

**FURTHER PRE-HEARING MEETING REPORT OF CHAIR PRESIDING
PURSUANT TO SECTION 99 OF THE RESOURCE MANAGEMENT ACT
1991 (RMA)**

**TAKAPAU WASTEWATER TREATMENT PLANT DISCHARGE
RESOURCE CONSENT APPLICATION**

Introduction

1. This is the second pre-hearing report I have prepared, having been appointed by the Hawke's Bay Regional Council (**the Council**) to Chair this and a previous pre-hearing meeting regarding the application made by Central Hawke's Bay District Council (**CHBDC**) for the Takapau Wastewater Treatment Plant (**WTP**) discharge.
2. In my previous report, issued following the pre hearing meeting which took place on 13 December 2021, I gave an overview of the application and activity proposed along with the matters discussed.
3. I also set out in some detail (albeit by way of summary), changes to proposed conditions of the resource consent for the Takapau WTP that had been agreed at that meeting.
4. I recorded that all substantive issues raised at the meeting and related conditions had been essentially agreed by all parties, albeit subject to CHBDC providing further information on certain matters (along with HBRC on certain other matters).
5. In response to that further information, the HBRC reporting officer who is responsible for processing the application (Ms Edmead) had prepared a s 42A report regarding the application.
6. This report recommended that the application be approved subject to conditions, including a number of amendments to the conditions of consent agreed at the previous pre-hearing meeting, including in light of the further information received from CHBDC, and further consideration of the issues arising (with the benefit of advice from HBRC's technical advisers).
7. As also evident from the content of that report and discussion at this latest pre-hearing meeting, there had been a degree of interchange between Ms Edmead and the CHBDC representatives since the last pre hearing meeting.

8. Both parties wished to determine whether two key outstanding matters raised in the s 42A report could be resolved through further discussion, rather than the consent being issued on the conditions proposed in that report, or by way of decision from an independent commissioner.
9. The two principal outstanding issues needing to be discussed at the further pre-hearing meeting involved:
 - (a) The “end of pipe” (prior to discharge) performance standards to be set through (now) condition 3; and
 - (b) Duration of consent.
10. The other proposed changes to conditions agreed at the previous pre-hearing meeting were (to my understanding) accepted by CHBDC.

Parties Attending

11. The same parties as attended the previous pre-hearing meeting were present but with CHBDC additionally represented by Messrs Chris Moore and Garrett Hall (Planner and Engineer at Beca, advising CHBDC).
12. Set out below is a brief record of the discussion held and the outcome reached on each principal issue remaining in contention.

Condition 3 – Performance Standards

13. The previous pre-hearing meeting report recorded my understanding that the terms of condition 3 had been agreed subject to the provision of further information from CHBDC as to the basis of the proposed limits for total suspended solids (TSS), dissolved inorganic nitrogen (DIN) and *E.Coli* in particular.
14. The s 42A report advises that this further information was supplied through a letter dated 22 December 2021, which replaced previous “place holder” limits included in a draft set of consent conditions submitted with the application, with (in some instances) higher limits, particularly for biological oxygen demand (cBOD₅), TSS and ammoniacal nitrogen.
15. At the meeting, CHBDC explained that the AEE was prepared on the basis of what was being discharged directly to the river to this point, rather than previous compliance limits or the place holder limits themselves.

16. Ms Edmead had advised through her report that the new limits were not only higher than in the publicly notified “place holder” conditions, but substantially higher in some instances than the actual levels of these contaminants in the existing discharge based on past monitoring results, and as assessed in the Beca Surface Water Assessment report undertaken for the application.
17. To that point, it was noted that the proposal in the s 42A report to set limits (based on the past monitoring data) for stages 0 and 1 of the consent (prior to completion of the full irrigation area at 20 hectares) would put CHBDC in a situation of immediate non-compliance.
18. After considerable discussion on this point, it was agreed that CHBDC would propose a set of limits for stages 0 and 1, based on the ‘2 out of 12’ and ‘8 out of 12’ sampling model of the previous condition 3, and more closely aligned to past monitoring data, but without raising this immediate compliance issue.
19. However, with respect to stage 2, and given the prospect that discharges to the Makaretu River could continue in conditions of median or higher river flow, the Council was concerned to ensure that the higher proposed limits would not have an adverse surface water impact at or downstream of the discharge point.
20. To that end, it was agreed that CHBDC would provide the following information to the Council (as confirmed to me by email following discussion between Mr Hall and Ms Lough):

A near-field mass balance water quality assessment will be undertaken to assess potential near field water quality effects of the proposed intermittent discharge to the High Rate Land Passage and subsequently the Makaretu River for stage 2 of the proposed discharge. This assessment will be undertaken for the following two scenarios as envisaged by the draft consent conditions (draft condition 12(c)(ii)and(iii)):

- *Treated wastewater discharge rate of 800 m³/day, when the river is at median flow (9,470 L/s)*
- *Treated wastewater discharge rate of 1,000 m³/day, when the river is at 3 x median flow (28,410 L/s)*

The discharge treated wastewater quality parameters will be those presented in draft condition 3 (including the stage 1 onward E. coli condition).

Results will be presented in a brief memo comparing the predicted downstream concentrations to those recorded upstream (as per the methodology applied in the Water Quality Assessment – Makaretu River, Beca, Doc ID: Beca, 2020 – TD.25). Brief commentary will also be provided on potential downstream effects on the Tukituki River catchment.

Consent Duration

21. On the issue of duration, CHBDC presented information addressing concerns raised in the s 42A report (and as identified by Ms Edmead in the proposed agenda for the meeting) as reasons for recommending a 20 rather than 35 year duration of consent.
22. These reasons included:
 - Uncertainties over the effluent quality standards for stage 0, stage 1 and stage 2 (as addressed above).
 - Unknown effects and cumulative effects, and specifically the potential for diffuse discharge on other tributaries of the Tukituki eg the Porangahau Stream catchment (through a groundwater pathway).
 - Unknowns in treatment quality, with particular regard to the impact on surface water (as to be addressed through the further information to be provided, above).
 - Unknowns in how the farm will be managed.
 - Current exceedance of the Change 6 targets for nitrogen within groundwater underlying the site.
23. Without going into too much detail, basic points made by CHBDC in addressing those concerns included that:
 - (a) Relative to existing contaminant levels including through the groundwater pathway, there will be a net reduction in nutrient loadings compared with a baseline scenario involving existing farm operations and the surface water discharge, conservatively assessed at least 10% for nitrogen, and much greater than that for phosphorus.
 - (b) The concern that groundwater levels are above the Plan Change 6 targets is “out of context”, with the monitoring data relating to shallow groundwater, whereas the targets apply below 10 metres or at greater depth.
 - (c) There is nothing unknown about the wastewater treatment process (it will continue as at present, but with the addition of filtration and UV) nor for that matter as to farm management, which would be determined through the farm environmental

management plan which needs to be certified under proposed consent conditions, and cover all inputs including land irrigation.

24. To these points Ms Lough and Ms Edmead responded that the uncertainty is not so much over farm management, but the interface between that and irrigation loadings, which would not be under the farmer's control. Further, that regardless of the depth at which nutrient levels had been assessed as higher than the Plan Change 6 targets, that groundwater is all ultimately connected to surface water.
25. A further concern raised by the Council's technical experts is that the Porangahau Stream may be the ultimate receiving environment of diffuse groundwater discharges when the groundwater surfaces.
26. The s 42A report advises that there is therefore a concern that the groundwater leaching from the land discharge would contribute to the cumulative increase in nutrients at other locations.
27. The outcome on this point was that the Council would consider the additional information provided on the uncertainties and issues of concern relevant to consent duration identified in the agenda.
28. Further that Ms Lough would provide to CHBDC information as to the potential for a connection through groundwater with the Porangahau Stream, for CHBDC to consider and respond in turn.

Other Matters

29. Mr Ball reiterated points made at the previous pre-hearing meeting as to the need for progressive improvement and review of consent conditions at specific stages, to ensure that the limits set now do not remain in place for the full duration of the consent, and respond as further information comes to hand about the cumulative effects of improved nutrient management within the relevant catchments, along with scientific understanding of nutrient related effects.
30. It was suggested in this context that condition 76 could be amended to provide for five yearly reviews of the performance limits for the discharge in condition 3, ie in addition to the nitrogen and phosphorus limits in condition 8.

Outcomes

31. Against that background, the following outcomes were agreed:

- (a) CHBDC to provide proposed revised performance limits for stages 0 and 1.
 - (b) CHBDC to provide the information on surface water impacts of the proposed discharge performance standards for stage 2 as set out above.
 - (c) Council to provide information regarding potential groundwater connection to Porangahau Stream, for CHBDC to respond to in turn.
 - (d) Condition 76 to be amended to reference a review of the condition 3 performance limits.
 - (e) Section 42A report to be revised within 10 working days of CHBDC's response on the Porangahau Stream groundwater connection issue.
32. Whether there needs to be a hearing on the issue of consent duration will depend on the final recommendation as to duration in the s 42A report, as completed with this information all to hand.



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Martin Williams
Pre-Hearing Meeting Chair

Dated: 01 July 2022