

Our Ref: CL180008C & Others

26 February 2018

Port of Napier Limited
PO Box 947
Napier 4140

For the attention of: Michel de Vos (cc: Grant Russell & Sylvia Allan)

Dear Sir

REQUEST FOR FURTHER INFORMATION

I have reviewed your resource consent applications (CL180008C & Others) to undertake a wharf expansion and dredging project as restricted by Section 12(1) of the Resource Management Act. The application has also been peer reviewed by independent technical experts on behalf of Council. More information is needed so that I can better understand your proposed activities and their potential effects.

In accordance with Section 92 of the Resource Management Act (1991) (RMA) I request the following information:

Dr Shane Kelly provided a technical review of the marine ecology assessments that accompanied the resource consent application. Dr Kelly's assessments accompanies this letter for your information and reference. Following Dr Kelly's review, Council requests the following:

1. Please explain whether the historic ecological data (which in some cases is 13-14 years old) provides an accurate representation of current ecological condition and please provide information detailing the current ecological values and condition of the dredging and disposal areas.
2. Please provide confirmation of whether or not unwanted marine pests are currently present in the dredging areas, together with an assessment of their potential impacts. Furthermore, provide information on the proposed methods for detecting and responding to unwanted marine pests when exercising the consents (if granted) and for the duration of the proposed consents.
3. Please describe the nature of the cohesive dredge material that may be deposited as clumps with limited friability. For instance, will this material be in the form of substantial lumps that alter the physical characteristics of the seabed at the disposal site. If so, how persistent are these lumps likely to be and will their presence affect ecological recovery?
4. Please confirm whether, in relation to turbidity monitoring, the Environmentally Weighted Moving Average method of analysis referred to in Sneddon et al. (2017) is the same as the Exponentially Weighted Moving Average method of analysis.

Richard Reinen-Hamill and Dr Terry Hume provided preliminary technical reviews of the coastal processes assessments to determine if further information was required to understand the proposed activities and their potential effects. These reviews accompany this letter for your information and reference. Council requests the following:

5. Provide an assessment of effects that the proposed wharf and dolphins may have on coastal processes.

6. Please provide further information in relation to the effects from sea level rise and changes in storm surge/wave intensity on the proposed activities. The potential effect of the wharf, dredged channel and disposal should be considered/discussed. Furthermore, the possible changes to wave climate and tidal currents on sediment transport trends needs to be explained and discussed.
7. It is noted that no information has been provided on expected maintenance dredge volumes. Can you confirm the proposed dredge disposal area and the existing consented areas have sufficient capacity for both capital and maintenance dredging and that the effects of maintenance dredging disposal has been considered (i.e. presumably this results in an increased elevation of disposal mounds and/or it is expected that a proportion of the placed material will migrate).
8. Please provide a response and further information in relation Richard Reinen-Hamill's concerns relating to sediment transport and potential effects associated with the proposal (below in italics):

Mean changes in wave direction (Appendix D – Table 7.1) can result in changes in alongshore sediment transport and these results suggest increase alongshore transport from Westshore to Bayview and similarly from Port Beach to Ahuriri Inlet. While it is understood that these changes may be less than the natural variability, this constitutes a net change that moves the baseline that variability will occur. Appendix D – Figure 8-4 appears to suggest a realignment of the shoreline between Port Beach and Ahuriri in the order of 2 degrees. If this results in a change in the stable coast angle, this could result in lowering sea beds to the east and increased seabed/beach levels to the west that may have implications on existing revetment stability and/or overtopping frequency and quantity from storm events (not mean wave events) as well as increase sediment ingress into the lagoon.

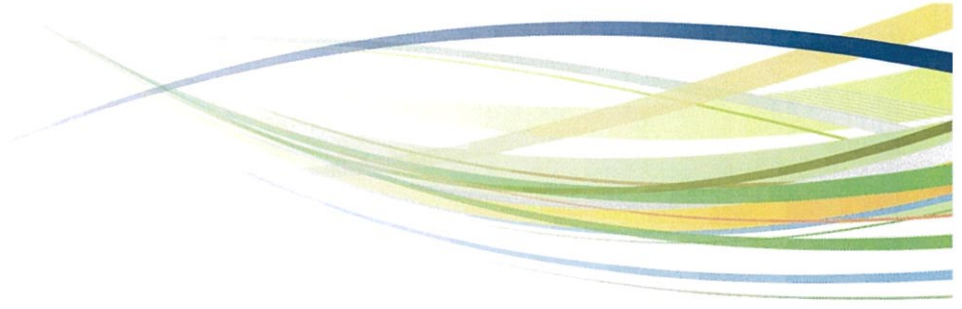
There appears to be a similar, but lesser effect along Westshore Beach with a more subtle reorientation of the wave energy. While the findings set out in Section 9.3 of Appendix D and Section 4 of Appendix G discuss net changes, it does not fully extend to the implications of these effects. A more developed assessment of the potential effects of the identified changes would be useful taking into account present day and future sea level rise and whether these changes could contribute to existing erosion processes.

While Single (Appendix G) discusses the change in land elevation resulting from the earthquake there is no discussion of the uplift and subsequent down cutting of the seabed seaward of Westshore, both in terms of sediment budget, transport rates and likely sediment properties. This is material in that while sediment placed in Area R will move, the speed of removal and the effect the increased seabed elevation makes on gravel alongshore transport may be material.

I note Appendix G – Figure 2.5 appears to support the findings of some north easterly sand transport pathway off the Port. Figure 5-6 (for 125 micron of 70% of vibrocore) shows predominantly northerly transport for all but the NW scenario and this seems to be supported in Figure 6-7 (Appendix F). The mean transport vectors for 125 micron that show southerly transport therefore is largely due to the large rates of southerly transport during the NW wind which occur less than 13% of the time and during winds from these sectors, no significant wave heights are measured. What wind condition, combined with the NW wind results in the transport vectors shown in Figure 5-6 and are these combinations likely?¹

9. In relation to effects on coastal processes, Please explain the use of the Boussinesq simulation and use of the calibrated and validated SWAN spectral wave model for the predictions. Furthermore, please explain the selection of the storm event measured in July 2016 on which to base the simulations.

¹ Tonkin & Taylor, Port of Napier Proposed Wharf and Dredging Project AEE - Preliminary coastal processes review. Prepared by Richard Reinen-Hamill, 24 January 2018



10. Discuss the effect that the small changes in sediment transport predicted in Appendix D (Figure 8-4 and the realignment of the shoreline between Port Beach and Ahuriri in the order of 2 degrees) may have on the wave quality at the respective breaks.
11. In relation to the post disposal fate of dredged sediments, justify and explain the choice of critical shear stress for erosion of cohesive sediments and the choice of the 'erosion parameter.

It is noted that the information requested above is technical in nature and if needed, Council's experts are happy to clarify any of the points above where further information has been requested.

You must respond in writing to this request, before the **19 March 2018** and do one of the following:

- a) Provide the information.
- b) Tell us that you agree to provide the information, but propose an alternative reasonable date (suggest a date).
- c) Tell us that you refuse to provide the information.

It is important that you respond to this request, otherwise, your application can be declined for a lack of information. We may also decline your application if you refuse to provide the information.

Please use the attached form to respond to this information request. If you prefer you can email your response to reece.oleary@hbrc.govt.nz

I have put processing of your application on hold until we receive your response.

Please contact me on (06) 833 8071 if you have any questions.

Yours faithfully



Reece O'Leary
Senior Consents Planner
06 833 8071

To: Reece O'Leary

Hawke's Bay Regional Council
Private Bag 6006
Napier

In response to the Council's request for further information dated 26 February 2018 and relating to CL180008C & Others to undertake a wharf expansion and dredging project as restricted by Section 12(1) of the Resource Management Act:

Please tick your response.

- the information requested is attached
- I'm unable to provide the information by 19 March 2018, but could send it to you by

- I refuse to provide the information.

Signature of applicant or authorised agent: _____

Name: _____

Date: _____

Please print full name of person who signed above.