and:	Waikato District Council
	Submitter 2053
Between:	Mercury NZ Limited
in the matter of:	the Proposed Waikato District Plan
under:	the Resource Management Act 1991

Territorial Authority

Opening legal submissions on behalf of Mercury NZ Limited (Topic 27 Natural Hazards)

Dated: 6 May 2021

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OPENING LEGAL SUBMISSIONS ON BEHALF OF MERCURY NZ LIMITED (TOPIC 27 NATURAL HAZARDS)

May it please the Commissioners:

INTRODUCTION

- 1 These legal submissions are presented on behalf of Mercury NZ Limited (*Mercury*) (Submitter 2053), in relation to Topic 27 (Natural Hazards) of the Proposed Waikato District Plan (*PWDP*).
- 2 Mercury is concerned with the approach adopted by the Waikato District Council (*Council*), and within the PWDP, in relation to the management of flooding risk hazards. It considers that the PWDP fails to adequately manage risk associated with flooding as a natural hazard, and that it therefore fails to meet the statutory requirements under the Resource Management Act 1991 (*RMA*).
- 3 The crux of Mercury's concerns is that the Council has not prepared the PWDP using a risk-based approach to inform its decisions on where development and changes in land use and intensification should occur given flooding risk. As identified in Mercury's opening legal submissions back in September 2019, the staging of the PWDP process has meant that land use provisions were effectively promulgated in isolation from consideration of flooding hazard risk.
- 4 With the natural hazard provisions now before the Hearing Commissioners, this flaw in the plan-making process, and the Council's failure to take a risk-based, integrated approach from the outset has been compounded by both the spatial maps and natural hazard policy framework and rules not identifying and managing all areas of significant natural hazard risk. Council officers have equated 'significant risk' with 'high risk', when Mercury's view is that the two are not always the same. Council's approach has led to a deficient risk management framework, with known areas of significant risk not being identified in the maps for plan users. Mercury considers that the PWDP provisions before the Commissioners do not adequately manage those areas of significant risk, which leaves the potential for intolerable levels of risk to people and communities.
- 5 The piecemeal process adopted by the Council to date could lead to poor planning outcomes and creates risks to land use and development in unidentified and unmitigated flood hazard areas. Had Council taken a proper risk-based approach from the start of the plan review process, Mercury considers the PWDP would be a markedly better plan. Unfortunately, we are not in that situation.

6 Mercury realises the Hearing Commissioners can't now `turn back the clock', and fix the flaws in this approach, and that this hearing process needs to progress towards a conclusion. Mercury therefore seeks pragmatic and more limited amendments to the spatial mapping and policy framework, which it considers will improve how the PWDP manages significant natural hazard (flooding) risks.

Mercury's role in the Waikato

- 7 Mercury owns and operates the Waikato Hydro Scheme. As part of the management of the Scheme, Mercury works closely with the Waikato Regional Council (*WRC*) which is the Statutory Flood Manager during periods of high flows.
- 8 The operation of the Scheme (largely through the Taupo Gates, but also through the hydro reservoirs further down the system) can alleviate some flood risk to downstream areas, as up to a certain level of inflow can be withheld for a period.
- 9 However, at times during high flow events the volume of inflows into the system can be more than the design capacity, and therefore the Scheme is not physically able to prevent all flooding. The Waikato River, its catchment and tributaries, are a major waterway with significant inflows - flooding during times of high flows is a natural and expected occurrence. There will always be a need for the Waikato River to utilise the natural floodplains that exist downstream of Lake Taupo.
- 10 Mercury would like to ensure that urban land use and development in the Waikato District only occurs in locations where there is an acceptable or tolerable level of flooding risk exposure. However, ultimately, the responsibility for this lies with Council and the WRC.

MERCURY'S CONCERNS WITH THE APPROACH TO NATURAL HAZARDS

- 11 Mercury has endeavoured to work collaboratively with Council, raising its concerns about flood hazard risk for many years, with discussions relevant to this process starting back in 2004.¹ Despite Mercury's best endeavours and consistent messaging, the Council has still not undertaken a comprehensive risk assessment of flood hazard in the district.
- 12 In its Opening Legal Submissions dated 26 September 2019, Mercury expressed its concerns with the staging approach taken. In particular, the concern that a hazard assessment should have informed the development of the policy framework and zoning for land uses; not the other way around.²

¹ Evidence of Mr Colson (Topic 2), dated 23 September 2019, at Section 6.

² Opening Legal Submission on behalf of Mercury NZ Limited, dated 26 September 2019, at [3] – [4].

13 While Council has asserted that this staging would have no impact on managing natural hazards in the district, and the Stage 2 (natural hazards) hearing is now occurring briefly in advance of the rezoning topic, Mercury remains concerned that the PWDP is not integrated, there are flaws in how flooding hazard areas are managed, and that this may lead to poor planning outcomes.

STATUTORY FRAMEWORK

14 Mercury considers that the PWDP, as currently formulated, does not meet the statutory requirements and that Council has not discharged its statutory duties.

Section 6(h) RMA

15 The Council is required to recognise and provide for the management of significant risks from natural hazards, as a matter of national importance under section 6(h) RMA. The phrase *"recognise and provide for"* identifies the nature of the obligation.³

Functions of Council

- 16 Under sections 31(1)(a) and 31(1)(b) of the RMA, the Council also has the functions of establishing and implementing policies to achieve the integrated management of the effects of the use and development of land and associated natural and physical resources in their district, and the control of effects, including for the purpose of avoiding or mitigating natural hazards.
- 17 The Environment Court has identified that the function of managing effects of natural hazards is to be recognised by *both* regional councils and territorial authorities when preparing their plans.⁴

Giving effect to the RPS

- 18 The PWDP must give effect to the Waikato Regional Policy Statement (*RPS*) (section 75(3)(c) RMA). The Supreme Court has held that "give effect to" simply means "implement". It is a strong directive, creating a firm obligation.⁵
- 19 Mercury considers that the RPS sets a clear and robust policy framework, outlining what is required in order to manage land use so as to reduce natural hazard risks. Objective 3.24 of the RPS provides that:

The effects of natural hazards on people, property and the environment are managed by: \ldots

b) reducing the risks from hazards to acceptable or tolerable levels;...

- ⁴ Canterbury RC v Christchurch CC [1995] 3 NZLR 189 (CA).
- ⁵ Ibid, at [77].

³ See Environmental Defence Society Inc v The New Zealand King Salmon Co Ltd [2-14] NZSC 38, at [26].

20 Objective 3.24 is supported by Policy 13.1 Natural Hazard Risk Management Approach, which provides:

Natural hazard risks are managed using an integrated and holistic approach that:

- (a) ensures the risk from natural hazards does not exceed an acceptable level;
- (b) protects health and safety;
- (c) avoids the creation of new intolerable risk;
- (d) reduces intolerable risk to tolerable or acceptable levels;...
- ...
- (h) recognises natural systems and takes a 'whole of system' approach; and
- (i) seeks to use the best available information/best practice.
- 21 To implement the objective and policy, Implementation Method 13.1.1 Risk Management Framework then requires that the PWDP incorporates a "risk-based approach" into the management of subdivision, use and development in relation to natural hazards. The method requires that new intolerable risk is not created, and intolerable risk is reduced to acceptable levels.
- 22 The Environment Court considers that a risk-based approach is one where there is a "...*purposeful assessment of the risk of activities before they are allowed to commence*".⁶ The staging of the PWDP has meant that this approach has not been applied. Mercury considers an ISO31000:2009 assessment, which quantified risk in terms of location, probability, magnitude and consequences would have been the best approach.⁷
- 23 Implementation Method 13.2.5 requires district plans to "ensure that use and development within high risk flood zones...is appropriate, including by avoiding...development where these would be vulnerable to a natural hazard event or would place a community at intolerable risk". Mercury considers there are flood hazard areas vulnerable to intolerable risk that are not currently mapped in the PWDP.

⁶ Aratiatia Livestock Limited v Southland Regional Council [2020] NZEnvC 110 at [15].

⁷ Evidence of Mr McKenzie at [3.11].

- 24 Control of subdivision and development within a floodplain is specifically provided for by Implementation Method 13.2.6(a), stating that it cannot occur in a floodplain with an annual exceedance probability of 1% unless:
 - appropriate assessment of the risks has been undertaken and these risks will not exceed acceptable levels;
 - (ii) appropriate assessment of the likely effects has been undertaken, including the effects of any new structure or fill on the diversion of overland flows or any consequential increased runoff volumes;
 - the creation of a new, or exacerbation of an existing hazard, including those off site, and any adverse effects are avoided, remedied or mitigated;
 - (iv) any adverse effects of a 1% annual exceedance probability flood event on habitable buildings are avoided or mitigated;...

MERCURY'S CURRENT POSITION

- In the absence of a comprehensive natural hazards risk assessment as the foundation of the PWDP, Mercury has focussed on identifying amendments that, at a minimum, would help to improve the PWDP – put simply, the best that could be done now.
- 26 Mercury considers the following matters must be addressed:
 - 26.1 Spatial identification of flood hazards in Lake Waikare and the Rangiriri Spillway, through the mapping of the 1% AEP design flood level of RL 7.37m as part of the Flood Plain Management Area Overlay; and
 - 26.2 Various amendments to the policy framework and rules to help manage areas of significant risk within the Flood Plain Management Area.
- 27 I address each of these matters in turn.

Spatial identification of flood hazards in Lake Waikare

- 28 Mercury acknowledges there has been some improvement in the mapping of high risk areas and areas affected by the main stem of the Waikato River. However, the exclusion of Lake Waikare and the Rangiriri Spillway has not been justified from a technical perspective.
- 29 Mercury seeks the amendment of the planning maps to identify areas of significant risk at Lake Waikare. Dr Webby's evidence explains the importance of Lake Waikare as a primary flood storage

facility for the Lower Waikato Waipa Flood Scheme.⁸ Flood hazard information exists *now* to spatially identify areas of significant risk, and the PWDP should manage those risks.

- 30 In her s42A report, Ms Carter recommends that Mercury's mapping relief be rejected because modelling data for the 1% AEP with climate change is not yet available (paragraph 470). Ms Carter notes that WRC is expected to undertake this modelling next year, and she maintains that it is better to wait to map this area of significant risk, once Council has more information about the implications of climate change. She describes the use of an 8m RL line as a "surrogate" and says it is unknown what this line represents (paragraph 473).
- 31 Dr Webby acknowledges that the data identifying the 1% AEP flood level of RL 7.37m is based on a 1983 review. While not perfect, and more of an interim measure, Mercury considers it is better to use the best available information and identify this area of known significant risk in the PWDP now, as opposed to doing nothing and holding off until some undefined point in the future. This approach is consistent with Policy 13.1 of the RPS, which states that natural hazard risks are to be managed "*using an integrated and holistic approach that:i) seeks to use the* **best available information**/best practice" (emphasis added).
- 32 This future modelling and performance assessment, which Mr Liefting of WRC confirms in his rebuttal evidence,⁹ is planned for the 2021/22 financial year. While it appears that this work will go ahead, it still needs to be undertaken and then the outputs need to be incorporated into the District Plan by way of a plan change process –which could take quite some time to complete.
- 33 In Mercury's view, not identifying this area now in the PWDP maps as an interim measure represents a failure to give effect to the RPS.

Management of flood risk in the PWDP – Mercury's proposed amendments to policies and rules

34 The Council classifies areas as High Flood Risk Areas, and appears to treat equate 'significant risk' with 'high risk'. This approach is reflected in paragraph 142 of Ms Carter's s42A report. With respect, Mercury considers that this approach misunderstands these concepts. Areas of significant risk may not always be the same as areas of 'high risk'. Some areas of significant flood risk are not captured, but still pose a risk to people and vehicles due to being floodable.¹⁰

⁸ Evidence of Dr Webby, dated 16 April 2021, at [4.2]-[4.5].

⁹ Rebuttal evidence of Mr Liefting, dated 3 May 2021, at [3.7].

¹⁰ Evidence of Dr Webby, dated 16 April 2021, at [6.7].

- 35 Ms Carter's s42A report confirms there are floodable areas (based on the 1% AEP floodplain) that do not meet the High Flood Risk Area and are categorised as an area of "tolerable risk".¹¹ However, Dr Webby and Mr McKenzie do not agree, because the hazard categorisation means the flood depth and velocity are unsafe for people and vehicles. Any risk that has a life safety risk to people surely cannot be categorised as tolerable.¹²
- 36 Against this context, and in the absence of a risk-based approach being applied to preparation of the PWDP from the outset, Mercury seeks a range of amendments to the policies and rules that broadly relate to:
 - 36.1 Greater recognition of all flood hazard areas within the policy framework;
 - 36.2 Changes to policies to ensure that intolerable risk is considered, or that risk is managed to be acceptable;
 - 36.3 A more restrictive rule framework for activities in all flood hazard areas; and
 - 36.4 Requirements for more robust consideration of flooding effects (including cumulative infill effects).
- 37 These amendments are set out in in detail in **Attachment A** to Mr McKenzie's evidence.

Council's responsibility in relation assessing and managing flood risk

- 38 In her report, Ms Carter appears to suggest that Mercury should provide additional information to support its submission. With respect, there is no further information that Mercury could currently provide – and that is really Mercury's point. The obligation to manage natural hazards such as flooding falls squarely within the ambit of Council's statutory responsibilities under the RMA. Further, through the Implementation Methods, the RPS provides clear direction on how Council should manage and mitigate that flooding risk in the PWDP.¹³
- 39 Not all flood hazard areas are mapped in full, which means plan users are not aware of them, and the natural hazard provisions do not adequately manage the risks associated with development of these areas.

¹¹ Ms Carter's s42A report at [144].

¹² Evidence of Dr Webby, dated 16 April 2021, at [6.10].

¹³ Implementation Methods, 13.1.1, 13.1.3, 13.2.1, 13.2.2, 13.2.5 - 13.2.8.

EVIDENCE/WITNESSES TO BE PRESENTED

- 40 Evidence has been provided by:
 - 40.1 Dr Webby, in relation to flood and flood plain management; and
 - 40.2 Mr McKenzie, in relation to planning.

CONCLUSION

41 Mercury respectfully seeks the amendments to the PWDP as set out in Mr McKenzie's evidence, including **Attachment A** to his evidence.
Both Mr McKenzie and Dr Webby are available to answer questions.

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Catherine Somerville-Frost / Jo Pereira Partner / Special Counsel 6 May 2021