

**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. I was appointed by the Hawke's Bay Regional Council pursuant to s 99 of the RMA to chair a pre-hearing meeting regarding the application made by Central Hawke's Bay District Council (**CHBDC**) for the Takapau Wastewater Treatment Plant discharge (**WTP**).
2. This report sets out the key matters discussed by the parties attending the meeting, and the issues that were agreed, particularly with reference to proposed conditions of the various resource consents that have been sought under the application for the WTP discharge.
3. This was the second pre-hearing meeting regarding the application, the first having taken place on Thursday 18 November 2021.
4. I was provided with the minutes of that first pre-hearing meeting including a summary of the matters discussed, and a list of agreed actions and "key feedback" points.
5. I was also provided with relevant application material, including the Assessment of Environmental Effects (**AEE**), and a report prepared by Pattle Delamore Partners (**PDP**) comprising a review of the technical issues raised by the application.
6. Further, with a series of 'versions' of proposed consent conditions for the resource consents required, including as generated following the first pre-hearing meeting, updated in response to outputs of the PDP review, and with subsequent comments from CHBDC and the submitters.
7. An agenda for the meeting was pre-circulated along with the reference materials as just outlined.

Parties Attending

8. The meeting was held at the CHBDC Chambers on Monday 13 December 2021, commencing at 9.00 am and finishing at (approximately) 4.45 pm.
9. Present at the meeting were:

- Mr Bill Hale – Takapau resident (submitter)
- Mr Reynold Ball – Hawke’s Bay District Health Board (submitter)
- Mr Darren de Klerk – CHBDC (applicant)
- Mr Hamish Lowe – Lowe Environmental Impact (Technical Advisor to CHBDC)
- Mr Sam Morris – Lowe Environmental Impact
- Ms Sophia Edmead – Hawke’s Bay Regional Council (Senior Consents Planner)
- Ms Tania Diack – Hawke’s Bay Regional Council (Team Leader Consents)
- Ms Hilary Lough (by audio visual link) – PDP.

The Application and activity proposed

10. In essence, the application is for a staged upgrade of the existing Takapau WTP in order to progressively reduce the river-based discharge of wastewater from the plant, and replace that with a (principally) land-based irrigation regime.
11. Land based wastewater irrigation would be integrated with and support continued agricultural use of the proposed (approximate) 40-hectare site adjacent to the existing WTP, which would (I understand) be leased or licenced by CHBDC for the purpose from the current landowners.
12. The current discharge point is to the Makaretu River via a wetland drain from the pond treatment system.
13. The WTP upgrade effecting this transfer of a river to land based discharge, would proceed across two principal stages, as follows:
 - Stage 0 – current discharge continues for a period of up to three years.
 - Stage 1 (within 3 years) – involving provision of at least 2,000 m³ of storage and a minimum of 5 hectares of irrigation.
 - Stage 2 (within 5 years) – involving a minimum additional 15 hectares of irrigation (to a total of 20 hectares), with additional storage capacity to a total of at least 18,000 m³.

14. The concept is that any future discharge to the Makaretu River would be confined to periods of high river flow (principally, above half or median flow for Stage 1 and Stage 2 respectively).
15. The impetus behind this transition is one of strong iwi and broader community preference ,to avoid wastewater discharges to the river if at all possible.

Matters Discussed

16. Discussion at the meeting closely followed the proposed resource consent conditions (Version 4), with this version (incorporating the PDP advice outputs) distributed prior to the meeting, and comments in turn received on that version from CHBDC and the District Health Board (through Mr Reynolds).
17. Version 4 included 62 conditions which would be allocated across the necessary range of resource consents for the Takapau WTP, i.e. including a general consent, land discharge consent, land use consent, and air discharge consent etc.
18. The condition (of consent) topics which were the principal focus of discussion at the pre-hearing meeting comprised:
 - Treated wastewater standards (proposed condition 3).¹
 - Filtration and ultraviolet (UV) treatment system requirements (proposed condition 4).
 - Limits on total nutrient loading to the land discharge site (i.e. from both continued farming and nutrient inputs from the land-based wastewater discharge) (proposed condition 7).
 - Potential effects from grazing animals on crops/land irrigated with wastewater (including as associated with human consumption, ingestion of pathogens) (proposed condition 10).
 - Incentivising land-based irrigation in preference to river/surface water discharge, including on a “non-deficit” basis (proposed conditions 6, 11 and 12), including the specific discharge regime as linked to median flows and volumes able to be discharged at half, median and three times median flow rates for the Makaretu River (proposed condition 12).

¹ Number referencing being to version 4.

- Management of odour and site interface effects with the community (as raised by Mr Hale) (proposed condition 16, landscaping requirements etc).
 - Monitoring and reporting requirements including for soil moisture and heavy metals (proposed conditions 34 and 54(b) in particular).
 - On-farm nutrient management within the context of an over-allocated (as to nutrients) Tukituki River catchment (proposed condition 52 (Farm Environmental Management Plan)).
 - Operational and Management Plan requirements (condition 47).
 - Continuous improvement and system review reports (conditions 57(a), 57(b) and 62).
19. The dominant focus of discussion (relevant to many of the conditions listed above) was the need to “optimise” the overall environmental nutrient related performance of the combined farming and land-based wastewater irrigation regime, in the context of the strong community preference to transition from a river to land based discharge.
 20. A “non-deficit” model is proposed, which involves a greater rate of irrigation than can be immediately absorbed within the topsoil, grass, crops, and other vegetation on the farm property, again- in preference to a river discharge.
 21. A consequence of that approach is that nutrients within the wastewater will drain into ground water, and in turn potentially affect the Tukituki River catchment system (i.e. surface water), albeit indirectly.
 22. Taken too far, excessive wastewater irrigation to land could be counterproductive, if too much fertiliser then still needs to be added to sustain farming activity, i.e., to replace wastewater-based nutrients lost to groundwater. Conversely, if land-based irrigation is managed well (or optimised), wastewater nutrients would supplement even replace fertiliser inputs.
 23. The Regional Council’s concern in this context relates to the cumulative impacts of activities within the Tukituki catchment, which is over-allocated relative to the 0.8 mg/l DIN limit set under Change 6 to the Regional Resource Management Plan (**RRMP**), and with (as I understand it) the existing farm operation currently operating in excess of the LUC natural capital leaching limits under the RRMP (also set under Change 6).

24. The tension between minimising the *physical* amount of river discharge (through non- deficit irrigation), and still ensuring a net improvement in overall *nutrient related impacts* on the catchment system, represents the essential challenge presented by the application.
25. The agreed outcomes in terms of revised conditions address that tension, in the attempt to arrive at the right overall balance between encouraging non-deficit irrigation (to minimise the rate and extent of river-based discharge) and ensuring that the overall environmental health of the ground and surface water system is improved.
26. Specific issues as to pathogen management including from consumption of food produced on the farm property, alongside odour and community interface concerns (site screening and the like), were also addressed during the course of the discussions.

Outcomes

27. The essential outcome of the pre-hearing meeting was that all proposed consent conditions were agreed as between the Regional Council reporting officers present at the pre-hearing meeting, the CHBDC representatives, and the submitters, on the following basis (*noting the reservations hereby recorded, including as to provision of further information*).
 - (a) Condition 3 (Version 6 as appended to this report) agreed subject to provision of further information from CHBDC for Regional Council and PDP review, particularly in terms of the total suspended solids, Dissolved Inorganic Nitrogen (DIN), and *E.coli* limits, and as to the proposed management of pathogens (including helminths – refer proposed amendment to condition 47(b) (expressly referencing reduction of pathogens)).
 - (b) Condition 4a amended to require certification and installation of a UV treatment system able to meet the wastewater treatment standards in condition 3, with the system to be operational prior to Stage 1 (i.e., within three years of the commencement of the resource consents), and thereafter operated continuously at times of discharge.
 - (c) Nutrient loading limits (including for farm-based fertiliser application) in condition 7, to apply until reviewed under condition 63 (proposed new condition 63(a) in particular) following completion of the first system review report under condition 57(a) (5 years from consent commencement), which

would include an assessment of the application rate regime to optimise overall nitrogen and phosphorus contributions to ground and surface water. CHBDC is to provide additional information as to the justification for the limits included (under condition 7, Version 6) with reference to information regarding the existing farm system.

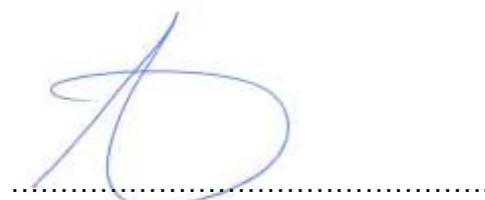
- (d) The conditions' structure, being one of review following receipt of the first (5 yearly) system review report, would thereafter enable progressive optimisation of the overall operating regime, i.e. including as to non-deficit irrigation, incentivising land rather than surface water discharges, and farm environmental management performance, over time.
- (e) In that regard, proposed condition 52 (requiring provision of a Farm Environmental Management Plan) has been amended to expressly reference nutrient budgeting, including for both farm and irrigation system inputs.
- (f) Conditions 11 and 12 amended to further incentivise non-deficit irrigation by enabling breach of the land irrigation rate limits in condition 6, in the event that storage has reached 80% (rather than 90%) of the minimum volumes recorded in condition 13, with condition 12 in turn structured to progressively constrain discharge volumes relative to river flows, for Stage 1 and Stage 2.
- (g) Condition 12 has been further amended to reference river flows for the Tukituki River (at Tapairu Road) as a determinant of median flows for the Makaretu River (there being no actual river flow resource available), with CHBDC to provide justification for the correlation between that flow measurement site, and the Makaretu River at the discharge point.
- (h) The Regional Council will identify the State of the Environment report from which specific flow rates (half median, median, three times median etc) could be set under condition 12, and a new review condition is added under condition 62 (62(f)) along with system review reporting (proposed condition 57 (a)(e)), to ensure that the median flow measurement point (Tapairu Road Tukituki gauging site) remains appropriate to predict median flows for the Makaretu River.

- (i) New condition 19(a) has been added requiring the consent holder to plant and maintain a vegetation screen along State Highway 2, to be double fenced to ensure survival of the plants, with irrigation not to commence until that planting has completed. CHBDC has also agreed to update Mr Hale (who raised this issue) on discussions with iwi as to extending riparian river corridor planting, and following further discussions with the landowners as to potential planting along the western site boundary.
- (j) Condition 34 has been amended to delete reference to soil moisture and heavy metals, with soil moisture addressed through continuous monitoring under condition 34(a), and heavy metals to be monitored on a five yearly basis within proposed new condition 34(c). A proposed condition requiring the monthly reporting of soil moisture data (condition 54(b) of Version 4) has been deleted, with the telemetered soil moisture data under proposed condition 34(a) instead needing to be provided to the Council upon request.
- (k) Conditions 40 and 42 would be amended as to the number of years (two versus three) for which an ecological assessment of the Makaretu River is required, subject to CHBDC confirming to the Regional Council that previous sampling is equivalent to the requirements of these two conditions.
- (l) Condition 37 to have a 400-metre downstream discharge location (rather than 200 metres as proposed by PDP), to align with historic records and sampling of the discharge.
- (m) Condition 47 amended as addressed above (reference to reduction of pathogens in condition 47(b)) and with condition 47(q) to now also refer to mitigation measures for odour associated with wastewater treatment plant and maintenance activities.
- (n) Condition 57 (annual reporting) to be amended to include a new requirement relative to soil moisture monitoring trends, including as to field capacity and any defined irrigation trigger points (condition 57 (f)).
- (o) An additional review purpose has also been added to proposed condition 62, regarding new registered drinking water suppliers which might be directly impacted.

- (p) New proposed condition 63 (as also discussed earlier) includes reviews following receipt of the five yearly system review reports, including as would enable changes to consent conditions and the treatment system, in response to those system review reports.
28. The list of agreed outcomes set out above is intended to be relatively exhaustive, however in the event of any conflict between that summary and the conditions amended in Version 6 appended to this report, the latter should prevail.

Result

29. In the result, all substantive issues and related conditions were essentially agreed by all parties.
30. Mr Reynold Ball confirmed that he is unlikely to wish to be heard but would need to obtain confirmation from the District Health Board itself.
31. The applicant would not need to be heard, assuming that the conditions appended to the s 42A report for the application are consistent with the outcomes recorded herein. In that regard, CHBDC wished me to record that it would be “disappointed” if the s 42A report were to propose additional or different conditions to those agreed at the pre-hearing meeting.
32. Mr Hale does not wish to be heard (as signalled previously).



Martin Williams
Pre-Hearing Meeting Chair

Dated: 22 December 2021