

Your ref: 4352  
Our ref: 12528591

01 April 2022

Whangārei District Council  
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**APP.004352.01.07 – Whangārei Wastewater Treatment Plant Resource Consent Application - Request for Further Information under Section 92(1) of the RMA Response**

Dear Stuart

Thank you for your letter dated 11 March 2022 requesting further information, pursuant to Section 92 of the Resource Management Act 1991 (RMA), on the resource consent application for the Whangārei Wastewater Treatment Plant (WWTP). Each of the points referred to in the letter are addressed below.

*(1) The application states “that over the Whangārei WWTP planning horizon considerable uncertainty exists associated with [among other things] Whangārei city growth”. However, the application also states that the level of certainty/understanding associated with population growth forecasting is reasonable.*

*Can you please clarify or provide further comment on the level of uncertainty associated with the high population growth scenario that is adopted in the resource consent application, and appended Master Plan Report (Appendix H), to predict future average daily inflows to the Whangārei Wastewater Treatment Plant?*

Response:

The Whangārei District Council (WDC) periodically reviews its population projections and growth patterns to inform its long-term planning functions. At the time of preparing the consent application documentation, WDC were in the process of updating their high growth model to inform their Growth Strategy, which was released in September 2021. The growth projections clearly indicate the district could see significant growth of around 46% over the next 35 years. However, as noted in the Growth Strategy (2021), “*there is always uncertainty with growth projections, which can be driven by factors outside the control of Local Government or directed by events or trends that can be difficult to predict (such as COVID-19)*” and that “*growth may happen faster, slower or differently than we can anticipate at this time*”. However, when considering other drivers for change, such as climate change, the level of certainty around population growth is considered better understood and thus has been captured in the Master Planning work to inform the adaptive pathways development and preferred pathway selection at this time.

To mitigate the uncertainty discussed above, the population projections and growth patterns (along with other key drivers) are proposed to be reviewed under the adaptive pathway planning approach on an ongoing basis to inform future pathway decision making. As indicated in Table 12 of the main Assessment of Effects on the Environment report (AEE), the initial review of growth projections is proposed to be carried out in the near future (2023/2024) to inform a review of the Master Plan in 2024. This process will result in a confirmation of the pathway plan for the medium term (pathway 1b, 1d or other) and inform the design process for the proposed plant upgrades.

*(2) The Master Plan Report (Appendix H) states ‘...the treatment plant has performed well throughout the past few years, particularly with respect to “medium” (21,000 to 30,400 m<sup>3</sup>/day) and “high flow” conditions (30,400 to 57,400 m<sup>3</sup>/day) described in the 6 monthly resource consent monitoring reports prepared by*

*NRC over this period.’ It is understood that Whangārei District Council (WDC) will be upgrading the WWTP with augmentation works by 2024/2025 to “increase plant performance and resilience to meet existing consent discharge limits, focusing particularly on improved treatment of ammonia, suspended solids, pathogens and odour management.”*

*WDC proposes the use of preliminary water quality triggers until it develops long-term trigger levels. It is understood that the preliminary trigger values will be used to assess consent compliance over the preliminary two-year baseline monitoring period (i.e. “Within six months of the granting of the consent and for a minimum period of 12 months and a maximum period of 18 months, the quality of treated wastewater, receiving water and sediment environment”).*

*Based on the assessment that the WWTP is generally performing well, is very unlikely to come under population growth pressures in the next couple of years, and augmentation upgrade works will be implemented shortly, what is the practical purpose of the preliminary trigger values?*

Response:

Owing to the generally good level of compliance, the actual influence of the WWTP on the Hātea River is less than would otherwise be suggested by the current compliance limits. New discharge and receiving environment trigger levels are proposed to reflect the intent of the Proposed Northland Regional Plan (PNRP) water quality criteria, that being the protection of the Hātea River from further degradation. To align with this preliminary trigger values have been derived using recent available information to establish a working baseline for the WWTP discharges and effects in the receiving environment. If exceeded over the two-year monitoring period while this baseline and trigger levels are refined (long term trigger levels), Council would investigate the likely cause, which may not be solely the influence of the WWTP but other catchment wide discharges on the environment. The findings of such investigations will further support the understanding the receiving environment and the development of the long-term trigger values. As such, the trigger values are considered to be a starting point for setting a baseline condition, and any exceedances measured will not necessarily result in action at the Whangārei WWTP over and above what has already been proposed (i.e augmentation works).

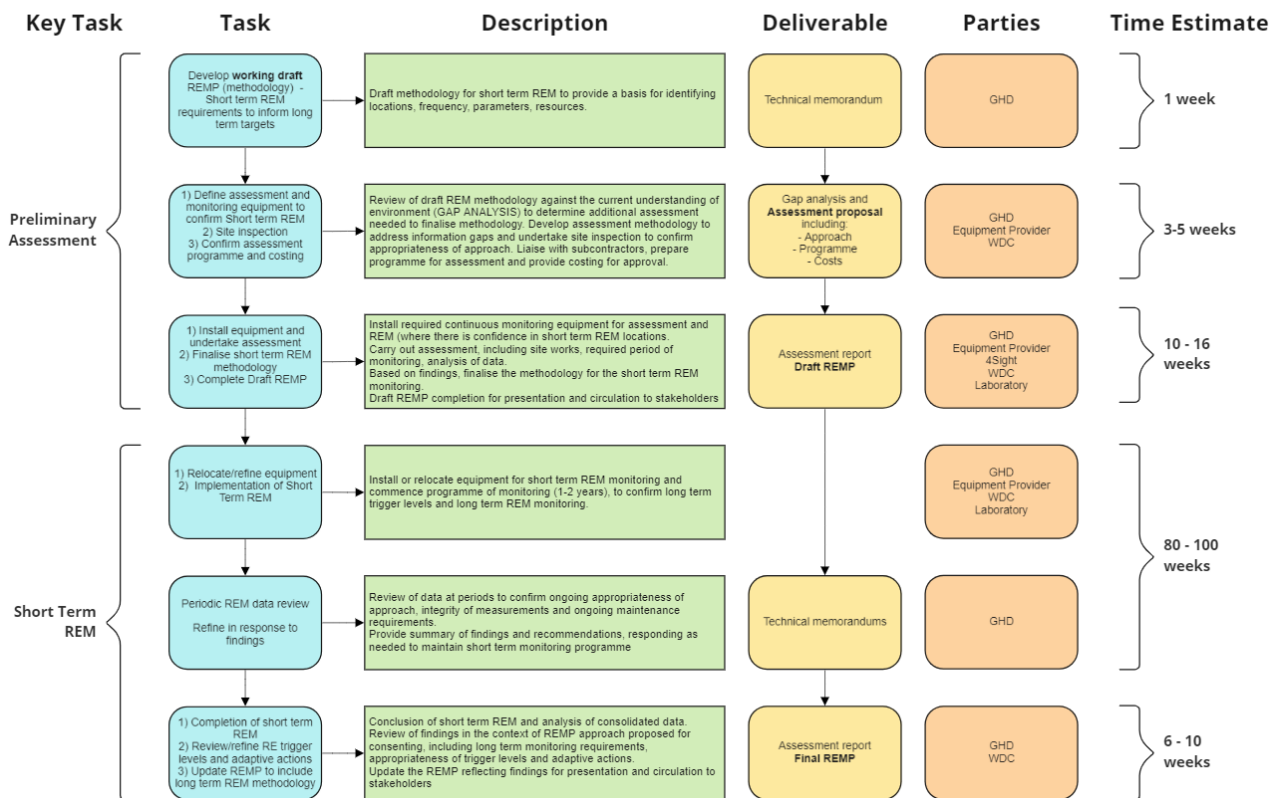
*3) WDC proposes that preliminary trigger values will be developed as part of a Receiving Environment Management Plan, a sub-plan to an Adaptive Management Plan. Appendix E to the application sets out preliminary water quality trigger levels and preliminary WWTP mass discharge trigger levels derived from existing data sets.*

*Can you please clarify why you consider that up to six months is required to derive preliminary trigger values when they have already been derived and proposed?*

Response:

The 6-month period will be used, through a series of tasks, to determine the monitoring requirements and implement monitoring of WWTP discharges and the receiving environment. The required works are detailed in the below figure which lead to the development of the Receiving Environment Management Plan (REMP) and its implementation, which allows monitoring against the preliminary trigger levels and collection of sufficient information to develop the long-term trigger levels. In this regard, we consider that the preliminary trigger levels are already set and need no further refinement, but time is needed to implement the required monitoring programme.

## Whangarei WWTP - Receiving Environment Monitoring Implementation



(4) Appendix E to the application sets out proposed monitoring of the WWTP discharge and receiving environment during the interim “period for the purpose of monitoring against the preliminary trigger levels”. Proposed Condition 5 requires monitoring of the quality of treated effluent and the receiving environment to be implemented within six months of granting of consent.

Is there a reason why such monitoring, as set out in Section 9.5 of Appendix E, could not begin upon commencement of a consent?

### Response:

As noted in response to Question 3, time is needed to inform development and implementation of the REMP. Owing to the highly dynamic environment with multiple influences on water quality, it is considered that refined monitoring is required to:

- 1) Provide information to better understand the receiving environment.
- 2) Accurately monitor and differentiate the influence of the WWTP on the environment and water quality.
- 3) Determine when adaptation of the WWTP or operations are needed to ensure no further degradation of the Hātea River.

The existing monitoring undertaken by Council will continue as additional assessment is undertaken to inform the REMP and refined monitoring is implemented.

(5) Proposed Condition 2 would require WDC to, within six months of consents being granted, prepare four management plans (i.e. Operations and Maintenance Management Plan, Odour Management Plan, Wastewater Irrigation Management Plan, and Adaptive Management Plan).

Is there an existing Operations and Maintenance Management Plan (or similarly named plan) and/or Odour Management Plan (or similarly named management plan) that cover most or all the matters in Schedule 1 to the proposed conditions?

Response:

There is no existing Operations and Maintenance Management Plan (or similarly named plan) or Odour Management Plan (or similarly named management plan) and as such these plans are proposed to be developed on commencement of consent.

**Conclusion**

We trust that the information contained within this letter adequately addresses the matters raised in your request for further information. If you have any further queries with regards to the above responses, please do not hesitate to contact us.

Regards





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