

Before Independent Commissioners

In Taupō

Under the Resource Management Act 1991 (the Act)

In the matter of Plan Change 42 – Rural

**Supplementary statement of evidence of David John Robert Smith for
the Taupō District Council (Transport)**

Dated 23rd August 2023

1 Introduction

- 1.1 My name is David John Robert Smith. I have prepared a statement of evidence for Plan Change 42 dated 26th July 2023. My qualifications and experience are outlined in that statement.
- 1.2 My role in relation to Plan Change 42 (PC42) is as an independent expert witness to Taupō District Council on traffic and transportation matters.
- 1.3 In this supplementary evidence I provide a:
 - a summary of my primary evidence;
 - b review of Mr Swears transportation evidence for Waka Kotahi NZ Transport Agency;
 - c comments relating to transportation matters raised in Mr Rowe's evidence for Genesis Energy.

2 Summary of primary evidence

- 2.1 I was engaged in 2022 by Taupō District Council to undertake a high-level transport assessment of a potential future plan change proposal to insert a Rural Lifestyle (RL) environment in the vicinity of Taupō Township. This assessment comprises a multi-criteria analysis which assesses eight sites against:
 - a Transport network capacity;
 - b Road Safety; and
 - c Their individual alignment with the seven priorities contained within the Taupō District Council Transport Strategy – Connecting Taupō 2020-2050 (Transport Strategy).
- 2.2 The assessment concluded which development areas were most suitable for potential RL rezoning from a transportation perspective favouring sites with lesser impact on the already constrained areas in the transport network, and due to their relatively remote location. Notably my assessment did not conclude that any of the sites were entirely unsuitable, and all of the clusters in the assessment have been carried through to PC42.
- 2.3 Taupō District Council have requested that I respond to two submission points from the Waka Kotahi NZ Transport Agency (Waka Kotahi) submission as follows.
 - a I agree with submission point 113.6 and the corresponding amendment sought by Waka Kotahi to provision 4b.2.1 to restrict the traffic generated by a General Rural Environment allotment for a site accessing a State Highway to 100 vehicles per day. I have further recommended the addition of an advice note to refer to the appropriate standards for State Highway access design.

- b I disagree with submission point 113.7 and the corresponding amendment sought by Waka Kotahi to provision 4b.2.4 to restrict more than one primary residential dwelling being established per General Rural Environment site where access relies on a State Highway. In my view the change sought to provision 4b.2.1 which I support satisfactorily addresses potential road safety impacts.

3 Review of Mr Swears' evidence for Waka Kotahi

Equivalent vehicle movements calculations

- 3.1 In section 4 of his evidence, Mr Swears highlights that the calculation of equivalent vehicle movements (evm¹) specified by Council through the Taupō District Plan (TDP) (from Chapter 10.1) differs from values he is "*more familiar with*". The fundamental differences are for trucks (the TDP applies 4 evm versus Mr Swears' preferred value of 6 evm), and combination or multi-unit vehicles (the TDP applies 8 evm for a truck and trailer versus Mr Swears' preferred value of 10 evm). I note that the equivalence for light vehicles is not in dispute at 2 evm.
- 3.2 It is important to note that the above evm calculations as stated in the TDP are for a trip to and from a site (two trips or movements per vehicle).
- 3.3 I am concerned that Mr Swears has not stated the source of his preferred values and have engaged directly with Mr Swears to establish an agreed set of equivalence values which would be appropriate in this context. I have formed the view that there is no singular and obvious 'source of truth' with respect to guidance for industry, and at the time of preparing this supplementary statement these discussions between Mr Swears and myself are ongoing. However, we intend to resolve this as soon as practicable to assist the Panel.
- 3.4 In the context of the RL zoning I consider that the likely number of larger vehicles generated by a RL site on any given day is likely to be relatively small, and the consequences of applying an alternative evm classification to development accessing the wider road network may be minimal. This is a further point of discussion with Mr Swears.

Performance standards

- 3.5 In section 5 of his evidence, Mr Swears raises a further concern relating to the 100 evm threshold for access onto state highways as a result of the underlying evm calculation, suggesting that the evm calculation be amended or the 100 evm threshold be reduced. Any such changes would ideally be in line with appropriate industry guidance and I anticipate this will be informed by the outcomes of the ongoing discussions with Mr Swears as per paragraphs 3.3-3.4.

¹ This is often also referred to as 'equivalent car movements' or ecm. The terms evm and ecm can be used interchangeably.

Forest Harvesting Trip Generation

- 3.6 In section 6, Mr Swears addresses forest harvesting trip generation, and highlights the difference between Council and Waka Kotahi's position in that Waka Kotahi seek the exemption for forestry traffic generation to only apply "*where access is to a local road*".
- 3.7 Mr Swears notes the periodic nature and higher trip generating potential of forestry operations and raises concerns that the resultant effects "*can be very significant*". I agree that forestry operations are temporary in nature and when harvesting have the potential for high levels of traffic generation that can impact on the transport network in terms of access and wider impacts. The primary vehicle movements are likely to be logging trucks and larger vehicles transporting machinery on and off site, and much of this traffic would follow the same routes through the local road network to access the state highway network. If not appropriately assessed this could give rise to safety and efficiency effects at the access location and at key intersections where there may be an increase in the number of vehicles turning onto or off state highways or other busy arterials in the District.
- 3.8 A simple approach is recommended to by Mr Swears to provide a mechanism for forest operation effects to be addressed through the District Plan as stated in paragraph 6.6 of Mr Swears evidence. This proposes that access provisions and a Traffic Management Plan (TMP) be required where the performance standards are exceeded by the forestry activity. I agree that the preparation of a TMP may be appropriate to address temporary transportation effects in this context, however I understand that any activity which exceeds the traffic generation thresholds in the rules will trigger the requirement for resource consent. I defer to Mr Sharman with respect to the appropriateness of any such amendments to the proposed rules in the Plan.

4 Response to Mr Rowe's evidence for Genesis Energy

- 4.1 In paragraphs 64-67 of Mr Rowe's evidence, a recommendation is put forward to amend the vehicle movement rule 4b.2.1 to exclude existing renewable electricity generation activities. From a transportation perspective I understand that this requested amendment applies to existing and consented activities only.
- 4.2 The context of the submission point refers to the maintenance and upgrade of these activities, as well as being able to ensure that the structure integrity of renewable electricity structures is preserved, and to protect the assets during or following a natural hazard event. In my view maintenance and upgrade activities are likely to be periodic or sporadic in nature, and could involve a number of larger vehicle movements. I consider that an assessment of the traffic effects of any such temporary increase in vehicle movements (should that exceed the performance standard) should in my view be appropriately assessed, including consideration of impacts at the access to the activity and any potential impacts of the increase in vehicle movements across the wider transport network.

- 4.3 In essence this is not dissimilar to the forest operations activity referenced in the Waka Kotahi submission, as maintenance and upgrade activities would likely be periodic, temporary in nature and may have an intense peak of vehicle generating activity over that period. In my view it may be appropriate to address the transportation effects of renewable energy activities with respect to periodic, temporary activities such as maintenance and upgrades, in much the same manner as that proposed in the Waka Kotahi submission. This would then appropriately consider the scale of the activity and provide a mechanism for assessing the potential effects with respect to access to the activity, and to address temporary effects on the safety and efficiency of the wider network through the preparation of a TMP.
- 4.4 However I note that any such activity may trigger the requirement for resource consent and defer to Mr Sharman with respect to the appropriateness of any changes to the rules in the Plan to satisfactorily address this matter.

5 Conclusion

- 5.1 I have reviewed the matters raised by submitters in evidence, and concluded:
- a That there is no clear and obvious evm calculation guidance available, and Mr Swears and I are engaging in ongoing discussions to resolve this matter in the context of the Plan Change;
 - b On that basis it is not at this stage apparent whether the traffic generation performance standard in rule 4b.2.1 requires further review;
 - c Forestry activities do coincide with periodic, temporary localised peaks in terms of activity on the network. I agree with Mr Swears that where this exceeds the thresholds under the plan, the assessment of access provisions and a temporary TMP may be appropriate to assess and address the transportation effects of forestry vehicles on the local and wider network, however any such activity will trigger the need for resource consent; and
 - d I disagree with Mr Rowe that existing renewable electricity generation activities should be exempted from the 4b.2.1 performance standard rule. I consider that whilst it may be appropriate to address the temporary traffic impacts of existing renewable energy activities by requiring a temporary TMP where the thresholds in rule 4b.2.1 are exceeded, I understand that any such activity will trigger the need for resource consent .

David John Robert Smith

23rd August 2023