94]
[176] Legal Submissions on behalf of TRPL 3 September 2025 at paras [96] and [97]

GDC water supply is low but that the potential impacts are high. The GDC evidence was clear in that regard. Its importance was not disputed.

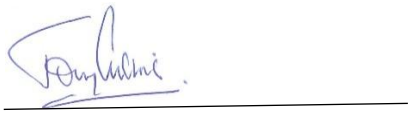
387. We consider there are potentially effects on cultural values that are more than minor. Overall, having carefully considered the submissions, evidence and all the relevant materials provided, including the relevant Part 2 matters, we find that the relevant objectives and policies of the statutory documents, and purpose of the RMA, are better met by declining this consent.

388. As we identified earlier in this decision, our decision is determining this specific application on the evidence and documents provided. It should not, in any way, be taken as predetermining likely outcomes of the comprehensive consents now before Council.

Overall Decision

389. For the above reasons, the application is **declined** pursuant to ss104 and 104B of the Resource Management Act 1991.

David Caldwell
Hearing Commissioner (Chair)



Anthony Cussins
Hearing Commissioner

Dated: 20 November 2025