IN THE MATTER of the Resource Management Act 1991 (the Act)

AND

IN THE MATTER A hearing of application by Tararua District Council to Horizons Regional Council for APP-200511178.01 for resource consent in relation to the discharge of treated wastewater from the Eketahuna Township into the Makakahi River, a discharge to air (principally odour) and a discharge to land via seepage, Bridge Street, Eketahuna.

REPORT TO THE COMMISSIONERS

DR BRENT COWIE (CHAIR), MR REGINALD PROFFIT AND MR PETER CALLANDER

REPORT PREPARED BY TABITHA MANDERSON, OPUS CONSULTANTS

TIMELINE TO PREPARE ADDITIONAL CONSENTS IN RELATION TO EKETAHUNA WWTP

23rd May 2017

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1. In response to the panels instructions in Minute 4, the following timeframe has been prepared detailing what are considered to be the necessary steps to prepare the additional consents required associated with 'Option 2' for the preferred discharge location for the Eketahuna WWTP.

2. I have primarily prepared this timeline on behalf of Tararua District Council, after discussion with a number of technical experts that I would see being required to undertake various elements of design and preparation of assessment of environmental effects as part of the consent application process.

3. As identified, there are two known consent applications that will be required, and one that may potentially be required depending on detailed design. Namely, a Discharge Permit that would seek to authorise the 'seepage' component from the wetland, a Land Use Consent for the earthworks that would be required to construct the wetland and potentially a Land Use Consent for a discharge structure, to be determined by the detailed design (proximity to the river bed will be a key determining factor).

4. I discuss each of these in turn below, with a timeframe, including (where relevant) proposed methodology. I have also attached a table showing the timeline to attempt to visually outline the timeline. It needs to be acknowledged that there is a degree of interconnectedness, in particular consultation, but I have tried to show what steps I see could be undertaken in parallel, while recognising that some steps will need to be sequential. As field monitoring is proposed, weather and site conditions will factor in as well.

Discharge Permit

5. The Discharge Permit in relation to seepage has been discussed with Dr Jack McConchie (Technical Principal Hydrology and Geomorphology, Opus) who considered that there were two key questions –
    - Does the local geology in the vicinity of the proposed wetland host a groundwater system, and if so at what depth; and
    - How does any groundwater system interact with the Makakahi River i.e. should any 'groundwater' be regarded as groundwater or simply an extension of the surface water resource.

6. The methodology he proposes for this component is to –
    - Undertake a site investigation to determine the local geology, particularly its potential to host a groundwater system;
    - Drill a number of auger holes to identify whether any groundwater exists on site;
    - If a local groundwater system does exist, then;
        - Attempt to quantify its depth and orientation;
        - Install a number of shallow piezometers to measure the depth to groundwater
        - Install water level recorders in at least one piezometer and adjacent to the Makakahi River;
        - Quantify the degree of interaction between the river and groundwater system

7. Once the data has been collected it would be assessed, to answer the questions posed in para 5 above.

8. Following this step, and the detailed design of the wetland, an assessment of environmental effects would be prepared.

Earthworks

9. The design of the wetland itself would be again based on flows and predicted effluent standards (standards that would be achieved post treatment upgrades). The design and size of the treatment wetland will determine the volume of earthworks required and therefore the Erosion and Sediment Control Plan needed as part of that consent application.

10. A consent for a Land Use Consent for a discharge structure may be required, this will be determined through the design phase. In the timeframe below it is proposed to determine the need for this structure once concept design has been done and during the early stages of the consultation proposed.

11. The applicant proposes to provide six weekly updates to the panel with regards to progress, noting that the methodology does involve some field work that will be weather dependent. Consultation is allowed for.

Timeframes

Project start up (project management establishment) – 1 week

Earthworks
- On site investigations of geotechnical conditions (test pits etc, undertaken at same time as site visit referred to under seepage consent below)
- Design of wetland – based on known flows and nutrient concentrations post upgrades (4 weeks)
- Erosions and Sediment Control Plan (3 weeks)
- Preparation of Application (2 weeks)

Seepage to land where may enter water
- Initial investigations to establish degree of connection between GW and Surface water
    - Site visit to establish ground conditions (depth to water table) (within 3 weeks)
    - Write up findings of initial site visit (2 weeks)
    - Install monitoring equipment in piezometer and surface water level (within 4 weeks of site visit)
    - Monitor for one month
    - Establish relationship between groundwater and surface water (3 weeks to write up results and given opinion on findings)
    - Option of forwarding to Horizons GW expert to review (say 3 weeks)

- Preparation of Application
    - Prepare AEE based on assumed seepage rates, links back to wetland design (4 weeks)
    - Prepare consent application (2 weeks)

Land Use Consent for Discharge Structure (possibly)
- Design wetland, determine if discharge structure is needed
- Undertake design (3 weeks)

- Incorporate details in to consent application

Consultation with Golf Club – ongoing, initially attend committee meeting

Consultation with iwi parties, once initial wetland concept design is prepared. Discuss outcomes of the field monitoring undertaken.

Total timeframe – approximately six months

	Land Use (Earthworks)	Discharge Permit (Seepage)		Land Use Consent (Discharge Structure)
Week 1	Start Up	Start Up		
Week 2	Site visit to confirm ground conditions	Site visit to confirm ground conditions		
Week 3				
Week 4				
Week 5	Concept Wetland Design	Monitoring equipment in place	NOTE: WEATHER DEPENDENT INSTALL WITHIN 4 WEEKS OF SITE VISIT	
Week 6				
Week 7			MONITORING FOR ONE MONTH	
Week 8				
Week 9	ESCP			
Week 10				
Week 11				Determine if Consent required Prepare consent if necessary
Week 12	Consultation	ASSESSMENT OF MONITORING RESULTS		
Week 13				
Week 14				
Week 15		Review by HRC GW expert		
Week 16	Modify design if required			
Week 17				
Week 18	Preparation of AEE	Preparation of AEE		
Week 19				
Week 20				
Week 21	Finalise consent application	Finalise consent application		
Week 22				