

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of Proposed Private Plan Change 2 to  
the Hamilton City Operative District  
Plan: Te Awa Lakes Private Plan  
Change

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**STATEMENT OF REPLY EVIDENCE OF JOHN KINROSS MCKENSEY FOR THE APPLICANT  
(LIGHTING)  
27 NOVEMBER 2019**

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## **1. QUALIFICATIONS AND EXPERIENCE**

- 1.1 My full name is John Kinross Mckensey.
- 1.2 I have the relevant qualifications and experience as set out in section 2 of my primary evidence.
- 1.3 I reconfirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and to the extent that I am giving expert evidence, have complied with it in preparing this evidence. I confirm that the issues addressed in this evidence are within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in my evidence.

## **2. SCOPE OF EVIDENCE**

- 2.1 I have been asked to provide evidence in response to the statements of evidence of Brigid Buckley and Mark Chrisp for Fonterra Ltd, in relation to their assertions regarding the potential for reverse sensitivity effects on operations at Fonterra's Te Rapa Dairy Factory from lighting effects on sensitive activities at Te Awa Lakes. The issue is whether the Factory's lighting impacts on future residents (or other sensitive receivers) at Te Awa Lakes would be sufficiently adverse as to generate opposition from such persons towards Fonterra, including perhaps seeking reduced hours of operation or reduced lighting levels.
- 2.2 I also note Mr Chrisp suggests that Te Awa Lakes would be an "incompatible land use" in relation to the Te Rapa Factory. I will respond on that suggestion from a lighting perspective.
- 2.3 I respond to the particular statements below by reference to the paragraph numbers which require a response.

## **3. RESPONSE TO SUBMITTER EVIDENCE**

**Fonterra**

*Brigid Buckley – paragraph 7.3*

- 3.1 At paragraph 7.3 of her statement of evidence, Ms Buckley claims that the location of sensitive activities at Te Awa Lakes will cause significant disruption to Fonterra's manufacturing and processing operations at its Te Rapa Dairy Factory, including the potential for reduction in operating hours due to lighting emissions (possibly linked to lighting associated with heavy traffic movements during night-time hours). Ms Buckley also claims at paragraphs 7.1 and 7.7 that PPC2 will, in her opinion, result in significant adverse reverse sensitivity effects, including from light as a necessary by-product of the Dairy Factory activities.
- 3.2 I disagree entirely. I confirm that I assessed lighting effects from the Te Rapa Dairy Factory as part of my initial Lighting Assessment, and in my primary evidence at paragraph 5.5, and found that any effects on the Te Awa Lakes site will be low. Low level lighting from the Te Rapa Factory site will also be screened for the Medium Density Residential zoned land by the commercial buildings in the Business 6 zone proposed to border Hutchinson Road within the site. Other Fonterra lighting may be visible to varying degrees from within the site, but the local lighting within the Te Awa Lakes site will be considerably more obvious to residents than the lighting associated with the Fonterra Dairy Factory. In addition, as noted in Mr Olliver's evidence, residential units are required to be set back 25m from Hutchinson Road and, within 100m of Hutchinson Road in both the Residential and Business zones, all main living areas are to be oriented to the north, away from Hutchinson Road. Because any lighting effects on Te Awa will be of such a low level, I repeat my prior opinion that any reverse sensitivity effects generated out of Te Awa Lakes by such lighting will be low-nil.
- 3.3 The only potential lighting effect from additional vehicles accessing the Factory would relate to headlight sweep. However, as there is no egress point from the Factory in the direction of the site, headlight sweep effects on the Te Awa Lakes land will be low-nil. The interposing commercial portion of the site will also further screen and thereby mitigate any such potential effects toward residential locations, as will the other Plan Change provisions referred to above.
- 3.4 Further, as stated in my primary evidence at paragraphs 5.10 to 5.13 and 5.15, it is my opinion that compliance with existing District Plan obtrusive lighting rules will not be onerous for future developments within the industrial zoned nearby sites, which would

include any future potential re-development of the Fonterra site, as modern lighting technology makes it practical to achieving good lighting control with low off-site effects.

3.5 In my opinion there is no technical basis to support a conclusion that lighting effects from the Te Rapa Dairy Factory will result in anything more than low effects on Te Awa Lakes, nor for any potential for reverse sensitivity caused by such impacts to be more than low-nil, and certainly not significant as asserted by Ms Buckley.

3.6 As such, I do not agree with Ms Buckley's opinion.

*Mark Chrisp – paragraph 2.14 (and elsewhere) and paragraphs 5.8, 9.15*

3.7 It follows from the above that I do not agree with Mr Chrisp's assertion that the potential for reverse sensitivity effects from lighting at Fonterra's Te Rapa Dairy Factory cannot be avoided or appropriately mitigated, and that it would compromise future industrial activities on the site.

3.8 The actual effects currently generated by the Factory are low in my opinion and will be further mitigated by the measures stated above.

3.9 Potential effects of lighting from the Factory in the future if further development is undertaken can readily remain low through good design practice of any exterior lighting, considering selection, aiming, tilt and/or shielding.

3.10 Any potential reverse sensitivity effects can be mitigated through the design measures I have referred to above.

3.11 For the same reasons I do not consider from a lighting perspective the Te Awa Lakes proposal to be an "incompatible land use" given its separation, the low level of lighting impacts caused by the Te Rapa Dairy Factory, the mitigation measures discussed above and the ready ability of any new or expanded industry to control off-site lighting effects.

#### **4. CONCLUSION**

4.1 In my opinion, any potential reverse sensitivity effects arising from lighting on Fonterra's Te Rapa Dairy Factory will be low-nil. I also do not consider Te Awa Lakes to be an incompatible proposal in terms of lighting. There is no technical evidence provided by

Fonterra that suggests otherwise, and as such, I have no reason to alter my original conclusions.

**John Kinross Mckensey**

**27 November 2019**

