BEFORE THE INDEPENDENT HEARING PANEL APPOINTED BY HAWKE'S BAY REGIONAL COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the hearing of submissions on Proposed Plan Change 9 (PPC9) – Tūtaekurī, Ahuriri, Ngaruroro and Karamū Catchments (TANK)

LEGAL SUBMISSIONS OF COUNSEL FOR T&G GLOBAL LIMITED

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Introduction

- 1. These legal submissions are made on behalf of T&G Global Limited (**T&G**).
- 2. T&G is here representing its own interests and that of ENZAFruit New Zealand (a wholly owned subsidiary of T&G and the grower, marketer and export seller of apples grown in T&G's orchards).
- 3. T&G owns or leases approximately 740 hectares of orchards throughout Hawke's Bay, including at Puketapu, Moteo, Twyford, Karamu, Meeanee, Pakowhai, Haumoana and Havelock North.
- 4. T&G develops approximately 60 hectares of land into intensive apple orchards per year. Its ability to do that in the Tūtaekurī, Ahuriri, Ngaruroro and Karamū Catchments will likely be compromised by this plan change.
- 5. It holds approximately 80 water take consents for irrigation of those orchards. All but one of those consents are groundwater takes. Mr Betty has provided details of the water take consents held by T&G, which are vital to sustain the orchards and the fruit grown there as well as the investment T&G has made in those orchards.
- 6. All but a few of T&G's orchards are irrigated using drip or sprinkler irrigation. The orchards are watered overnight. T&G has live soil moisture monitoring at its Puketapu orchards which enables it to monitor the impact of irrigation and make adjustments to ensure that irrigation is limited to what the trees need.
- 7. As Mr Betty has explained in his evidence T&G has little or no 'fat' in its existing consents. In addition to that, it is and has long been an efficient user of water. Those two factors mean that it may be disadvantaged by the definition of 'Actual and Reasonable' proposed in the plan change, in a way that other less efficient users are not. That point is addressed later in these submissions.

Concerns about the proposed Plan Change

- 8. T&G has the following concerns about the proposed Plan Change:
 - (a) New clauses 1 and 2 on the first page of Schedule 30 which have been recommended by Council officers seem to require industry to duplicate information that the Council already has, for no obvious benefit.
 - (b) Whether a water user will be able to renew a consent for a water take which has not been fully implemented because the

orchard to which the consent relates is still under development. The definition of 'Actual and Reasonable' and Rules TANK 9 and 11 would seem to penalise a consent holder in that position.

- (c) The plan change does not presently allow water within the interim allocation limit which becomes available to be reallocated, but does seem to allow transfers of permits to take and use water.
- (d) The effect of raising the minimum flow in the Tutaekuri River given T&G's significant investment in developing orchards in Puketapu.
- (e) Whether the provision allowing an existing user to take up to 20m^3 of water per day to assist in the survival of horticultural crops will assist much if there is an irrigation ban lasting more than one or two days.
- (f) That the definition of 'Actual and Reasonable' should allow for an increase in the irrigated area provided that the quantity of water applied for is no more than the permit being renewed.

Schedule 30

- 9. As Mr Betty explains in his evidence, T&G supports that comprehensive changes to Schedule 30 recommended in the Hearing report and Addendum report to the Hearing report with one exception.
- 10. Council officers have recommended new clauses 1 and 2 on the first page of Schedule 30. The paragraph, in its entirety reads:

The Freshwater Plan and Industry Programmes must identify the key water quality and water quantity management issues identified in this Plan that are relevant to:

- 1. the modelled or measured water quality as indicated in Schedule 26, 28 of the Council's SOE reports, or local water quality measured using comparable water quality monitoring in the applicable catchment(s)
- 2. other water quality monitoring may be used as a guide to measure progress towards water quality targets.
- 3. the nature of the land and water use activities carried out within that catchment

- 4. The scale of the effects on water quality or water quantity from the land and water use activities in that catchment.
- 11. The Council itself is the likely repository of the water quality monitoring information referred to in new clauses 1 and 2. Additionally, those clauses appear to be redundant given new Section C in Schedule 30. By way of example, clause 1.1(d) in Section C requires Industry Programmes to include a description of the programme area including:
 - (i) land uses
 - (ii) key environmental issues and measures to address them

. . .

12. It is important that Industry Programmes address key environmental issues. However, clauses 1 and 2 do not assist with that – particularly given the other requirements that Freshwater Farm Plans and Industry Programmes must already meet.

Renewing consents which have not been fully implemented

- 13. T&G sought changes to Policy 36(f) to make it clear that it does not apply to consented takes for planned primary production developments which have not been fully implemented at the time of renewal.
- 14. Council officers have recommended a change to that clause which is an improvement but does not directly address this particular issue. The scenario under discussion does not involve a 'new' consent, but rather the renewal of an existing one. The renewal would therefore be considered under Rules TANK 9 or 11, depending on whether or not the quantity taken and used is the 'Actual and Reasonable' amount.
- 15. In the scenario of concern to T&G, the amount of water being applied for would be no more than the quantity specified on the permit due for renewal (clause (a) of the definition of 'Actual and Reasonable'), but clauses (b) and (c) of that definition must also be considered.
- 16. Clause (b) refers to the maximum annual amount of water used over the ten-year period preceding 2 May 2020. If the orchard development has not been fully implemented, it is likely that the maximum amount of water use over that period will be less than the amount required to irrigate a fully developed orchard.
- 17. Clause (c) requires the running of IRICACL or a similar model to determine the modelled crop water demand. However:

- (a) The irrigated area must be no more than the area irrigated in the ten-pear period prior to 2 May 2020 (sub-clause (i) of clause (c)).
- (b) Evidence must be supplied to demonstrate that the area has, and can continue to be irrigated (sub-clause (ii) of clause (c)). clause (ii) of clause (c)).
- 18. For an orchard under development, it may be difficult for T&G to meet these requirements depending on whether the orchard (or some part of it) has been developed to the point where irrigation is necessary. T&G may therefore have to apply for consent under Rule TANK 11 even though it would not be seeking any more water than is required to irrigate the orchard under development and for which the water permit had originally been granted.
- 19. That is the reasoning behind the change sought to the definition of 'Actual and Reasonable' set out in para 61 of Mr Betty's evidence, (also set out for convenience below):
 - c) for irrigation takes, the quantity required to meet the modelled crop water demand for the irrigated area with an efficiency of application of no less than 80% as specified by the IRRICALC water demand model (if it is available for the crop and otherwise with an equivalent method), and to a 95% reliability of supply where the irrigated area is:
 - (i) no more than in the permit due for renewal, or any lesser amount applied for, except that the irrigated area may be increased provided that there is no increase in the volume of water authorised under the permit being renewed, and in the case of Heretaunga Plains Groundwater Quantity Area, is not more than the amount irrigated in the ten years preceding 2 May 2020; and
 - (ii) evidence is supplied to demonstrate that the area has, and can continue to be, irrigated and the permit substantially given effect to.
- 20. The proposed amendment also addresses T&G's submission point seeking an amendment to this definition to allow for an increase in irrigated area provided that the water applied for is no more than the permit due for renewal.¹

¹ See paragraphs 58-60 of Mr Betty's evidence

Re-allocation of water within the interim allocation limit

- 21. Like Horticulture NZ, T&G supports the re-allocation of water which becomes available within the interim allocation limit if its intended use is primary production.
- 22. The policy direction in Policy 37(b) to 'avoid' re-allocation of any water that might become available within the interim groundwater allocation limit until there has been a review of the relevant allocation limit is a strong one, which will likely make it very difficult for an applicant to obtain consent for a 'new' water take even if water becomes available.
- Given the importance of primary production in Hawke's Bay and the availability of versatile soils, a softening of that policy direction might enable water within the interim limit to be re-allocated. That is why T&G supports the change to Policy 37(b) proposed by Mr Dooney (expert planning witness for Horticulture NZ) which is that it be amended to read as follows:
 - b) restrict avoid the re-allocation of any water that might become available within the interim groundwater allocation limit or within the limit of any connected water body to essential municipal uses or primary production purposes on versatile land, or for use in stream flow maintenance and enhancement schemes, until there has been a review of the relevant allocation limits within this plan.

Raising the minimum flow in the Tutaekuri River

- 24. The proposal to raise the minimum flow in the Tūtaekurī River from 2000 litres/second to 2,500 litres/second (Policy 43 and Schedule 31) is a serious concern for T&G.
- 25. It currently has approximately 100 hectares of orchards in Puketapu and plans to develop new orchards in this area in future.
- 26. There was an irrigation ban in February 2017 at the current minimum flow of 2,000 litres/second. Raising the minimum flow in the Tūtaekurī River will increase the likelihood of irrigation bans in the future. Those bans are likely to occur more frequently and potentially be in place for longer periods of time.
- 27. T&G acknowledges the changes recommended to Rules TANK 7 and 8 in the Addendum Report to the Hearing Report which would allow lawful takes existing at 2 May 2020 to continue to take up to 20 cubic metres per property per day.
- 28. That will not be enough water to irrigate a growing crop and is highly unlikely to be sufficient for root stock survival.

Witnesses for T&G

- 29. Mr Craig Betty, Director of Operations for T&G has prepared a statement of evidence which is provided with these legal submissions. He will attend the hearing to present a summary of his evidence and answer any questions the Hearing Panel may have.
- 30. Mr Ben Rimmer, T&G's Technical Manager will also attend the hearing. He has not prepared written evidence but is available to answer any questions from the Panel about T&G's growing operations or any technical matters.

7 June 2021

Lara Blomfield

LIBERFILL

Counsel for T&G Global Limited

- 1. I am the Director Operations for T&G Global Limited (**T&G**). T&G is New Zealand's largest pipfruit business accounting for approximately 30% of NZ's total pipfruit exports. ENZAFruit New Zealand International Limited (**ENZIL**) is a wholly owned subsidiary of T&G. Within Hawke's Bay, ENZIL:
 - (a) Together owns or leases over 740 hectares of land for apple orchards in Puketapu, Moteo, Tywford, Karamu, Meeanee, Pakowhai, Karamu and Havelock North; and
 - (b) Owns two pack houses and two cool stores located at Whakatu, Hastings with a value of \$90 million.
- 2. ENZIL intends to reinvest in infrastructure at Whakatu to the value of approximately \$20-\$40 million by 2025. T&G employs approximately 200 permanent employees and 900 seasonal workers in Hawke's Bay. It also engages third party contractors at an annual cost of approximately \$1 million.
- 3. T&G develops approximately 60 Ha of land into intensive apple orchards each year at a cost of approximately \$12 million/annum. This development can cost over \$200,000 per hectare for the first 3 years.

Efficient Water Use

- 4. T&G is focussed on efficient use of water. All but a very small number of T&G's orchards are irrigated overnight using drip or sprinkler irrigation. An external consultant advises us when to irrigate. We have soil moisture probes all our orchards.
- 5. Unfortunately, the threat of an irrigation ban can drive poor behaviour when managing orchard irrigation, leading growers to use the soil as a water storage medium and effectively over irrigating in the hope that crops can cope with any extended dry period.

Resource Consents Held by T&G

6. T&G holds over 80 water consents for irrigation and frost protection purposes. All but one of those consents are groundwater takes. These consents vital to sustain our orchard investments. T&G has little or no 'fat' in its existing consents which would enable it to develop further orchards without obtaining new water permits for that development.

Industry Programmes

7. T&G supports the recommended new Section C in Schedule 30, but opposes new clauses 1 and 2 on the first page of Schedule 30 because: they are redundant, the focus should be on good or best of farm management practices regardless of the state of water quality in the catchment, and only HBRC has access to modelled or monitored water quality data.

8. T&G is not clear if the amended clause would apply to a consented take which has not been fully implemented – for example a consent to irrigate an orchard under development. My concern is that this policy and Rules TANK 9 and 11 might take away consented but as yet unused water when the consent holder applies to renew or replace that existing consent.

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Policy 37(d)(ii)

9. The Hearing Report recommended no change to Policy 37(d)(ii), but recommended the definition of "Actual and Reasonable" refer to the "average annual amount as measured by accurate water meter data in the ten years preceding May 2020". Use of the "average" would have been very problematic so I support reverting back to the maximum annual amount as measured by accurate water meter data in the ten years preceding 2 May 2020.

Policy 37(b) and 38

10. We sought changes to these policies to enable water which became available within the interim allocation limit to be re-allocated if its intended use was primary production or it would be used for streamflow maintenance. Accordingly, I support the change to Policy 37(b) recommended by Mr Dooney (expert planning witness for Horticulture NZ).

Policies 39, 40 and 41

11. T&G supports the changes recommended to Policy 39 in the Hearing Report.

Policy 43 and Schedule 31

12. Policy 43 and Schedule 31 propose to raise the minimum flow in the Tūtaekurī River from 2000 litres/second to 2,500 litres/second. T&G's concern is that the increased minimum flow might result in irrigation bans which are longer than one or two days (as happened once in the past). If that was the case, it would have a detrimental impact on T&G's 100ha of orchards in Puketapu.

Policy 47(b)

13. T&G supports the Hearing Report's recommended change to Policy 47(b).

Policy 51, 52, Rules TANK 7 and 8

14. T&G supports the Addendum Report recommendation to change Rules TANK 7 and 8 to allow lawful takes existing at 2 May 2020 to continue to take up to 20 cubic metres per property per day.

Rule TANK 5

15. T&G supports the Hearing Report's recommended changes to TANK 5 and Schedule 29.

Definition of "Actual and Reasonable"

- 16. T&G sought an amendment to this definition to allow for an increase in the irrigated area provided that the quantity of water applied for was no more than the permit due for renewal. If an applicant is not seeking to take any more water than had been allocated under the permit due for renewal, the overall allocation of water will not be increased if that renewal consent is granted. This will enable some ongoing orchard expansion.
- 17. Accordingly, T&G requests that clauses (c)(i) and (ii) of the definition be further amended to read as follows:
 - (i) no more than in the permit due for renewal, or any lesser amount applied for, except that the irrigated area may be increased provided that there is no increase in the volume of water authorised under the permit being renewed, and in the case of Heretaunga Plains Groundwater Quantity Area, is not more than the amount irrigated in the ten years preceding 2 May 2020; and
 - (ii) evidence is supplied to demonstrate that the area has, and can continue to be, can be irrigated and the permit substantially given effect to.

Conclusion

- 18. The orchards that ENZIL owns and leases are dependent on a secure supply of water.
- 19. There is considerable potential for further orchards to be established within the area affected by the Plan Change but the terms of the Plan Change would make it very difficult (if not impossible) to get consent for new water takes needed to establish and operate the orchards.
- T&G is very concerned about the Tūtaekurī minimum flow being increased. This could impact on T&G's plan to develop further Orchards in the Puketapu area. If there is an irrigation ban the permitted activity rule allowing lawful takes existing at 2 May 2020 to continue to take up to 20 cubic metres per property per day will not That will not be enough water to irrigate a growing crop and is highly unlikely to be sufficient for root stock survival.

Craig Betty

BEFORE THE INDEPENDENT HEARING PANEL APPOINTED BY HAWKE'S BAY REGIONAL COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the hearing of submissions on Proposed Plan Change 9 (PPC9) – Tūtaekurī, Ahuriri, Ngaruroro and Karamū Catchments (TANK)

STATEMENT OF EVIDENCE OF CRAIG BETTY FOR T&G GLOBAL LIMITED

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INTRODUCTION

- 1. My name is Craig Victor Betty. I am the Director Operations for T&G Global Limited (**T&G**).
- 2. I have been employed by T&G Global since October 2019. Prior to this I was in a number of Operations and Supply Chain roles most recently at Westland Milk Products from 2017 to 2019 and prior to that I was employed by Fonterra from 2002 to 2017.
- 3. T&G is New Zealand's largest pipfruit business. It accounts for approximately 30% of New Zealand's total pipfruit exports. It has extensive growing operations and third party growers located in Gisborne and Hawke's Bay, Nelson and Central Otago. It owns three packing facilities two located in Hawke's Bay, and one in Nelson, together with post-harvest facilities located in Dunedin and Ettrick, Otago.
- 4. ENZAFruit New Zealand International Limited (**ENZIL**) is a wholly owned subsidiary of T&G, and is the grower, marketer and export seller of the fruit. ENZIL currently grows 1.7 million cartons and sells 6.4 million cartons of pipfruit from New Zealand each year which are shipped to Asia, Europe and North America. That fruit is predominantly packed and stored at pack houses and cool stores at Whakatu, Hastings.
- 5. Within Hawke's Bay, ENZIL:
 - (a) Owns approximately 228 hectares of orchards;
 - (b) Leases and manages over 50 orchards, comprising approximately 514 hectares of land;
 - (c) Together owns or leases over 740 hectares of land for apple orchards; and
 - (d) Owns two pack houses and two cool stores located at Whakatu, Hastings.
- 6. The current asset value of these post-harvest assets in Whakatu is approximately \$90 million. ENZIL intends to reinvest in infrastructure at Whakatu to the value of approximately \$20-\$40 million by 2025.
- 7. In my evidence I will refer to T&G and this means both ENZIL and T&G.
- 8. T&G invests in new orchard developments (developing approximately 60 Ha of land into intensive apple orchards per year) at a cost of approximately \$12 million per year.

9. T&G is a significant employer in the region. It employs approximately 200 permanent employees and 900 seasonal workers in the Hawke's Bay region and pays approximately \$28 million in wages and salaries annually. It also engages third party contractors as part of the production process at an annual cost of approximately \$1 million.

SCOPE OF EVIDENCE

- 10. My evidence addresses the following matters:
 - (a) A description of the assets owned by T&G, all of which are dependent on a secure supply of water sourced.
 - (b) Details the existing resource consents held by T&G to take and use water for irrigation.
 - (c) An explanation of the concerns that T&G has regarding the Proposed Plan Change 9, which in summary are:
 - i. The provisions relating to industry programmes;
 - ii. Treatment of consents for orchards under development which have not been fully implemented at renewal time;
 - iii. The definition of Actual and reasonable;
 - iv. Re-allocation of water within the interim limit; and
 - v. The effects of raising the minimum flow at Tutaekuri.

HAWKE'S BAY ASSETS AND INVESTMENTS

- 11. ENZIL owns or leases land on which orchards have been established throughout Hawke's Bay including at Puketapu, Moteo, Tywford, Karamu, Meeanee, Pakowhai, Karamu and Havelock North.
- 12. I have **attached** to this evidence a table which shows the areas of these orchard plantings and the apple varieties grown on them (**Table A**).
- 13. The investment required to establish an orchard is significant it can cost over \$200,000 per hectare for the first 3 years. If T&G does not own the land on which the orchard is being developed, it must have a long-term lease with a term of 20 years (or more) because that is the timeframe required to establish an orchard and get an economic return from it.
- 14. All but a very small number of T&G's orchards are irrigated using drip or sprinkler irrigation. Our orchards are watered overnight using

sophisticated technology which ensures that water use is limited to the amount that is required to water the crop, and no more. We have engaged an external consultant who advises us when to irrigate and in what volume and we follow that advice.

- 15. T&G is focussed on efficient use of water.
- 16. Our new growing systems are designed around harvesting every apple therefore minimising food waste. As in the viticulture industry where it has been shown that leaf plucking reduces the amount of water a vine requires, we are looking at this as a potential method to reduce our water requirement on these growing systems in the future.
- 17. In Hawke's Bay T&G spends \$85,000 annually on soil moisture monitoring. We have probes across all Orchards monitoring any change in soil types across the Orchard.
- 18. In Puketapu, T&G runs live soil moisture monitoring which allows us to view what depth in the soil profile the latest irrigation has impacted. This means we can monitor if we are watering the root zone or deeper (which would be a waste of water). In addition, we have been running a sap flow trial on our Bay Trust Block to see if that is a better indicator of water stress in apple trees.
- 19. The threat of a water ban drives poor behaviour when managing orchard irrigation. When growers are concerned that water will no longer be available their only option is to use the soil as a water storage medium. This means running your soil profile at "full point", effectively over irrigating (in the hope that crops can cope with any extended dry period). It would also mean when the ban is lifted growers would be loading the soil back up to that high level. In short irrigating to the soil's holding capacity not to what the trees need.
- 20. In T&G's future developments live moisture monitoring will be implemented as a standard practice which by only watering the rootzone ensures we are using water as efficiently as possible.

RESOURCE CONSENTS HELD BY T&G

- 21. T&G holds over 80 water consents for irrigation purposes. All but one of those consents are groundwater takes.
- 22. I have **attached** to my evidence a table which has details of those water consents including the volume of each water take, the orchard to which it relates and the current expiry date of each permit (**Table B**).

- 23. The existing consents held by T&G are vital to sustain the investment the company has made in the orchards which are irrigated using water from those consents.
- Like many water users, historically T&G had been able to get consent to take a greater volume of water than was actually required to water its orchards. It no longer does that because it has a much better understanding of its crop's needs. Further the Hawke's Bay Regional Council does not allow that. As water permits are replaced, the Council 'runs the numbers' through its crop model to determine the volume which should be granted on replacement. I make this point to make it clear that T&G has little or no 'fat' in its existing consents which would enable it to develop further orchards without obtaining new water permits for that development.
- 25. Ideally, if T&G was looking to develop a new orchard, it would only purchase or lease land which already had an existing water right associated with it. If the land was being used for (say) cropping, T&G would apply to the HBRC to have the consent transferred into its name and perhaps seek to amend some of the permit's conditions so that it was suitable for irrigating an orchard. While it appears that the transfer of that consent to T&G might be possible under Policy 48 of Plan change 9, the policy framework of the plan change will make it difficult to get any 'new' groundwater to irrigate an orchard.

CONCERNS ABOUT PROPOSED PLAN CHANGE 9

Industry Programmes

- 26. T&G sought amendments to Policies 17, 18, 19, 23, 24, 25, 26, Rules TANK 1 and 2 and to Schedule 30. It asked that the provisions relating to Industry Programmes be amended so that the requirements in the Plan Change aligned with existing and established industry programmes such as GAP schemes.
- 27. The Hearing Report recommends significant changes to Schedule 30 including the addition of a new Section C which comprehensively sets out the minimum standards for an Industry Programme. It also added new clauses 1 and 2 to the first page of Schedule 30 which require Industry Programmes to identify key water quality and water quantity management issues that are relevant to:
 - 1. The modelled or measured water quality as indicated by Schedule 26, 28 or the Council's SOW reports, or local water quality measured using comparable water quality monitoring methods in applicable catchment(s)

- 2. Other water quality monitoring may be used as a guide to measure progress towards water quality targets.
- 28. T&G supports new Section C in Schedule 30 but opposes new clauses 1 and 2 on the first page of Schedule 30 as:
 - (a) Those clauses are redundant given new Section C
 - (b) Industry Programmes and Freshwater Farm Plans should focus on good or best management practices <u>on farm</u> which should be implemented regardless of the state of water quality in the catchment.
 - (c) Only HBRC has access to modelled or monitored water quality and it is unreasonable to require industry to duplicate that effort.

Policy 36(f)

- 29. T&G sought amendments to this policy to make it clear that it does not apply to consented takes for planned primary production developments.
- 30. The officers have recommended that submission be rejected and instead propose a change to that clause so that it refers to:

Avoiding further adverse effects by not allowing granting new consents to take and use groundwater new water use.

The concern T&G had (and still has) is that it is not clear whether this clause would apply to a consented take which has not been fully implemented – for example a consent to irrigate an orchard under development. My concern is that this policy and Rules TANK 9 and 11 might take away consented but as yet unused water when the consent holder applies to renew or replace that existing consent. That should not happen if the consent holder has planned development in the pipeline based on the unused portion of the allocation in the existing consent.

Policy 37(d)(ii)

- 32. T&G sought an amendment to this clause to read:
 - (d) When considering applications in respect of existing consents due for expiry, or when reviewing consents, to:

. . .

(ii) apply an assessment of actual and reasonable use that reflects the water use authorised in the 10 years up to 2 May 2020 (except as provided by Policy 50).

- 33. The Hearing Report recommends no change to Policy 37(d)(ii) but recommended that the definition of "Actual and Reasonable" refer to the "average annual amount as measured by accurate water meter data in the ten years preceding May 2020".
- That amendment would have been very problematic for T&G (and other water users) because average water use over a 10 year period will by definition be lower than the actual water required in (say) a drought year.
- I see that further changes have been recommended to the definition in the Addendum report to the Hearing report dated 19 May 2021. Council officers now recommend that clause (b) of the definition of "Actual and Reasonable" refer to the maximum annual amount as measured by accurate water meter data in the ten years preceding 2 May 2020.
- T&G supports that recommended change. However it is not clear to me exactly how the definition applies if the applicant does not have accurate water meter data for the relevant ten year period. Either clause (a) or (c) applies (I think) which means that crop water demand is modelled using IRRICALC and if that volume is the actual and reasonable volume, unless the amount being applied for is less (under clause (a)).

Policy 37(b) and 38

- 37. T&G's submission on these policies sought changes to these policies to enable water which became available within the interim allocation limit to be re-allocated if its intended use was primary production or it would be used for streamflow maintenance.
- 38. The officers did not recommend any change to those policies. However they also recommended changes to Policy 48 and Rule 62a which deal with the transfer of permits to take and use water.
- 39. I have read the evidence of Gillian Holmes (for Horticulture NZ) and I agree with her that re-allocation within the limit is hydrologically equivalent to transfer within the limit.
- 40. I support the change to Policy 37(b) recommended by Mr Dooney (expert planning witness for Horticulture NZ) which is that it be amended to read as follows:
 - b) restrict avoid the re-allocation of any water that might become available within the interim groundwater allocation limit or within the limit of any connected water body to essential municipal uses or primary production purposes on versatile

land, or for use in stream flow maintenance and enhancement schemes. until there has been a review of the relevant allocation limits within this plan.

Policies 39, 40 and 41

- 41. T&G requested that these policies be amended so that they required the regional Council to fully implement Policy 41 before individual consent holders were required to develop or contribute to stream flow maintenance and habitat enhancement schemes.
- 42. Policy 39 has been amended significantly in response to that submission and others like it. T&G supports the changes recommended to Policy 39 in the Hearing Report.

Policy 43 and Schedule 31

- 43. Policy 43 and Schedule 31 propose to raise the minimum flow in the Tūtaekurī River from 2000 litres/second to 2,500 litres/second.
- 44. I am advised by T&G's Technical Manager Ben Rimmer (here with me today) that the current 2,000 litre / sec low flow has been triggered once over the last 10 years, for a two-day period over 22 24 February 2017. T&G could not irrigate during that period at its Moteo block.
- 45. In practice on this occasion, T&G had been forewarned and so had water on beforehand and because the ban only lasted two days, the company (and the orchard) was able to cope.
- 46. The proposed 2,500 litre/second limit would definitely have been triggered at the same time, possibly for longer. It is also likely to have resulted in irrigation bans on other occasions (had it been in place).
- 47. T&G now has significantly more Orchards planted intensively in the area so the impact in the future would be far greater (specifically these are T&G's Bay Trust Orchard and Ebbett Orchard.
- 48. Mr Rimmer has seen the expert evidence Gillian Holmes and Dr Tony Davoren and notes that T&G's experience differs from the conclusions they have reached. There may be an explanation for this.
- 49. T&G's concern is that the increased minimum flow in the Tūtaekurī River might result in bans which are longer than one or two days. If that was the case, it would have an impact on T&G's orchards in Puketapu.
- 50. Given the scale of T&G's operations in Puketapu (currently approximately 100Ha) and its plans to develop new apple Orchards in this area in future T&G is very concerned that raising the minimum

flow in the Tūtaekurī River would result in more bans on irrigation which in turn would impact significantly on tree health and apple production in the area.

Policy 47(*b*)

- 51. T&G sought that this clause be amended to refer to alternatives to the IRRICALC water demand model. Council officers have recommended that this clause be amended to refer to "a suitable equivalent approved by Council that utilises crop type, soil type and climatic conditions".
- 52. T&G supports that recommended change.

Policy 51, 52, Rules TANK 7 and 8

- 53. T&G sought that a specific exemption be provided be provided to allow up to 20m³ per day to be taken to assist in the survival of permanent horticultural crops and rootstock.
- 54. The Addendum Report to the Hearing Report recommends changes to Rules TANK 7 and 8 to allow lawful takes existing at 2 May 2020 to continue to take up to 20 cubic metres per property per day.
- 55. I support that change which gives effect to paragraph 1848 of the Hearing report in which the officers stated:

I recommend points seeking a specific exemption for takes to assist the survival of horticultural crops are accepted in part because takes existing at 2 May 2020 may continue to take up to 20m³ per day. If take to assist the survival of horticultural crops existed before 2 May 2020, then they may continue. If these takes did not exist before 2 May 2020 then they are subject to a 5m³ per day limit.

Rule TANK 5

56. T&G sought that condition (a) of this rule be amended to read:

Any change to a production land use activity commencing after 2 May 2020 that does not result in the annual nitrogen loss increasing

57. This change has effectively been made with the addition of clause (d) as recommended in the Addendum Report to the Hearing Report and the changes proposed to Schedule 29. Those changes are supported.

Definition of "Actual and Reasonable"

58. T&G sought an amendment to this definition to allow for an increase in the irrigated area provided that the quantity of water applied for is no more than the permit due for renewal.

- 59. The officer recommended no change to the definition to address that point.
- 60. It seems to me that the definition is intended to give effect to the sinking lid approach that the council is taking to the allocation of groundwater in the Heretaunga Plains Groundwater Quantity Area. That is understandable, but if an applicant is not seeking to take any more water than had been allocated under the permit due for renewal, the overall allocation of water is not increased if that consent is granted.
- 61. T&G requests that clause (c)(i) of the definition be amended to read as follows:
 - c) for irrigation takes, the quantity required to meet the modelled crop water demand for the irrigated area with an efficiency of application of no less than 80% as specified by the IRRICALC water demand model (if it is available for the crop and otherwise with an equivalent method), and to a 95% reliability of supply where the irrigated area is:
 - (i) no more than in the permit due for renewal, or any lesser amount applied for, except that the irrigated area may be increased provided that there is no increase in the volume of water authorised under the permit being renewed, and in the case of Heretaunga Plains Groundwater Quantity Area, is not more than the amount irrigated in the ten years preceding 2 May 2020; and
 - (ii) evidence is supplied to demonstrate that the area has, and can continue to be, irrigated and the permit substantially given effect to.

CONCLUSION

- 62. The orchards that ENZIL owns and leases are dependent on a secure supply of water.
- 63. There is considerable potential for further orchards to be established within the area affected by the Plan Change but the terms of the Plan Change would make it very difficult (if not impossible) to get consent for new water takes needed to establish the orchards and grow fruit once the orchards have been established.
- 64. T&G is very concerned about the minimum flow being increased. This could impact on T&G's plan to develop further Orchards in the Puketapu area.
- 65. The Plan Change presents as being so restrictive that it will have a dampening effect on the growth of the horticultural sector in the

- catchment and loss of the economic and social benefits associated with that growth.
- 66. Speaking for T&G I believe there would be serious questions about T&G's ongoing capital investment in the region if it cannot have confidence about its long-term water supply.

Craig Betty Director Operations T&G Global Limited

Table A
Orchard Plantings by Apple Variety

Sector	Orchard Name	Variety	Sum of Ha
Karamu	Anderson	Envy	6.73
	Chestergrove	Pacific Queen	0.42
		Royal Gala	4.32
		Galaxy	0.53
		Braeburn	5.89
		Lady In Red	0.19
		Pink Lady	1.57
		Aztec	0.27
		Can Can	1.08
	Kahu	Braeburn	1.65
		Brookfield	2.33
		Fuji	0.25
		Royal Gala	0.91
		Pacific Rose	0.34
	Makoha	Pacific Queen	0.94
		Fuji	2.83
		Galaxy	1.09
		Lady in Red	2.16
		Royal Gala	3.95
	Pouakai	Aurora	0.96
		Braeburn	1.98
		Fuji	1.23
		Galaxy	1.47
		Royal Gala	1.46
		Pacific Queen	1.74
		Granny Smith	0.59
	Sika	Brookfield	0.74
		Galaxy	2.35
		Pacific Queen	2.43
		Eve	0.86
		Granny Smith	0.46
	Wainui	Aurora	0.38
		Braeburn	0.57

Meeanee Total			78.04
		Royal Gala	3.99
	Tannery Road	Jazz	11.13
		Lady in Red	6.06
		Bare Land	28.00
	Steiner	Envy	2.73
		Pacific Queen	2.62
		Royal Gala	1.70
	Nagel	Galaxy	2.18
		Lady in Red	3.79
		Jazz	4.07
	Mission	Galaxy	2.40
		Pacific Rose	0.87
		Pacific Queen	1.31
		Royal Gala	0.62
		Galaxy	0.56
	Manar	Aurora	0.53
		Pacific Rose	0.53
		Pacific Queen	1.22
		Royal Gala	0.99
		Galaxy	2.09
Meeanee	Bo Val	Fuji	0.65
Karamu Total			79.62
		Envy	3.41
		Royal Gala	3.47
		Lady in Red	1.01
		Jazz	4.68
	Willapple	Galaxy	1.50
		Pacific Queen	0.71
		Royal Gala	0.68
		Jazz	3.06
	Wannock	Galaxy	1.71
		Pacific Rose	0.94
		Royal Gala	1.18
		Kiku	2.13
		Galaxy	0.47

Moteo	Bay Trust	Envy	8.24
		Jazz	2.88
	Ebbetts	Envy	17.35
		Jazz	15.45
		Ju Gala	13.18
Moteo Total			57.10
Pakowhai	Applewoods	Envy	2.57
		Jazz	0.80
		M Mist	0.43
		Royal Gala	1.41
		Pacific Rose	0.46
	Duncan	Braeburn	1.05
		Galaxy	0.39
		Royal Gala	1.16
		Pacific Rose	0.78
	Farndon	Ju Gala	0.84
		Envy	5.02
		Lady in Red	0.78
		Pink Lady	0.89
		Royal Gala	2.30
		Pacific Queen	1.89
	Harris	Jazz	3.45
		Envy	6.73
	Pirika	Lady in Red	1.99
		Cherry Gala	0.49
		Fuji	1.20
		Galaxy	3.14
		Gilmac	3.87
		Jazz	0.55
		Kiku	1.37
		Royal Gala	0.46
		Pacific Queen	3.05
	Riverrun	Braeburn	2.81
		Fuji	0.52
		Galaxy	2.01
		Pink Lady	1.27

		Royal Gala	3.62
		Pacific Rose	1.14
		Granny Smith	0.50
	Scotts	Envy	1.44
		Galaxy	1.49
		Kiku	1.07
		Pacific Rose	1.47
	Waiohiki	Bare Land	56.60
	Whanake	Envy	2.28
		Galaxy	2.21
Pakowhai Total			125.50
Puketapu	Fraser	Brookfield	0.89
		Galaxy	19.67
		Jazz	2.36
		Ju Gala	1.36
		Royal Gala	0.27
	Kotuku	Envy	8.27
		Pink Lady	1.94
		Jazz	4.32
	Moteo	Envy	5.38
		Galaxy	13.46
		M Mist	3.81
	Stirling	Envy	3.48
		Galaxy	1.34
		Royal Gala	0.49
		Pacific Queen	2.94
	Windy Creek	Envy	5.12
		Jazz	7.32
Puketapu Total			82.42
Thompson	Belmarven Home	Braeburn	1.78
		Brookfield	1.24
		Galaxy	0.72
		Royal Gala	2.00
		Pacific Rose	1.14
		Granny Smith	0.80
	Denby	Galaxy	1.80

		Royal Gala	2.10
		Pacific Rose	4.05
	Hanei	Aurora	2.25
		Braeburn	4.18
		Brookfield	1.50
		Eve	0.34
		Fuji	2.19
		Galaxy	8.41
		Jazz	0.84
		Pink Lady	1.42
		Royal Gala	3.67
		Pacific Queen	1.74
		Pacific Rose	1.60
	Hydes	Jazz	8.01
		Lady in Red	4.90
		Envy	2.08
	Oakland Farm	Braeburn	1.50
		Jazz	0.95
		Royal Gala	2.19
		Pacific Rose	2.29
	Ortons	Envy	2.39
		Jazz	3.67
	Rosewood	Envy	3.28
		Pacific Queen	2.37
	Stewarts	Envy	7.01
		Ju Gala	3.36
	Taylor	Envy	9.14
		Galaxy	1.05
	Te Aute Road	Envy	7.10
		Galaxy	10.72
		Pacific Queen	1.67
Thompson Total			117.45
Tuki Tuki	Bakers Bridge	Envy	13.43
		Lady in Red	8.06
	Greenfields	Fuji	2.45

		Jazz	4.05
	Mission Tuki Tuki	Jazz	3.61
		Envy	4.54
	Palomino	Envy	10.48
		Kiku	4.27
	Richmill	Fuji	1.90
		Galaxy	0.42
		Royal Gala	0.71
		Pacific Queen	7.22
		Granny Smith	0.74
	Sefton Farm	Envy	16.20
		Jazz	1.19
		Ju Gala	12.43
	Tennants Bend	Envy	3.22
		Galaxy	3.25
		Jazz	10.70
	Tuki Tuki	Braeburn	0.92
		Galaxy	2.25
		Pacific Rose	2.43
Tuki Tuki Total			117.60
Twyford	Evenden Orchard	Envy	21.06
		Galaxy	9.31
		Jazz	22.73
		Kiku	6.59
	Ormond Road	Envy	7.72
		Ju Gala	3.29
	Trotter Road	Brookfield	1.44
		Envy	8.49
		Galaxy	4.00
		Mahana Red	1.08
		Mahana Red Jazz	1.08 6.65
		Jazz	6.65
Twyford Total		Jazz Ju Gala	6.65 1.96
Twyford Total Grand Total		Jazz Ju Gala	6.65 1.96 0.57

Table B: Water Consents held by T&G					
Orchard Address (Physical)	Consent Number	Well Number & (Size)	Water Takes	Consent Expiry	
2 Anderson Rd, Whakatu	WP050410T	15243 (100mm)	25 lt / sec, 3,981 m3 / week	31/05/2025	
2 Anderson Rd, Whakatu	WP080432T	15329 (100mm)	20 lt / sec, 3602 m3 / week	31/05/2023	
1127 Links Rd	WP050504T	1487 (75mm.)	6.3 lt / sec, 1625 m3 / week	31/5/2026	
140 Tuki Tuki Rd, Haumoana	WP040557Tb	2049 (100mm)	20 lt / sec., 9200 m3 / week	31/05/2025	
104 Moteo Pa Rd, Puketapu	WP060102Ta	1506 (200mm)`	36.6 lt/sec 24088 m3 / 28 day period	31/05/2026	
388 Napier Rd	WP000481T	8365 (100mm.)	3.6lt / sec, 1895 m3 / week	31/5/2022	
14 Grassmere Rd	WP060655T	1011 (100mm.)	15 lt / sec, 1560 m3 / week	31/5/2027	
Ruahapia and Pakowhai Rds	Wp010167Ta	1141,3529 & 1566 (100mm)	25 lt / sec, 31,420 m3 / 28 days	31/05/2023	
Thompson Rd	WP120258T	3547 (150mm.)	15lt /sec, 2500m3 / week	31/5/2013	
15 Allen Rd	WP060177T	8460 (100mm.)	3.8 lt / sec, 1084 m3 / week	31/5/2026	
2 Anderson Rd, Whakatu	DP150354W	Drainage discharge permit		31/05/2016	
2 Anderson Rd, Whakatu	WP050286T	1258 & 1259 (200mm)	8 lt / sec, 4830 m3 / week	31/05/2025	
104 Moteo Pa Rd, Puketapu	WP060052Tb	16617 & 16618 (300mm)	100 L/Sec 92656 m3 / 28 day period	21/05/2028	
cnr Evenden & Ormond Rd	WP090160Tp	15510 & 15511 (both 100mm)	28.5 lt / sec, 15,600 m3 / 4 weeks both wells	31/05/2025	
cnr Evenden & Raupere	WP090167T	15510 (100mm)	19 lt / sec, 30,708 m3 / 4 weeks	31/05/2025	
15 McNab Rd	WP090220Tq	2946 (100mm)	20 lt / sec, 17,896 m3 / 4 weeks	31/05/2025	
256 Farndon Rd	WP050091T,	8457 (100mm.) & 2129 (200mm.)	16.6 lt /sec, 3989 m3 / week	31/5/2025	
51a Omaranui Settlement Rd	WP060124Tb	1577 (100mm.)	25lt / sec, 10082 m3 / week inc Irrigation	31/5/2026	
51a Omaranui Settlement Rd	WP060124Tb	2320 (200mm)	30 lt / sec, 10082 m3 / week inc Spray fill	31/5/2026	
392 Tuki Tuki Rd	WP040496Ta	5015 (200mm.)	15 lt / sec, 3362 m3 / week	31/5/2025	
315 Te Mata Mangateretere Rd	WP010423T	1089 (100mm)	23 lt / sec, 1735 m3 / week	31/05/2022	
285 Te Mata Mangateretere Rd	WP000513T	1926 (100mm.)	15 lt / sec, 3250 m3 / week	31/05/2022	
287 & 297 Te Mata Mangateretere Rd	WP000527T	8413, 371 & 104 (3 wells all 100mm)	18 lt / sec, 3790 m3 / week	31/05/2022	
52 Gilligan Rd	WP130238T	1734 (150mm)	50 lt / sec, 27,568 m3 / 4 weeks	31/5/2026	

	Table B: Water Consents held by T&G					
Orchard Address (Physical)	Consent Number	Well Number & (Size)	Water Takes	Consent Expiry		
207 Thompson Rd, Havelock North	WP070014Tb	16839 (200mm)				
18 Te Mata Managteretere Rd	WP040542T	2403 (200mm)	7.5 lt / sec, 2207 m3 / week	31/05/2022		
459 Puketapu Road	WP070050Tc	3052 (200mm.)	15lt / sec, 19558 m3 / 28 days, 69952 / 12 months	31/5/2028		
51 Te Mata Mangateretere Rd	WP040506T	1964 (200mm)	16.7 lt / sec, 3521 m3 / week	31/05/2025		
13 Grassmere Rd	DP070356W	Drainage discharge permit	15lt / sec max discharge			
13 Grassmere Rd	WP070293T	15389 (75mm)	10 lt / sec, 1084 m3 / week	31/5/2027		
cnr Basil & Meeanee Rds, Meeanee	WP070187T	3000 (100mm.)	13lt / sec, 3128 m3 / week	31/5/2027		
162 Tukituki Rd, Haumoana	WP070434T	1919 (100mm)	11.5 lt/sec, 2194 m3 / week	31/05/2025		
33 Moteo Pa Rd, Puketapu	WP060097Td	1901 (300mm)	50.5 lt / sec, 45,167.6 m3 / 28 days	31/05/2026		
20 Parsons Rd	WP060604Ta	15456 (100mm.)	4 lt / sec, 1707 m3 / week	31/5/2027		
Napier Rd	WP000489T	830 (100mm.)	13lt / sec, 2045m3 / week	31/5/2022		
Ormond Rd	WP110378T	15879 (100mm)	10.6 lt / sec, 3,998 m3 / week	31/05/2020		
cnr Thompson & Brookvale Rds, Havelock North	WP000496T	1301 (150mm) & 3414(100mm)(Buried)	30 lt / sec, 2495 m3 / week	21/05/2022		
43 Palomino Rd, Haumoana	WP040401Tb	825 (100mm) 16471 (150mm)	32lt / sec / well, 27,119 m3 / 28 days & 4,769 m3 / 28 days	31/05/2025		
16 Allen Road Hastings	WP060359T	819 (100mm.)	15.3 lt / sec, 4838 m3 / week	31/5/2026		
70 Pilcher Rd	WP000641T	1965 (200mm)	8 lt / sec 1085 m3 / week	31/05/2022		
546 Napier Rd	WP010159T	1319 (100mm)	15 lt / sec 2165 m3 / week	31/05/2022		
34 Richard Road, Havelock North	WP070319Ta	699 (100mm.)	18 lt / sec, 2150m3 / week	31/5/2021`		
cnr Richmond & Mill Rds, Clive	WP050077T	365 (100mm)	14 lt / sec, 2858 m3 / week	31/05/2025		
1787 Pakowhai Rd	WP060034Tb	1623 (100mm.) & 15322 (75mm.)	19 lt / sec, 3106 m3 / week	31/5/2026		
294 Napier Rd, Havelock North	WP070217T	3009 (100mm.)	10lt / sec, 1387m3 /week	30/6/2022		
70 Franklin Rd	WP060036T	draw fom Tutaekuri - Waimate Stream	10.1 lt / sec, 2765 m3 / week	31/5/2026		
Farndon Road, Napier	WP050034Tb	2286 (150mm.)2287 (150mm.) 3536 (100mm.)	36 lt / sec, 20000 m3 / week	31/5/2025		
Farndon Road, Napier	WP050035T	2286 (150mm.)	25 lt / sec frost consent	31/5/2025		
5 Watson Rd	WP000350Ta	241 (100mm.)	18 lt / sec, 1354 m3 / week	31/5/2021		
108Te Mata Mangateretere Rd,	DP010137W	Drainage discharge permit	2.5 lt / sec max discharge	31/05/2021		

Table B: Water Consents held by T&G				
Orchard Address (Physical)	Consent Number	Well Number & (Size)	Water Takes	Consent Expiry
108Te Mata Mangateretere Rd,	WP010036T	15621 (100mm)	15 lt / sec, 2205 m3 / week	31/05/2022
226 Willowbank Avenue, Napier	WP060355T	5008 (250mm.)	76 lt / sec, 14738 m3 / week	31/5/2027
298 Brookvale Rd, Havelock North	WP060358Ta	16688 (150mm)	15 L / Sec 12,788 m3 / any 28 days	31/05/2022
64 Omaranui Settlement Rd	WP060127T,	15327 (100mm.)	9 lt / sec, 2175 m3 / week	31/5/2026
99 Tannery Rd, Napier	WP070188T	1363 (150mm.)	10 lt / sec, 4334 m3 / week	31/5/2027
127 Thompson Rd	WP070205Ta	16174 (300mm.)	25 lt / sec, 4215 m3 / week	31/5/2022
223 Te Aute Road, Hastings	WP060491Ta	5471 (100mm.)	18 lt / sec, 6626m3 / week	31/5/2021
112 Tennant Rd, Haumoana	WP070385Ta	140 (100mm) & 5649 (150mm)	16 lt / sec Per Well , 23,956 m3 / Any 28 Days	31/05/2025
66 & 84 Trotter Rd	WP090185T	2780 (100mm)	20 lt / sec, 30,240 m3 / 4 weeks	31/05/2025
81 Tennent Rd	WP040512T	3550 (100mm.)	7.5 lt / sec, 2162 m3 / week	31/5/2025
233 Ruahapia Rd	WP010458T	1141 (100mm.)	10 lt /sec, 1795 m3 /week	31/5/2023
65 Korokipo Rd	WP060411Ta	1403 (150mm.)	24.6 lt / sec, 97,368 m3 across all wells	31/5/2026
65 Korokipo Rd	WP060411Ta	764 (150mm.)	24.6 lt / sec, 97,368 m3 across all wells	31/5/2026
42 St Georges Rd North	WP000358Ta	15360 (100mm.)	16.7 lt / sec, 1790 m3 / week	31/5/2021
23 Whakatu Rd, Hastings	DP140396W	Drainage discharge permit	water dump & cooling towers discharge	
22 Whakatu Rd, Hastings	WP040482Ta	1751 (200mm.)	10 lt / sec, 2600m3 / week	
49 Allen Rd, RD3, Napier	WP060098Tb	15321 (100mm)	25 lt / sec, 1396 m3 / week	31/05/2026
187 Ruahapia Rd	WP010425T	1062 & 151 (2 x 100mm)	38 lt / sec, 4775 m3 / week	31/05/2023
253 Swamp Rd, Fernhill	DP040216W	Drainage discharge permit	NA	31/5/2024
253 Swamp Rd, Fernhill	WP150312T	5404 (150mm)	18.3 lt/sec, 4736 m3 / week	31/05/2026