

BEFORE THE SOUTHLAND REGIONAL COUNCIL

APP-20191339

IN THE MATTER OF of the Resource Management Act 1991

AND

IN THE MATTER OF of resource consent applications by Alliance Group Limited to take water and to discharge treated wastewater to enable meat processing at the Mataura Plant, Mataura

STATEMENT OF EVIDENCE BY JOHN KYLE

16 NOVEMBER 2020

1. INTRODUCTION

- 1 My name is John Clifford Kyle.
- 2 I hold an honours degree in Regional Planning from Massey University, obtained in 1987. I am the Managing Director of the firm Mitchell Daysh Limited, which practices as a planning and environmental consultancy throughout New Zealand.
- 3 I have been engaged in town and country planning and resource management for more than 30 years. My experience includes a mix of local authority and consultancy resource management work. Since 1994, I have been involved with providing consultancy advice with respect to regional and district plans, designations, resource consent applications, environmental management and environmental effects assessments. This work includes extensive experience with large-scale consenting projects involving inputs from multi-disciplinary teams. An outline of projects in which I have been called upon to provide resource management advice in recent times is included as **Appendix A**.
- 4 My involvement in the consent applications for the ongoing operation, upgrading and maintenance of Alliance Group Limited (Alliance) Mataura Processing Plant (the Plant) commenced in 2017, when my firm was asked to undertake a planning assessment and then later to assist in the preparation of the Assessment of Environmental Effects (AEE) for the various consents being sought. I have visited the Plant on numerous occasions, and I am familiar with the processing operations and wastewater treatment plant.
- 5 I have also assisted Alliance with obtaining consents for its Pukeuri and Lorneville Plants. I have provided resource management planning advice to the company to assist a number of its other operations around New Zealand from time to time. Elsewhere in the rural processing sector, I undertake similar work for Silver Fern Farms, Blue Sky Meats and Ravensdown.
- 6 I am familiar with the relevant operative and proposed Regional Plans and District Plans that apply, and I have been involved in the appeals relating to the Proposed Land and Water Plan for Southland.
- 7 In preparing this evidence I have reviewed:
 - a. The applications and the associated technical reports that assist to make up the Assessment of Environmental Effects;

- b. The statements of evidence of all of the other witnesses giving evidence on behalf of Alliance;
 - c. Submissions made with respect to the applications; and
 - d. The technical review reports and s42A report commissioned by Environment Southland.
- 8 I attended the Pre-Hearing meeting that was convened with respect to the application and held in Invercargill on 30 September 2020.
- 9 Whilst I appreciate that this is not a case before the Environment Court, I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2014. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

2. SCOPE OF EVIDENCE

- 10 I have been asked by Alliance to prepare planning evidence in relation to the Mataura applications. I intend to focus my evidence on the key issues that relate to the applications and provide comment on these matters in light of the relevant statutory planning documents and requirements of the Resource Management Act 1991 (**RMA**).
- 11 A detailed evaluation of the activities against the various statutory provisions, policy statements and plans has been provided as part of the Assessment of Environmental Effects (**AEE**) at sections 12 and 13. Mr Mayhew also provides a detailed assessment of the relevant policy statements and plans at sections 3.4 to 3.10 of his report. I consider these assessments to be comprehensive and, in many respects, Mr Mayhew and I are in agreement with respect to a number of key matters. For this reason, I do not intend to repeat the assessment undertaken in sections 12 and 13 of the AEE again. I note for completeness that the analysis carried out there confirms the proposal is consistent with the relevant national and regional objective and policies and I agree with that conclusion.
- 12 Since filing the applications however, a new National Policy Statement for Freshwater Management (**NPS-FM 2020**) has come into effect, and the Environment Court has issued interim decisions on the Proposed Southland Water and Land Plan (**Proposed Plan**). As I address the key issues, I have regard to the most relevant and up to date provisions and assessment matters from this policy statement and the plan.

13 I have referred to the Report on the Pre-Hearing Meeting, dated 30 September 2020 in order to understand the key issues pertaining to the applications. In preparing for this Pre-Hearing the applicant, submitters and the Council were asked to identify key issues associated with the applications before the panel. These are set out at paragraph 4 of that report. In my opinion, the issues identified by the various participants are those that are directly relevant to the determination of the applications before the panel. For this reason, I have used this to guide the way I have set out this evidence. A summary of the matters which were identified and those that I will address in this evidence are as follows:

1. Resource Consents Sought by Alliance and Activity Status.
2. Emerging Regional Plan Provisions.
3. Implications of the NPS-FM 2020.
4. Consideration of Alternatives / Best Practicable Option.
5. Wastewater Discharge Volume.
6. Wastewater Treatment Upgrade Timeframes and Review.
7. Consent Term and Reviews.
8. Other Cultural Matters.

14 My colleague, Mr Low, has prepared evidence which provides an overview of the consents being sought, the key effects that arise as a result of the activities for which consents are sought and how those effects are proposed to be mitigated via the imposition of consent conditions.

3. RESOURCE CONSENTS AND ACTIVITY STATUS

15 The following resource consents were sought by Alliance:

- a. A water permit to take and use up to 21,200 m³/day of water from the Mataura River for condenser cooling water purposes;
- b. A discharge permit to discharge up to 21,200 m³/day of condenser cooling water to the Mataura River;
- c. A water permit to take and use up to 8,000 m³/day of water from the Mataura River for meat processing and truck washing purposes;

- d. A discharge permit to discharge up to 8,000 m³/day of treated wastewater to the Mataura River;
 - e. A land use consent to use an existing weir and hydro race structure in the Mataura River; and
 - f. A water permit to dam and divert water using the existing weir and hydro race structure.
- 16 An assessment of the relevant rules in the Operative and Proposed Plan which apply to these activities is contained in the two AEE documents lodged in support of applications for the above consents and in Table 2 of Mr Mayhew's s42A report.
- 17 In my assessment relevant rules which apply to each activity are clear with the exception of those which apply to the weir, and overall I agree with Mr Mayhew that the consents required are a non-complying activity.
- 18 I have a different view on the relevant rules which apply to the weir related activities insofar as they relate to the process and cooling water abstractions.
- 19 As described in the AEE and Mr Mayhew's s42A report the weir and hydro race structure have been in place for more than 100 years, and most of the water which enters the hydro race is diverted through a hydroelectricity turbine before being returned to the river immediately downstream of the Mataura Falls. Water permits¹ (AUTH-20171566-01 AUTH-20171566-02) were granted following a hearing process in 2018 and authorise the damming and diversion using the weir and hydro race, and the operation of the hydro-electricity turbine until 1 November 2026 subject to a range of conditions.²
- 20 Of note, during the resource consent hearing for the hydro consents it was identified that a s13 RMA land use consent to use the weir might have been required alongside the s14 RMA water permit which was sought and granted for the activity. This was highlighted in the Commissioners decision on the hydro consents and it was agreed that that the matter may need to be resolved at a later date and, in the event it is found that a land use consent is needed for the weir, it could (and would) be applied for separately.³

¹ RMA Section 14.

² A separate consent with the same expiry date authorizes the damming and diversion of water in this same manner (also via the existing weir) to enable the operation of the hydroelectricity turbine on the other side of the river.

³ Report and Decision of Independent Hearings Commissioner Hearing held in the Council Chambers, Environment Southland, Invercargill on 3 December 2018. Paragraphs 21 – 24.

- 21 Resource consents were sought by Alliance as part of this package of applications to continue using the weir and hydro race to dam and divert water in this manner following 1 November 2026 to provide it certainty it could continue to use the weir to dam and divert water to facilitate its process water and cooling water abstractions for the life of the consents being sought now. This included the s13 RMA land use consent.
- 22 My Mayhew has questioned this approach, considering it not consistent with sound resource management practice to provide for a consent with a duration that ‘leap-frogs’ the two hydro-generation consents. In turn he has recommended that the consents sought for the use of the weir be granted a term which aligns with that on the hydro consents so the future use of the weir can be assessed at that time in an integrated manner.⁴
- 23 I agree with Mr Mayhew’s analysis of Permitted Activity Rule 60(ab) in the Proposed Plan, and that when it becomes operative the s13 land use consent to use the weir will be a permitted activity.⁵ As this will likely occur between now and when the hydro consents expire in 2026 in my view the shorter term suggested by Mr Mayhew for the s13 land use consent makes no difference here as after that date the use of the weir will be a permitted activity.
- 24 However, in my view no RMA s14 water permit is required to use the weir to facilitate the abstraction of water for cooling and processing purposes. Until 2026 the diversion of water is covered by the existing RMA s14 water permits granted for the hydro scheme. Once Rule 60(ab) becomes operative (which will occur before that date) it will cover any damming aspect of the activity. The only diversion here is for the hydro scheme insofar as it diverts water out of the water race and through a hydroelectricity turbine before returning it to the river downstream of the falls. The abstraction of water for cooling and processing purposes is not contingent on that diversion occurring, and the abstraction could continue to occur if the hydro scheme, and its associated diversion, were to cease operating in 2026.

4. EMERGING REGIONAL PLAN PROVISIONS

- 25 In 2016 the Council prepared its Proposed Plan. Hearings were held in 2017 and a decision version of the Plan was released in 2018. Various appeals were filed, and the formal Environment Court hearing process is underway. To date, the Court has

⁴ Mr Mayhew, Section 4.2.2, pages 110 – 111.

⁵ Mr Mayhew, Table 2 and footnote 5.

released four interim decisions. These decisions deal predominately with the objectives of the Plan, with appeals on the policies and rules yet to be heard. Where appropriate I refer to these Court ratified objectives later in this evidence.

5. IMPLICATIONS OF THE NPS-FM 2020

26 As explained in section 3.6.1 of Mr Mayhew's report, a new NPS-FM came into effect on 3 September 2020. There was no assessment of this document in the AEE as it post-dates lodgment. However, under section 104(1)(b)(iii) decision makers must have regard to this new NPS-FM when considering the applications and submissions received.

27 The NPS-FM provides national direction for the management of freshwater under the RMA. The guidance material that has been prepared by the Ministry for the Environment in support of the NPS-FM 2020 explains that it:

Provides national direction which regional councils translate into action on the ground through their regional policy statement and regional plans, and city and district councils through their district plans. The NPS-FM 2020 requires every regional council, in consultation with its community, to develop a plan for maintaining or improving the state of freshwater in the region. There are a number of compulsory values and attributes (measures of the state of a river or lake) that must be met, and communities can choose to go above and beyond these. Regional councils must notify their new or amended plans giving effect to the NPS-FM 2020 by 31 December 2024. The timeframe for action to achieve attribute target states is a long-term process set by councils in consultation with their communities.⁶

28 It is evident that the obligations inherent within the NPS-FM 2020 are directly targeted at regional councils in terms of its ultimate implementation and delivery of key outcomes and targets, rather than specifically directed at those determining resource consents. It is however a relevant matter to this resource consent application insofar as the activities should be compatible with, and certainly not undermine the ultimate ability for the council to implement its obligations under the NPS-FM 2020. The objective and policies of the NPS-FM 2020 need to be considered in this light in my view.

29 The overriding objective of the NPS-FM 2020 is to ensure:

⁶ <https://www.mfe.govt.nz/sites/default/files/media/Fresh%20water/essential-freshwater-overview-factsheet.pdf>

That natural and physical resources are managed in a way that prioritises:

- (a) First, the health and wellbeing of water bodies and freshwater ecosystems;*
- (b) Second, the health needs of people (such as drinking water)*
- (c) Third, the ability of people and communities to provide for their social, economic, and cultural well being, now and in the future.*

- 30 Dr James explains that water quality within the Maitava River is currently affected by a number of point (generally municipal and industrial processing) and an extensive array of non-point (generally farmland runoff derived) discharges. These discharges combined with historical modifications and land use activities in and adjacent to the river mean that overall water quality is currently low.
- 31 The water quality assessment accompanying the Alliance application identifies that the Maitava River is degraded in terms of the nitrogen levels present, periphyton reflects moderate to high enrichment at times, and MCI and QMCI data are representative of fair to poor (but occasionally good) ecosystem health. Toetoes Estuary also continues to degrade with extensive macroalgal growth driven by very high nutrient loads from the catchment. While there is no evidence suggesting the Plant's discharge has a direct adverse effect on these stressors downstream of the discharge, it does consistently contribute to the overall loads of Amm-N and TN downstream of the discharge.
- 32 For this reason and as it has been explained by other witnesses, Alliance has committed to further improve the quality of its wastewater discharge as part of this consent, and is committed to a major upgrade in the wastewater treatment system which will yield a significant reduction in these contaminant loads. This directly aligns with achieving the first priority of this objective. I address the timing of this upgrade later in this evidence.
- 33 The upgrade to the wastewater treatment plant will only likely result in an improvement in water quality to a confined area of the river, and any wider observable or meaningful improvement will only accrue when other actions are taken to achieve better water quality outcomes throughout the catchment. Put another way, any short term improvement effort made on the part of Alliance would be difficult to detect within the wider river environment and the estuary, and a catchment wide effort is necessary to yield meaningful water quality improvement. Again, I return to this matter later in this statement.
- 34 The lower Maitava River also contains high levels of *E.coli* and the Plant's discharge significantly increases those levels in the receiving water downstream of the Plant.

- 35 Dr Dada has addressed this issue, both in his report which formed part of the application, and in evidence. He explains that the nature of the pathogens in the discharge are not of a type that will cause a significant health risk to a person swimming below the Plant. He concludes that the risk of a person becoming ill due to the Plant's discharge is well below 1%, which is considered acceptable from a risk management perspective. On behalf of the council, Dr Poore suggests that caution is needed around the conclusions of the Quantitative Microbial Risk Assessment (QMRA) study, undertaken by Dr Dada. She cautions that it is very complex and few such studies on animal wastewater and impacts on human health have been conducted. Dr Dada has addressed these concerns directly in his evidence and I leave it to him to elaborate.
- 36 It also appears the Plant's discharge is not having an adverse impact on people's use of the river for recreation purposes as set out in the Recreational Assessment attached to the AEE.
- 37 Notwithstanding this evidence, Alliance recognises there is a need to reduce the levels of *E.coli* in its discharge as part of catchment-wide initiatives to improve water quality. This will occur following the planned installation of the UV treatment plant required by the proposed conditions, which is expected to reduce the *E.coli* levels in the Plant's wastewater discharge by more than 99%.
- 38 The proposed upgrades align with the NPS-FM objective to prioritise the natural health and wellbeing of the Mataura River and the health needs of those people that come into contact with the waters of the river.
- 39 In recognising the third priority of this objective, the Plant is strategically important to Alliance. The Plant is a significant employer in the Mataura township and wider Southland region and provides an essential service to the primary sector. From a cultural perspective, Alliance has committed itself to a close working relationship with Hokonui Rūnanga as is further described below.
- 40 The NPS-FM 2020 contains 15 policies. Those of relevance are identified in Mr Mayhew's report so I do not repeat them here. For the reasons set out below I consider the proposal to be consistent with the policy requirements in the NPS-FM.
- 41 Te Mana o te Wai refers to the vital importance of water. When managing freshwater, it ensures the health and well-being of the water is protected and human health needs are provided for before enabling other uses of water. This is reflected in the overriding objective of the NPS-FM 2020 as discussed above, and in my view, it means something broader than tangata whenua involvement, though

this is an important element as I discuss below. The guidance material that has been prepared by the Ministry for the Environment further explains that:

It expresses the special connection all New Zealanders have with freshwater. By protecting the health and well-being of our freshwater we protect the health and well-being of our people and environments. Through engagement and discussion, regional councils, communities and tangata whenua will determine how Te Mana o te Wai is applied locally in freshwater management.

- 42 Te Mana o te Wai imposes a hierarchy of obligations which is reflected in the objective of the NPS-FM 2020. Giving effect to Te Mana o te Wai also imposes an obligation on the council to action the five key requirements of Te Mana o te Wai, which are:
- a. Actively involve tangata whenua in freshwater management;
 - b. Enable the application of a diversity of systems of values and knowledge, such as matauranga Maori, to the health and well being of water bodies and freshwater systems;
 - c. Apply the hierarchy of obligations when implementing the NPS-FM;
 - d. Engage with communities and tangata whenua to identify long term visions, environmental outcomes, and other elements of the NOF;
 - e. Adopt an integrated approach, ki uta ki tai, to the management of freshwater.⁷
- 43 With regard to the first principle, it is evident as discussed by Mr Hailes that Alliance recognises that Ngāi Tahu exercises tino rangatiratanga over the Mataura River and its catchment as the Treaty partner and mana whenua have kaitiaki responsibilities to manage the Mataura River for intergenerational outcomes. It is also recognised that the Mataura River Statutory Acknowledgement Area, Mataura River Mātaitai Reserve, Te-Au-Nui-Pihapiha-Kanakana (the Mataura Falls) and Tuturau are areas of high cultural significance. In this regard Alliance has sought to actively engage with Hokonui Rūnanga Incorporated (Hokonui Rūnanga) with regard to this application. Cultural impact statements have been prepared to also assist inform Alliance's understanding of key issues.
- 44 These processes have identified that the maintenance and improvement of habitat for mahinga kai and taonga species and managing them within the Mataura River

⁷ <https://www.mfe.govt.nz/sites/default/files/media/Fresh%20water/essential-freshwater-te-mana-o-te-wai-factsheet.pdf>.

Mātaaitai Reserve and downstream is a priority in order to support resilient and abundant populations suitable for customary harvest.

- 45 This engagement is ongoing and while I accept that how the proposal will affect the cultural and spiritual values of the Mataura River is for Hokonui Rūnunga to speak directly on, I understand that discussions between the parties have been fruitful in assisting to further establish an enduring relationship between Hokonui and Alliance. A collaborative approach to managing the river, Alliance's activities and ongoing monitoring is a key component of this agreement. An example of the type of management processes being discussed is a jointly operated/managed trap and transfer programme for tuna and kanakana over the weir, and enhancement of riparian margins near the Plant.
- 46 With regard to the health and wellbeing of the water body, the NPS-FM 2020 identifies 'ecosystem health' and 'human contact' as compulsory values the catchment must be managed for. The NPS-FM includes additional and amended water quality parameters (compared to the 2014/2017 version) which are relevant to the Mataura River. These parameters include an amended national bottom line for ammoniacal nitrogen.⁸
- 47 Dr James confirms that that the existing discharge is not having an adverse effect on downstream water quality such that life supporting capacity or ecological values are compromised. However, a cumulative catchment degradation issue is present due to nutrient enrichment to which the Alliance discharge contributes. This includes high DIN and DRP concentrations in the main stem of the Mataura River, and Toetoes Estuary experiencing eutrophication symptoms due to excessive nutrient inputs, particularly TN.
- 48 To improve the health of the river and the Toetoes Estuary requires reductions in nutrient concentrations and loads throughout the catchment. DIN and DRP levels are either the same or only slightly different upstream and downstream at present and the contribution of the load from Alliance's discharge to the Estuary is less than 1.7% for nitrogen and less than 1.3% for phosphorus of the total catchment inputs. Alliance's experts assess this as comprising a small contribution. Conversely, Mr Mayhew and Dr Wilson seem to regard this as being "disproportionately high" when compared to other catchment and land use activities.⁹ In my view the quality of the estuary is clearly being impacted by the cumulative impacts of non-point and point source discharges throughout the catchment. Although Alliance is proposing to improve the quality of its discharge to the Mataura River, there is agreement

⁸ Appendix 1.

⁹ Page 31, Section 42A Report.

amongst the experts that this is only expected to have a localised improvement, and in order to see an improvement in the quality of the estuary, a whole of catchment improvement is necessary.

- 49 It is evident to me that Alliance is committed to doing its part in this regard, and in order to achieve a reduction Alliance proposes to install new treatment infrastructure. The planned improvements will significantly improve the quality of the discharges from the Plant. Taking into account dilution rates and water flows in the river, achieving these discharge limits is also expected to ensure that the discharge will align with future catchment limits and outcomes under the NPS-FM. I say more about this later in my evidence.
- 50 A comprehensive monitoring programme is also proposed that will address the limits set in the conditions of consent in the discharge and monitor key parameters of water quality upstream and downstream to ensure and demonstrate that the discharge is not affecting river health. This monitoring data will be also be useful to inform the BPO review requirements also discussed below.
- 51 The results of the benthic invertebrate community monitoring over many years also indicates that the current water take and the discharge from the Plant do not adversely affect these values. Fish migration also appears to be occurring as the river is host to a large population of brown trout and the native fish population is assessed to be healthy.
- 52 The abstraction of water from the hydro-race has the potential to entrain juvenile fish. It is proposed that all the intakes that are currently fitted with 5–6 mm screen mesh be fitted with <3 mm screens to further reduce the potential for entrainment and to meet best practice standards for screening intakes.
- 53 Mr Mayhew's report includes a detailed analysis of Policy 7¹⁰ of the NPS-FM (which seeks to avoid the loss of river extent and values), and Clause 3.24 which requires regional councils to insert a similar policy requirement into regional plans. Mr Mayhew's opinion which is supported by a legal opinion from Wynn Williams, is that these provisions should be interpreted as applying to all activities that may adversely affect the extent and values of rivers, including discharges as well as reclamation, drainage and in-stream structures, and are therefore relevant to these applications. I address this matter in more detail later in this evidence.
- 54 The NPS-FW 2020 also places new obligations on the council to manage fish passage in relation to existing structures. With respect to the Mataura River and the

¹⁰ *The loss of river extent and values is avoided to the extent practicable.*

existing weir, it will require the council to prepare an action plan in order to achieve the following objective:

*The passage of fish is maintained, or is improved, by instream structures, except where it is desirable to prevent the passage of some fish species in order to protect desired fish species, their life stages, or their habitats.*¹¹

55 As I have discussed earlier in this evidence, Alliance obtained consent in 2018 to continue to operate its hydroelectricity activity at the Plant. This included a damming and diversion consent and the issues relating to the use of the weir were canvassed in detail there. A number of conditions were imposed on that consent. They require the consent holder to maintain a fish ladder across the weir structure and review its function, and prepare and implement a trap and transfer system.¹² This requirement is reflected in the proposed conditions of the consents that are being sought now.¹³ I understand that the trap and transfer system that is being proposed is consistent with ‘best practice’ and commonly used in other parts of New Zealand¹⁴. This is also not considered to be an essential mitigation measure, and rather its use in this situation would enhance upstream migration.

56 The fish ladder is located below the apex of the of the broad crested weir. It was understood this was initially installed to provide for salmonid fish passage. Condition 6 of the relevant hydro related consents¹⁵ required Alliance to review the existing fish ladder to assess whether the fish ladder adequately provides for the upstream passage of salmonids that would normally migrate past this point in the river. Findings of the inspection were included in the Maitara River Weir, Fish Ladder Inspection Report¹⁶ and it was found to function as intended.

6. ALTERNATIVES / BEST PRACTICABLE OPTION

57 Whether the proposed approach to managing the effects of the wastewater discharge from Alliance’s site at Maitara comprises the best practicable option (**BPO**) has been raised in submissions and in the technical reviews commissioned by the council. It was also a matter discussed at the Pre-Hearing. I note at the outset that in my experience with determining the BPO in a given set of circumstances, the words ‘BPO’ do not mean the best option, the best technical option, the best economic option, or the best environmental option. Nor do they require adherence

¹¹ Section 3.2(1) NPS-FM 2020.

¹² Conditions 6 and 7 - 13 of AUTH-20171566-01 and AUTH-20171566-02.

¹³ Condition 44 of the Discharge of Wastewater consent (as part of the Kaitiaki Plan).

¹⁴ Condition 7 of the Land Use Consent and Water Permit to Use an Existing Weir.

¹⁵ AUTH-20171566-01 and AUTH-20171566-02.

¹⁶ Freshwater Solutions, 2020.

to what might be considered “best practice”. A judgement needs to be made as to what is practicable and proportionate to the risks likely from a contaminant to be discharged. The key word is **practicable** and in my opinion resource consents should not be granted requiring adherence to an option that would be prohibitively expensive or involve procedures that are unnecessarily onerous or impractical as that would go beyond what the section 108(2)(e) obligation requires.

- 58 The Assessment of Environmental Effects (**AEE**) concluded that Alliance’s proposed approach to managing the current and future discharge to the Maitava River is consistent with achieving BPO. Section 10 of the AEE describes why this conclusion has been reached. Mr Khan has addressed this matter in his evidence.
- 59 Section 10 of the AEE assesses a range of available alternative management and treatment options for the Plant and evaluates their efficacy in terms of the BPO. Options incorporating continued discharge to the Maitava River, irrigation to land, or a dual discharge combination, and discharge to trade waste are considered. Of the assessed long list options, those incorporating significant risk and uncertainty, and substantial lifecycle costs were removed from further assessment. In my experience, this is consistent with good practice, when evaluating options in the light of BPO assessment.
- 60 Section 10 of the AEE assesses a number of “short listed” options and concludes that land based discharge and dual discharge options should be discounted. It further concludes that further treatment should be applied to the wastewater discharge via two upgrades (disinfection and biological treatment) in order to meet BPO obligations.
- 61 Several submitters and Environment Southland’s technical advisors¹⁷ have questioned whether the finding of this assessment is sufficiently robust or have sought further information to provide greater confidence that the BPO has been appropriately evaluated. Further clarification has been sought as to why alternative land-based options have not been further pursued.
- 62 For example, the 4Sight review report sets out that:

From a water quality, and cultural perspective (as the Maitava River is attributed significant value by iwi), and given the location of the Toetoes Wetland downstream (which is a Ramsar site), and considering national and

¹⁷ 4Sight Consulting Ltd.

*regional objectives to improve water quality, avoiding a river-based discharge altogether should be the most preferred option.*¹⁸

63 This is perhaps not surprising given that there is an expressed preference in the Operative and Proposed Regional Plans, and Te Tangi a Taurira - The Cry of the People (the relevant iwi management plan) for wastewater to be discharged to land rather than directly to water.¹⁹

64 Policy 14²⁰ of the Proposed Plan expresses this as follows:

Prefer discharges of contaminants to land over discharges of contaminants to water, unless adverse effects associated with a discharge to land are greater than a discharge to water. Particular regard shall be given to any adverse effects on cultural values associated with a discharge to water.

65 Similarly, Ngā Kaupapa – Policy 6 of the Te Tangi a Taurira: Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan, states:

Avoid the use of water as a receiving environment for the direct, or point source, discharge of contaminants. Even if the discharge is treated and therefore considered “clean”, it may still be culturally unacceptable. Generally, all discharges must first be to land.

66 Policies 7 and 8 of Ngā Kaupapa temper this policy somewhat by stating:

7. *Assess waste disposal proposals on a case by case basis, with a focus on local circumstances and finding local solutions.*
8. *Wastewater disposal options that propose the direct discharge of treated or untreated effluent to water need to be assessed by the kaitiaki rūnanga on a case by case, individual waterway, basis. The appropriateness of any proposal will depend on the nature of the proposal, and what waterway is involved. Individual waterways possess their individual mauri and values, and kaitiaki Rūnanga are in the best position to assess the potential impacts of a proposal on such values.*

¹⁸ 4Sight Consulting Ltd, Technical Review – Mātaura Processing Plant Resource Consent Applications; June 2020; Section 5.1; Page 9.

¹⁹ For example:
Southland Regional Policy Statement - Policy WQUAL.8.
Operative Regional Water Plan – Policy 7.

²⁰ This policy has been appealed by Alliance Group Limited and is yet to be determined by the Environment Court.

67 Policy 16A of the Proposed Plan applies to industrial and trade processes and is consistent with section 108(2)(e) of the Act. It states:

Minimise the adverse environmental effects (including on the quality of water in lakes, rivers, artificial watercourses, modified watercourses, wetlands, tidal estuaries, salt marshes and groundwater) by requiring the adoption of the best practicable option to manage the treatment and discharge of contaminants derived from industrial and trade processes.²¹

68 In the light of the policy backdrop outlined above, it is my opinion that determining BPO in this case should include a detailed and robust assessment of land disposal options. In fact, the preference to discharge to land should exert a significant influence over the way the BPO is ultimately determined, and such options should only be dispensed with if they are genuinely inferior when the defined BPO considerations are applied. For this reason, Alliance asked Mr Khan to revisit his earlier findings with respect to the discharge and whether there might be a land disposal option that comprised the BPO.

69 As Mr Khan states in his evidence, he and his firm have re-evaluated the available land disposal options and options whereby the Alliance discharge might be accepted for treatment and discharge by the Gore District Council (**GDC**) under a trade waste agreement.

70 With respect to land disposal, Mr Khan concludes that this remains a far less practicable option when compared with the proposed discharge option for the following reasons:

- a. The land that is in reasonable proximity to the Plant does not contain soils that would allow sustainable wastewater irrigation on an all year round basis. Most soils are poorly drained and are thus constrained in terms of their utility for irrigation of wastewater, particularly in the cooler months when evapotranspiration rates are low.
- b. There is a risk of significant direct run-off and potential high nitrogen leaching if the identified land is utilised on an ongoing basis.
- c. Winter irrigation is not practicable and would require the construction and use of a large winter storage facility. This increases a level of risk in relation to management of nutrient levels in the stored treated wastewater and would be

²¹ This policy has been appealed by various parties and has yet to be determined by the Environment Court.

likely to generate significant odour risk and have significantly higher capital costs.

- d. Discharge options which discharge to land in warmer months and the river in the cooler months present considerable practical difficulties due to the fact that the Mataura Plant processes during winter and winter processing rates are high, compared to other meat processing plants. I note here that this schedule is somewhat unconventional for a meat processing plant which in other circumstances would have higher demand during the spring/summer. Wastewater management would necessitate prior treatment and the obtaining of suitable irrigable land which adds a significant capital cost when compared to the management option identified in the application as comprising the BPO.

71 As indicated above, a trade waste discharge option has also been re-assessed. In undertaking this assessment Mr Khan has examined both the Mataura and Gore Wastewater Treatment Plants. Mr Khan's evidence shows why disposal to either the Mataura or Gore systems is impracticable. The Mataura system would require a wholesale upscaling in treatment capacity. Applications are currently being prepared to consent the Gore treatment system discharge. From my own review of available documentation, the GDC has significant upgrade work to complete in order to deal with the current demands that are being placed on that system. The estimated cost of this upgrade is between \$46 million and \$61 million. This upgrade is expected to achieve a treated wastewater total nitrogen concentration of 10 - 20 mg/L. This is similar to the level of treatment proposed in the preferred option being proffered by Alliance in this case. This option would also not result in a different receiving environment as the discharge would ultimately end up in the river. I also understand that the GDC BPO assessment has not identified any realistic land disposal options for its discharge.

72 Mr Khan has also provided advice on the alternative treatment methods and technology that could be utilised to improve the discharge quality at the Alliance Plant. As discussed by him, the following options were considered:

1. Anaerobic treatment
2. Activated sludge system and clarifier
3. Sequencing Batch Reactor (SBR)
4. Membrane Bioreactor (MBR)
5. Emerging technologies, such as Membrane Aerated Biofilm Reactor (MAR) or Moving Bed Biofilm Reactor (MBBR).

- 73 After taking into account the nature of the wastewater, technical requirements, capital costs, operating ease of use (which is an important factor to ensure the plant is well maintained and running at optimal levels), and expected discharge quality, Mr Khan confirms that the preferred treatment upgrade for the Alliance Plant is the addition of the activated sludge system and clarifier.
- 74 Given these conclusions, it is my view that the current proposal represents the BPO and in fact the selected option is significantly superior to the other available options, including disposal to land (even though that option receives favour from the relevant Plans). I note that Ms Andrew agrees that the options for land disposal (full or partial) are limited. However, she considers that Alliance should keep a watching brief on newer technologies that may allow them to reduce or remove the discharge to the river, and that flexibility should be provided in the consent conditions to reflect this. To recognise this Mr Low has included a range of review conditions. These include the discharge method review conditions²² which require periodic reassessment of land disposal options in partnership with Hokonui and the FMU review condition²³ which requires a review of whether the discharge continues to align with emerging policy and the setting of new water quality standards within the FMU. In my view these conditions will assist to ensure that Alliance's approach continues to achieve the BPO.

7. WASTEWATER DISCHARGE VOLUME AND WATER QUALITY LIMITS

- 75 Alliance's current consent requires that the discharge not exceed 14,400m³/day. Alliance has acknowledged that since processing of sheep and rendering ceased at the Plant, the amount of water used during processing has reduced significantly and this is reflected in the proposed conditions set out in the evidence of Mr Low which allow a discharge volume of 8,000 m³/day. This volume is however reflective of the current processing capacity of the Plant and needs to be available should demand reach these volumes, particularly to meet export and food health and safety requirements.
- 76 The AEE and technical reports assessed the effects of the discharge volume of up to 8,000 m³/day, and the current discharge quality limits take this into account.
- 77 Notwithstanding this, Alliance is also proposing measures to review the Plant's water use, and the volume of the current wastewater discharge may be able to be considerably reduced (by approximately 37%) by recycling white water within the wastewater treatment plant. The measures to implement this will be set out in a

²² Conditions 16 to 23 as attached to the evidence of Mr Low.

²³ Condition 23 as attached to the evidence of Mr Low.

Whitewater Recycling Plan, as described in the evidence of Mr Low. As a result of this strategy revised discharge quality and quantity limits may be appropriate at that time, depending on other processing needs at the time.

- 78 Improving efficiency and use of the water on site is also consistent with the operative and proposed regional plans which specifically require the taking of water to be reasonable for the intended use and that water will be used efficiently.²⁴
- 79 Dr James has explained the rationale behind the discharge quality limits that are proposed for Alliance's discharge into the Mataura River. Some of the water quality limits have been adapted or new ones added to meet the relevant standards that have been included in the NPS-FM. Dr James has also provided further evidence regarding the appropriateness of using 12 month rolling median and 95th percentiles to determine compliance with water quality limits and Alliance's current and future proposed monitoring requirements.
- 80 In terms of the discharge limits it is worth noting here that the most up to date planning framework anticipates a long-term catchment-wide improvement in water quality.²⁵ No detail is available yet on the extent of the catchment scale improvement anticipated for each water quality parameter, or the timeframes and methods for achieving that improvement, including which values should be afforded priority. The planning framework anticipates these matters will be determined via the collaborative planning process for the FMU involving key stakeholders.
- 81 In response to this identified need to improve the quality of the discharge, particularly insofar as *E.coli* concentrations and to reduce concentrations of TN and Amm-N, Alliance has proposed some significant upgrades to its discharge treatment technology. I address these upgrades and the proposed timing of these initiatives in more detail in the next part of my evidence. At a general level, the expectation is that implementation of these upgrades will enable Alliance to continue to operate in a manner that is consistent with achieving set water quality limits over the term of the consent, cognisant of what is likely to emerge from the FMU process and in terms of the (hopefully) changing receiving environment as discharge practices across all sectors adapt to the need to meet tighter water quality standards over time.
- 82 Given that the FMU process still has still to play out for the Mataura and the results of the FMU limit setting process are not yet known, I have turned my mind to whether some contingency should be built into consent conditions to cover any

²⁴ Southland Regional Water Plan – Objective 7 and Policy 21.

²⁵ Southland Regional Policy Statement – Objective WQUAL.1 and WQUAL.2 and Policies WQUAL.2 and WQUAL.3; Proposed Plan (Decisions Version) – Objective 6 and Policies 15B and 15C.

circumstance where there is a mismatch between the limits set out in the proposed conditions and limits that might come about as a result of changes made to the relevant Plan to give effect to new limit setting within the FMU. Mr Mayhew also seeks greater assurance that the future outcomes of the FMU/NOF framework are able to be implemented and are not frustrated by a long consent term.

- 83 A new condition is suggested by Mr Low (proposed condition 23 – wastewater discharge consent) which addresses this matter. This condition has been specifically drafted to deal with the scenario I identify above. In my opinion, this is an important safeguarding provision to avoid the prospect of such a mismatch arising.
- 84 The proposed condition also safeguards against a situation where proposed upgrade timings become out of step with the setting of new FMU water quality limits and resultant improvements in river water quality. Say for example that changes to the Plan resulted in tighter water quality standards by 2026 and there was rapid and widespread change in management practices to meet these standards such that the Alliance discharge became a notable outlier within the catchment (despite meeting its consented limits). In such circumstances a review could be undertaken to reset limits which in turn would likely result in the proposed upgrade to reduce concentrations of TN and Amm-N needing to be implemented earlier than is currently proposed.
- 85 Mr Mayhew expresses a preference for a shorter term consent (10 years) with an expiry timed to enable the future requirements of the FMU/NOF process to be adopted through the renewal of the resource consent.²⁶ . In my opinion this is unduly conservative and proposed condition 23 is a suitable and effective way of addressing the potential uncertainty that arises from the current state of the play with FMU water quality limit setting. In addition, a 10 year consent limit for the Plant would create significant uncertainty for Alliance. The problems associated with this are discussed by Mr Weise. I return to this matter again later in this evidence.

8. WASTEWATER TREATMENT UPGRADE TIMEFRAME AND REVIEW

- 86 As explained in the application and further explained in the evidence of Mr Richardson and Mr Khan, a comprehensive wastewater treatment upgrade is proposed. The staged upgrade of the wastewater treatment plant includes:
- Year 1 – 3: Implementing water reduction opportunities and addressing existing resilience issues.

²⁶ Page 92, Section 42A Report.

- Year 5: Tertiary disinfection of microbial contaminants with a UV system (or similar) to reduce E.coli concentrations.
- Year 15: Biological treatment of the wastewater to reduce TN and Amm-N.

- 87 The conditions attached to the evidence of Mr Low set requirements for these upgrades to occur and include revised limits for key water quality parameters as these upgrades are implemented.
- 88 A number of submitters and the technical reviewers engaged by the council have questioned whether the timing of these upgrades is appropriate in the circumstances and the report by Mr Mayhew suggests that both the UV upgrade and the biological treatment upgrade should occur sooner than is proposed. Dr James has suggested that the upgrades and future limits are in fact likely to maintain and enhance water quality in the immediate receiving environment, and will very likely align with the anticipated water quality targets set by the NPS-FM 2020 and the Council for the Mataura River.
- 89 As outlined in the evidence of Mr Khan and Mr Wiese, the capital cost to install the necessary treatment technology for UV treatment and in particular the biological treatment upgrade is significant, and therefore Alliance proposes to implement the proposed upgrades incrementally. In my opinion there is a delicate balance to be achieved here between ensuring that the level of effects arising from the current discharge do not result in adverse effects on the key in river values that prevail (and according to the scientific evidence this is currently the case), that consistency is achieved with the requirements of emergent regulatory changes that will largely emanate from implementation of the councils obligations under the NPS-FM, and the ability of Alliance to comprehensively plan, design and fund the technology necessary to meet the tighter limits proposed. The evidence of Mr Wiese sets out the constraints that apply from a corporate perspective in this regard.
- 90 As he explains Alliance considered earlier adoption of the proposed upgrades. However, it was found that:
1. The relative difference in the effects on the environment from earlier adoption of biological treatment does not provide a strong justification for earlier upgrading; and
 2. The financial implications of adopting the biological treatment system earlier are significant. The expected capital cost of upgrading to a biological treatment system is significant, both in terms of capital expenditure (approximately \$13.98 million) and annual operating costs (\$1,060 million). It represents a major project, and as explained by Mr Wiese the funds need to

be budgeted and provided for alongside other capital and environmental projects Alliance needs to undertake across all its plants.

- 91 I acknowledge that Mr Mayhew and several submitters share the view that both the UV and the biological treatment upgrade should be completed sooner than is proposed. To support this view Mr Mayhew relies on the evidence from Dr Poore (in the case of the UV upgrade in particular), Dr Wilson and states the following in terms of justifying his view that an earlier timing (5 years) should apply to the full biological treatment upgrade:

Given the national (NPS FM) and regional (operative and proposed Regional Plan) objectives to improve water quality, and the cultural and ecological values of the Mataura River and the Toetoes Estuary receiving environments, I am of the opinion that the 15-year timeframe anticipated for the treatment plant upgrade should be reviewed and reduced if practicable to achieve the anticipated benefits of contaminant load reductions in a more timely manner.²⁷

- 92 I agree with Mr Mayhew that the general scheme of the relevant policy statements and plans is to instigate improvement to water quality parameters, particularly where that quality has been the subject of historical degradation. More particularly, the provisions of the Southland Regional Policy Statement align with the NPS-FM, and require water quality within the region to be maintained or improved via the imposition of freshwater objectives and limits that are to be established via the FMU process. This is also reflected in Objective 7 of the Proposed Plan (Environment Court – Interim Decision 1) which requires that:

Following the establishment of establishment of freshwater objectives, limits, and targets (water quality and quantity) in accordance with the Freshwater Management Unit processes:

- (a) where water quality objectives and limits are met, water quality shall be maintained or improved:*
- (b) any further over-allocation of freshwater is avoided; and*
- (c) any existing over-allocation is phased out in accordance with freshwater objectives, targets, limits and timeframes.*

- 93 Objective 6 of the Proposed Plan (Environment Court – Interim Decision 1) relates specifically to water quality and requires:

Water quality in each freshwater body will be:

²⁷ Page 36, section 42A Report.

(a) *Maintained where the water quality is not degraded; and*

(b) *Improved where the water quality is degraded by human activities.*

94 In its discussion on the drafting of this objective, the Environment Court agreed it was appropriate to delete the opening part of the decision's version Objective 6, *there is no reduction in the overall quality of the fresh water*. They went on to say that:

We consider this part may be severed without altering the meaning of the balance of the objective, which is to maintain water quality where not degraded and to improve water quality where it is. The amendment addresses concerns with the meaning of the term "overall" and does so without imposing any "no reduction" test as this would be unable to be achieved for point source discharges within the zone of reasonable mixing.

95 The FMU limit setting process which is reflected in both the RPS and Proposed Plan remains pending, and it is therefore uncertain what the freshwater objectives, limits and timeframes for the Maitava FMU will be. However, key issues identified by Alliance as part of this consenting process are its high nutrient and *E.coli* levels, and agrees that it needs to contribute in a meaningful way to making significant improvements to its discharge quality. Its ability to implement the necessary upgrades is however influenced by its ability to fund them. And because of these constraints Alliance is cautious not to act too far in advance of the FMU process being promulgated and implemented because the effect of doing so would not result in a meaningful change to what occurs in the receiving environment.

96 It remains that diffuse runoff from pastoral land use contributes considerably to the river's currently degraded water quality, and the improvement of water quality sought by Objective 6 will require a significant change to how such activities also influence the catchment. This will take some time to play out, and in my opinion requiring Alliance to undertake its biological treatment upgrades too early will result in advancing a significant capital spend where any reduction in effects on the environment is comparatively small.

97 I note that with regard to certain contaminants Mr Mayhew generally agrees with this proposition. For example, on page 31 of his report he states that *"reducing the Plant's annual nitrogen discharge by approximately 50% will have minimal benefit for the estuary in the absence of wider catchment nutrient reductions. However, in my opinion, implementing the proposed treatment is consistent with best practice, as discussed in Ms Andrew's evidence"*.

- 98 As discussed above section 108 requires Alliance to achieve the BPO which does not necessarily mean best practice. Moreover, it is my opinion that the effect of the new review condition²⁸ proffered by Mr Low will be to ameliorate any risk that the Alliance discharge is significantly out of alignment with a state of heightened water quality improvement occurring across the remainder of the catchment.
- 99 With respect to *E.coli*, despite the low risk of adverse effects on human health as discussed by Dr Dada, Alliance agrees that this upgrade should occur ahead of the full biological upgrade. On the basis of Dr Wilson and Dr Poore's evidence, Mr Mayhew considers that *E.coli* is the more pressing issue and should be addressed as a priority, recommending the upgrade occur within one year. Mr Mayhew also points out on page 75 of his report however that the catchment is being impacted upon by high *E.coli* levels and relevant water quality standards will not be met with or without the discharge. He also observes that because of the proposed treatment, the microbial water quality in the discharge will be similar to, or better than, upstream water quality.
- 100 Taking into account the existing state of the environment, the currently low risk to human health²⁹ and sufficient time for the water rationalisation process to occur, a five year timeframe remains appropriate in my view. Designing and implementing the treatment system ahead of this process also runs the risk of not achieving the most efficient and optimal performance design.

9. CONSENT TERM

- 101 As part of the application Alliance sought a 35 year consent term. This was to recognise the existing asset value of the Plant, the essential nature of the activity as a service to the rural sector, existing investment in processing and environmental management infrastructure, and the significant economic contribution (including as a significant employer for Mataura people) the Plant provides to the region. Moreover, Alliance is committed to significant expenditure to upgrade its wastewater treatment system, thereby improving water quality over the long term consistent with regional and national directives. Investment in wastewater treatment upgrades is a significant one for Alliance and it has sought a consent term long enough to allow the considerable financial investment to be justified and recovered over an appropriate timeframe.
- 102 Submitters have expressed concern about the duration of the consent term. A shorter consent term has been promoted as being more appropriate. Mr Mayhew

²⁸ Condition 23 – Wastewater discharge consent.

²⁹ Which will be further confirmed by additional monitoring as part of the proposed conditions, discussed in Mr Low's evidence.

also expresses a preference for a shorter duration term of around 10 years in his report.

- 103 In terms of specific policy on this issue the Proposed Plan - Policy 40 provides guidance. In addition, Ngā Kaupapa – Policy 18 in Te Tangi a Tauria is specifically relevant as to consent term. It states:

Recommend a duration not exceeding 25 years, for discharge consents relating to wastewater disposal, with an assumption that upon expiry (if not before), the quality of the system will be improved as technological improvements become available. In some instances, a lesser term may be appropriate, with a condition requiring the system is upgraded within a specified time period.

- 104 It is my view that a consent term of a reasonable duration for the key discharge and water take consents is appropriate in the circumstances for the following reasons:

- a. The nature and extent of effects arising from the current discharge to water, and the water abstraction are monitored and well understood and there is no uncertainty as to what the actual or potential effects arising from the current situation are. Thus, there is no need for a more cautious approach to be adopted.
- b. There is no evidence that the existing discharge is resulting in significant adverse effects on key matters such as ecosystem and human health and large scale capital investment is proposed to improve the quality of the discharge from the Plant at appropriate key milestone points during the exercise of the consent.³⁰
- c. The Plant is a significant physical resource contributing to the social and economic benefit of the community, is within land that is zoned for industrial purposes under the Gore District Plan. Significant investment in existing infrastructure already exists at the site, and it is more efficient to sustainably manage this existing operation rather than look to a new or alternative treatment plant. I further note that section 104(2A) requires the decision maker to have regard to the value of the investment of existing consent holders where a consent holder is applying for a replacement consent. It is evident that with respect to the Plant this is significant. In my opinion a longer consent term provides sufficient certainty to justify investment in a major industrial activity which brings significant social and economic benefits to the Southland region

³⁰ Proposed Plan Policy 40(1).

and community, and which in many ways provides an essential service to the rural sector.³¹

- d. As indicated above, Alliance is committed to ensuring the current quality of its discharges to water is improved through progressive upgrades to technology and management practices employed on site. As I have discussed throughout this evidence, it is my view that this approach is consistent with the national and regional policy framework. There is no uncertainty that the proposed improvements to discharge quality will occur. The proposed conditions include clear compliance limits pre and post upgrade and Alliance will be required to apply the necessary technology and management to meet these limits within the specified timeframes.³²
- e. In context of Policy 40(6) of the Proposed Plan, I understand that Alliance generally has a good track record regarding its Plants and compliance with its consents. Mr Richardson explains that the company adheres to a strong environmental policy and has a dedicated environmental team. Alliance also has a good working relationship with Environment Southland and its other stakeholders and takes a proactive approach to addressing any issues or concerns during the implementation of its consents.
- f. As discussed above, the discharge and the upgrade is consistent with achieving the BPO. The conditions as proposed by Mr Low have been structured to provide specifically tailored review provisions. That means the Panel and the wider community (including iwi) can be confident in relying upon the conditions of the consent, including obligations on the consent holder and formal review opportunities provided to the Council, to ensure that the way the authorised activities are managed throughout the life of long term consents will remain current and in time with ongoing limit setting in the FMU and broader water quality improvements across the catchment.³³ In my view addressing these matters via conditions strikes an appropriate balance. A shorter consent term fails to provide Alliance with adequate certainty which it needs to underpin its ability to commit to major capital expenditure.

105 Overall, it is my view that what is being proposed by Alliance will result in a significant and enduring improvement in the standard of its wastewater discharge quality and a longer consent term is warranted. It is evident that the improvements will come at considerable capital costs and need to be well planned and implemented as explained by Messrs. Wiese and Khan. The timing of the upgrade is

³¹ Proposed Plan Policy 40(4).

³² Proposed Plan Policy 40(7).

³³ Proposed Plan Policy 40(7).

also proposed to align with catchment improvements in water quality and will therefore result in a more meaningful outcome. Given the policy guidance set out above, it is my opinion that a consent term of 25 years is justified in the circumstances.

10. OTHER CULTURAL MATTERS

- 106 As detailed in the AEE and in the evidence of Mr Hailes and Mr Richardson, consultation with Te Ao Marama and Hokonui Rūnunga commenced early in the consenting planning phase and has continued throughout.
- 107 Alliance recognises the relationship that Ngāi Tahu and Hokonui Rūnunga have with the waters of the Mataura River and Te Au-Nui-Pihapiha-Kanakana and the significance of these places in cultural terms. In this regard Alliance has discussed the development of a Memorandum of Understanding (**MoU**) between the parties, would be appropriate given the importance of the Mataura River to each of the parties. Mr Richardson provides details of the development and obligations of this MoU.
- 108 I accept that it is for Hokonui Rūnunga to say how the proposal will affect the values that are important to them with respect to these applications. However, I note Mr Richardson has outlined that there are methods that are being discussed between Alliance and Hokonui Rūnunga that could achieve some restoration of the river's mauri now, as well as the upgrades that are proposed which will improve the discharge quality significantly. Mr Low reflects upon a number of the proffered conditions which go directly toward addressing the matters that Hokonui has raised within the discussions held to date.³⁴

11. SECTION 104D

- 109 At section 3.13 of his report, Mr Mayhew addresses section 104D as it is applicable to these applications. The AEE concluded that the proposed activities are not contrary to the objectives and policies of the relevant statutory planning documents. I agree with that analysis.
- 110 Mr Mayhew considers the key provision that needs to be addressed in 104D terms is NPS-FM Clause 3.24(1). This clause requires regional councils to insert the following policy into relevant Plans:

³⁴ Proposed Plan Policy 40(2).

The loss of river extent and values is avoided, unless the council is satisfied:

- (a) That there is a functional need for the activity in that location; and*
- (b) The effects of the activity are managed by applying the effects management hierarchy.*

111 Mr Mayhew concludes that the discharge is not contrary to this policy, provided that:

- 1. The quality of the discharge, particularly in respect of microbial contaminants and to a lesser extent nutrients, is improved in as short a time as is realistically possible – substantially less than the 5 and 15 years proposed by the Applicant;*
- 2. The consent term/conditions are set such that the future outcomes of the FMU/NOF framework, which establish the specific values that are to be managed for in the Maitai River, are able to be implemented;*
- 3. There is a collaborative approach to managing the freshwater resources with Tangata Whenua to ensure that cultural values, including mauri and mahinga kai and the ability to express kaitiakitanga and cultural identity are able to be improved;*
- 4. The term of the weir consents does not extend past that of the existing consents, which constitute part of the existing environment.³⁵*

112 I think it is first necessary to address whether this policy (and Policy 7) in the NPS-FM 2020 is directly relevant to these applications. The Wynn Williams legal opinion referred to by Mr Mayhew suggests that these policies are applicable to all activities that may affect the extent and values of rivers, including discharges. There is some reference to the section 32 for the NPS-FM within that opinion.

113 While I agree that policy should be read on its face, the drafting of this particular policy [Policy 7] is somewhat ambiguous, and the policy could be interpreted in different ways. I have reviewed the section 32 reporting that led to the policy's promulgation and note that it is apparent that these provisions were directly intended to prevent river and stream loss as follows:

Policy 7 specifically targets the unacceptable loss and degradation of New Zealand's rivers (a term which is defined in the RMA to include streams). Targeted activities include piping, diversion, and reclamation of streams and

³⁵ Page 100, Section 42A Report.

ivers. The purpose is to retain river and stream extents and associated values to the extent practicable.

Clear requirements for resource consent applications, including piping, diversion, and reclamation, sets a high bar. The overall theme is a presumption that further river (and stream) loss will not be approved without rigorous assessment, which should improve decision making.³⁶

- 114 The reporting also refers to the Stream Evaluation Method (SEV) as being a tool which can support implementation of these provisions. I am familiar with the use of this tool, and it seems to me to only be utilised to calculate necessary offsets where a section of stream is lost or substantially altered.
- 115 Notwithstanding this, the ambiguity in its drafting remains and for this reason I agree that it could be interpreted as applying more broadly. My analysis of this policy as it relates to these activities is provided below.
- 116 The activities which are the subject of these applications do not result in a loss of river extent.
- 117 I do not consider there to be a direct loss of values associated with Alliance's activities. There is apparent agreement that the current state of the environment is degraded from a water quality perspective and that requiring Alliance to upgrade its discharge quality now would have little or no effect on this current state.
- 118 There are no notable effects on aquatic ecology, which is similarly agreed between the relevant experts.
- 119 Dr Dada opines that there is no increased risk of harm to human health and wellbeing as a result of these activities.
- 120 Tangata whenua values and concerns have been recognised and the conditions seek to actively address effects on cultural values in a collaborative way as discussed by Mr Low.
- 121 Alliance is committing to major reductions in contaminants into the river and a major capital expenditure programme to deliver that outcome. The result will likely ensure Alliance is doing its part to reduce contaminant loadings required to deliver improvements in the riverine and estuarine environments. If more is required as the

³⁶ <https://www.mfe.govt.nz/sites/default/files/media/Fresh%20water/action-for-healthy-waterways-section-32-evaluation-report.pdf> - Pages 69 - 75.

FMU/NOR framework is established, the review options are available to ensure this is addressed.

- 122 I therefore do not agree with Mr Mayhew that the upgrades need to occur sooner in order to satisfy section 104D. Put simply, the Alliance approach is consistent with the likely pace of improvement that will occur within the river as policy initiatives are implemented.

12. PART 2 AND CONCLUDING STATEMENT

- 123 This evidence has addressed the key planning matters that relate to the applications being sought by Alliance which stand out to me. By way of summary, I conclude that:
- a. There is no evidence that the wastewater discharge is having an adverse effect that triggers the need for immediate or urgent mitigation. However, the Mataura catchment/FMU overall suffers from degraded water quality and the planning framework which applies here anticipates a long-term catchment wide improvement in water quality for key parameters including *E.coli* and nutrients.
 - b. As a result, Alliance is proposing to undertake progressive improvements to its wastewater discharge including a water rationalization scheme, *E.coli* treatment, and an extensive upgrade to its wastewater treatment process which will contribute to major catchment wide reductions in nutrients that will be necessary to improve the degraded environment in the Mataura River and Toetoes Estuary.
 - c. The proposed upgrades will work in concert with the Council's initiatives to set and implement a water quality management framework for the catchment in accordance with national and regional directives, and the significant upgrade has been timed so that the capital expenditure is matched to when other meaningful improvements in the catchment can be expected, and in the event that the timing of other improvements in the catchment is different, Alliance's timing obligations are able to be reviewed to ensure Alliance remains in step.
 - d. The proposed conditions obligate Alliance to undertake reviews to ensure the discharge and its treatment continues to achieve accepted water quality standards on an ongoing basis throughout the life of the consent.
 - e. The proposed activities and the conditions which are attached to Mr Low's evidence have been intentionally shaped to align with the relevant planning framework that applies here.

124 The various elements of Part 2 of the RMA will be well known to the panel. In light of *Davidson*, and the number of recently promulgated regional planning instruments in Southland which have been prepared having appropriate regard to Part 2, a further assessment in this evidence may not add any significant value. However, if such an assessment is considered to be necessary by the panel, I rely on that provided in the AEE³⁷ which in summary provides that:

- a. The Plant provides substantial employment, both directly and indirectly, and provides important social context to the area. The Plant is totally reliant on being able to operate under the consents sought in this application, including the ability to take water from the Mataura River, and use it as a discharge medium. Not granting the resource consents as sought would place the ongoing operation of the Plant in question.³⁸
- b. There is no evidence to suggest that the current activities are having an adverse effect on the on the life-supporting capacity of the Mataura River and its ecosystems trigger the need for immediate or urgent mitigation.³⁹
- c. The improvement in discharge quality as a result of the proposed wastewater treatment plant upgrade will also help contribute to a long-term improvement in the life-supporting capacity of the river, if that life-supporting capacity is currently being depressed by the high baseload of nutrients in the catchment.
- d. The use of the Mataura River by the Plant is not considered to be inappropriate in this context.⁴⁰
- e. The Plant is existing, and there is significant investment costs in the location and equipment at the site; the Plant has access to a skilled labour force of sufficient scale to ensure that it operates effectively; the Plant is appropriately located to receive livestock that is within the immediate and surrounding area; and the Plant has appropriate infrastructure support including access to road and rail networks.⁴¹
- f. The Mataura River and adjacent land, including the Mataura Falls in the immediate vicinity of the Plant, has high cultural significance for tangata whenua. In my assessment Alliance has recognised and placed considerable value on the role of Hokonui Rūnunga as tangata whenua and kaitiaki of the Mataura River. Alliance has actively sought to understand the key issues, and

³⁷ Section 13.4.

³⁸ Section 5.

³⁹ Section 5.

⁴⁰ Section 6(a).

⁴¹ Section 7(b).

the parties have formed a good working relationship. These discussions have had a strong shaping influence on the consent conditions which are attached to Mr Low's evidence.⁴²

125 It is my overall opinion, having considered the evidence and the conditions proffered by the Applicant, in the context of the relevant national and regional planning instruments, that consent can be granted to the various applications for a term of 25 years subject to the conditions put forward in Mr Low's evidence.

John Kyle

16 November 2020

⁴² Sections 6(e), 6(g), 7(a) and section 8.

Appendix A

Summary of Recent Experience of John Kyle

- Wellington International Airport Limited – Lead consultant – notice of requirement for airport site and former Miramar School site – Wellington City.
- Queenstown Airport Corporation – Lead consultant - Proposed plan change to manage the effects of aircraft noise – Queenstown Lakes District.
- Alliance Group Limited – Lead consultant – renewal of all discharge and land use consents Matura Meat Processing Works, Matura - Southland Region.
- Simcox Construction – Lead consultant – Quarry operation consent renewal, Marlborough District.
- Pernod Ricard NZ Limited – Planning witness – Marlborough Environment Plan submissions – Marlborough District.
- Alliance Group Limited – Lead consultant – renewal of all discharge and land use consents Lorneville Meat Processing Works, Lorneville - Southland Region.
- Alliance Group Limited – Air Discharge Consents – Pukeuri Meat Processing Works, Pukeuri - Otago Region.
- Queenstown Lakes District Council – preparation of a Plan Change to expand Queenstown town centre, including to accommodate a convention centre.
- Wellington International Airport Limited – Lead consultant - strategic and resource management advice with respect to the proposed runway extension – Wellington City.
- OceanaGold (New Zealand) Limited – lead consultant – Project Martha Gold Mine Expansion, Waihi – Hauraki District.
- Ryman Healthcare – resource consent applications for new retirement villages – New Zealand wide role.
- Environmental Protection Authority – advisor to the Minister appointed Board of Inquiry regarding a Plan Change by Tainui Group Holdings and Chedworth Properties for the Ruakura Inland Port Development, Hamilton.
- Environmental Protection Authority – advisor to the Minister appointed Board of Inquiry regarding a Notice of Requirement and resource consent applications by the New Zealand Transport Agency with respect to the Expressway between Peka and North Otaki on the Kapiti Coast.
- Environmental Protection Authority – advisor to the Minister appointed Board of Inquiry regarding a Notice of Requirement and resource consent applications by the New Zealand Transport Agency with respect to the Expressway between MacKays Crossing and Peka on the Kapiti Coast.
- Environmental Protection Authority – advisor to the Minister appointed Board of Inquiry regarding resource consent applications and designations by the New

Zealand Transport Agency with respect to the proposed Transmission Gully Project – Wellington Region.

- Queenstown Lakes District Council – member of the review team commissioned to undertake a review of Council consenting and resource management policy operations.
- Environmental Protection Authority – advisor to the Minister appointed Board of Inquiry regarding a plan change application to the Wellington Regional Water plan to assist with the proposed Transmission Gully Project – Wellington Region.
- Queenstown Airport Corporation – lead consultant - Notice of Requirement for land adjacent to QAC in order provide for the future expansion of airport operations, Queenstown Lakes District.
- Genesis Power Limited – due diligence Slopedown Wind Farm, Southland District and Southland Region.
- TrustPower Limited – Planning witness - proposed Kaiwera Downs Wind Farm, Gore District and Southland Region.
- TrustPower Limited – Planning witness - proposed alteration to the Rakaia Water Conservation Order – Lake Coleridge Hydro Electric Power Scheme – Canterbury Region.
- Meridian Energy Limited – Planning witness -Proposed Mokihinui Hydro Electric Power Scheme, damming, water and land use related consents, Buller District and West Coast Region.
- TrustPower Limited – Planning witness - Wairau Hydro Electric Power Scheme, water and land use related consents, Marlborough District.
- Southern Health – Plan Change Invercargill Hospital Development - Invercargill City.
- Sanford Limited, various marine farm proposals Marlborough Sounds, Marlborough District.
- Port Marlborough Limited – Lead consultant - Plan Change proposal to alter the marina zone within the Marlborough Sounds Resource Management Plan to provide for consolidation of marina development in Waikawa Bay, Marlborough District.
- Port Marlborough Limited – Resource consent application for occupation of coastal space – Shakespeare Bay port facilities – Marlborough District.
- Meridian Energy Limited – Planning witness - proposed Wind Farm, Lammermoor Range, Central Otago District and Otago Region.
- Queenstown Airport Corporation – Lead consultant - Runway End Safety Area, designation and construction related consents, Queenstown Lakes District and Otago Region.
- Riverstone Holdings Limited – Lead consultant - Proposed Monorail Link – Lake Wakatipu to Fiordland, Department of Conservation Concession Application – Southland Conservancy.
- Otago Regional Council – Planning witness - Consents required for controlling the Shotover River to mitigate flood risk – Queenstown Lakes District and Otago Region.

- Queenstown Airport Corporation – Lead consultant - aircraft noise controls and flight fan controls – Plan Change and Designations, Queenstown Lakes District.
- Todd Property Pegasus Town Limited – Pegasus Town, North Canterbury – Waimakariri District, Canterbury Region.
- Willowridge Developments – Lead consultant - 3 Parks Plan Change to create new commercial, large format retail, service, tourist and residential land use zones, Wanaka, Queenstown Lakes District.
- Gibbston Valley Station – Lead consultant - Land use and regional consents, Viticulture and Golf Resort, Gibbston – Queenstown Lakes District and Otago Region.
- Marlborough District Council – Business Park Plan Change, Blenheim - Marlborough District.
- Ravensdown Fertiliser Limited – Lead consultant - Coastal and Air Discharge Consent Renewal, Dunedin – Otago Region.
- Irmo Properties Limited – Resource consent application for retail complex, Green Island – Dunedin City.
- Infinity Investment Group and JIT Investments – Lead consultant - Hillend Station Farm Park development, Wanaka – Queenstown Lakes District.
- Infinity Investment Group – Lead consultant - Peninsula Bay Plan Change, Wanaka – Queenstown Lakes District.
- Genesis Power Limited – Planning witness - Tongariro Power Development, Water Related Consents, Central North Island – Environment Waikato and Horizons MW.
- Genesis Power Limited – Planning witness - Waikato District Plan review and provision for the Huntly Power Station, Waikato District.
- Department of Corrections – Planning witness - New Corrections Facility, Milton - Clutha District and Otago Region.
- Department of Child Youth and Family – Lead consultant - Youth Justice Facility, Rolleston – Selwyn District and Canterbury region.
- Kuku Mara Partnerships – Planning witness - Large Scale Marine Farms, Marlborough Sounds – Marlborough District.
- Marine Farming Industry – Plan Appeals, Tasman Aquaculture Inquiry, Tasman and Golden Bays – Tasman District.