BEFORE THE WHANGAREI DISTRICT COUNCIL AND NORTHLAND REGIONAL COUNCIL

IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	of a resource consent application by Northport Limited under section 88 of the Resource Management 1991 for a port expansion project at Marsden Point
APPLICATION NO.	APP.005055.38.01 LU 2200107

REBUTTAL STATEMENT OF EVIDENCE OF BRUCE BLAIK GOODCHILD

(NAVIGATION SAFETY)

3 October 2023

INTRODUCTION

Qualifications and experience

- 1. My name is Bruce Goodchild. My qualifications and experience are set out in my evidence in chief dated 24 August 2023.
- 2. This rebuttal statement addresses matters raised in the evidence of Mark Arbuthnot on behalf of Seafuels Limited.
- 3. The fact that this rebuttal statement does not respond to every matter raised in the evidence of a submitter within my area of expertise should not be taken as acceptance of, or agreement with, the matters raised. I have focussed this rebuttal statement on the key points of difference that warrant a response.

Code of Conduct

 I confirm that this rebuttal statement has been prepared in accordance with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note (2023).

EVIDENCE OF MARK ARBUTHNOT

5. I have read the evidence of Mark Arbuthnot and set out my response below. While I understand that Mr Arbuthnot is an expert planner and does not have qualifications or expertise in matters of navigation safety, he raises technical issues – often with reference to the evidence of Mr Mills, which has not yet been provided – which require a response.

Potential replacement vessel

6. The Navigation Safety (NS) report was undertaken based on the existing vessel Awanuia, due to this being the operational vessel currently in use. That vessel is equipped with highly manoeuvrable Azipod thrusters for propulsion and steering. I would consider this is the standard of vessel required for use of Channel Infrastructure (CI) Jetty 3. It has the correct length for Jetty 3 and is fit for purpose as a bunker ship. The NS report found in simulations conducted in 2020 that the planned Berth 5 would not impose a material effect on tanker operations at Jetty 3. Measurement of the space for Awanuia to manoeuvre into Jetty 3 is 154 metres between Berth 5 and the western most structure for CI. This equates to 1.9 x ship length for Awanuia which I consider to meet PIANC Guidelines.

- 7. Seafuels were invited to the simulations undertaken and for those simulations provided both a pilot and information on the Awanuia. For this simulation study the Tug Facility was shown well to the south of the manoeuvring area which is the intention of Northport to keep this facility clear of any tanker operations centred on Jetty 3.
- 8. In July 2023 Seafuels proposed a concept replacement vessel of larger dimensions 83.2m but of less manoeuvring capability than Awanuia. This was simulated for Seafuels in July 2023 with the tug facility in the same position as in 2020, i.e. well clear of the manoeuvring area. The space for entry for ships into Jetty 3 remained at 154m which equates to 1.85 x ship length.
- 9. However, and importantly in my view, there is no certainty that this vessel will be used by Seafuels in the future. Indeed, Seafuels are not certain of the size of vessel to use Jetty 3, apart from a statement that it "needs to have a length of more than 80m and less than 90m".¹ The manoeuvring capabilities of the replacement vessel are also unknown. It is unknown if the replacement vessel will be fit for purpose to use the existing Jetty 3 manoeuvring space, and indeed meet the requirements for NRC and MNZ for a bunker ship. This can only be assessed when details of the replacement vessel are released – which I understand is likely to be in perhaps 2 to 3 years' time.
- 10. It is my opinion that the proposed development can safely accommodate a vessel of the manoeuvring standard and size of Awanuia. Further, any potential replacement ship for Awanuia is unknown and yet to be determined, but in my view will be required to be of a similar standard. If, in future, a larger vessel with substandard manoeuvre capability compared to Awanuia is in operation, this will require a reassessment of the manoeuvring space which can only be undertaken at the detailed design phase of the project. I understand that a process for considering and where necessary responding to the requirements for vessels accessing the Channel Infrastructure Jetty 3, and wider navigation safety issues, is incorporated into the draft conditions proposed by Northport.

Full Mission Bridge Simulation (FMBS)

- 11. It has been agreed by Northport that FMBS is required at the design phase of the proposed expansion (Northport 5 Year Plan for Nav Safety 2022) and that simulation would include movements around the Jetty 3 and the new tug facility.
- 12. The proposed conditions put forward by Northport include a requirement for FMBS to be conducted, and the results, together with any outcomes and recommendations

¹ Arbuthnot EIC, at paragraph 3.3.

provided to Council. The requirement for FMBS expressly includes manoeuvres in/out of Channel Infrastructure's Jetty 3 bunker facility, being where the Seafuels vessel frequents.

Accordingly, I consider this fully addresses the issue raised at paragraphs D and 5.9(b) of Mr Arbuthnot's evidence.

Practical approach to detailed design

- 14. The only feasible time for a detailed reassessment of the navigation safety issues, including the requirements for the space between the proposed Berth 5 and the Channel Infrastructure Jetty 3 is at the detailed designed phase for the project.
- 15. As described in my EIC, Northport has undertaken an initial evaluation of navigation safety, including a range of simulations. These have not raised, in my opinion, any fundamental issues.
- 16. It was agreed with Mr Keane at expert conferencing that no further simulation is required at this stage.²
- 17. It has, however, always been acknowledged that a further evaluation must be done prior to construction (i.e. at the detailed design phase). At that time there will be certainty of the design of the wharf, tug berthing facility, and water taxi pontoon structures, as well as any vessel using Jetty 3. Accordingly, it is only at that time can the manoeuvring space between Berth 5 and Jetty 3 be fully re assessed.
- 18. It is my view that this approach is entirely appropriate. It is also my view that the conditions proposed by Northport enables/directs a process for this detailed reassessment to inform the design of the Northport facility to appropriately manage any effects on navigation safety for all harbour users, including vessels using the Channel Infrastructure Jetty 3.

Factual corrections and response to misleading statements

- 19. There are factual misstatements and/or misleading statements in the evidence of Mr Arbuthnot. I address those here.
- 20. Paragraph 3.4: Mr Arbuthnot states that there is "approximately 70m" from the western end of Jetty 3 to the location of the tug berth facility. Because of the reasons I state above, namely that the tug facility is to be designed in a manner so as not to

² Recorded at section 3.4 of the Navigation and Planning JWS dated 25 September 2023.

interfere with navigation safety, the more relevant distance is that between Jetty 3 and Eastern extension, which is 154m.

- 21. Paragraphs 5.3 5.4: I consider Mr Arbuthnot is being disingenuous here. Seafuels was given reasonable advance notice of the 2020 simulation and was invited to provide information of vessel(s) to be simulated. Seafuels offered model data information on no other vessels other than the Awanuia.
- 22. 5.6 (a): Mr Arbuthnot states "For the first seven simulations, the tug facility was not included, but was added for the rest of the simulations...". This is incorrect. The tug facility was included in all simulations (2020/2023) but at an appropriate location slightly south of the currently proposed area.³ It was included both graphically and visually in all simulations (2020/2023). After 7 simulation runs, Mr Mills asked for the visual of the tug facility to be removed.
- 23. Paragraph 5.6 (b): Mr Arbuthnot states that the approach channel to Jetty 3 would be reduced "to around one ship length". This is incorrect. The distance between eastern end of Berth 5 and western end of the Channel Infrastructure Jetty 3 is closer to 1.9 ship lengths for Awanuia. I further note that the presence of shoaling to the south of Jetty 3 will be unchanged from the situation today.
- 24. Paragraph 5.6 (c): This paragraph is incorrect and misleading. The detailed design of the tug facility will be undertaken having consideration to factors including tug requirements at the time, and what ship(s), if any, are using Jetty 3. I agree that any final design of the tug facility will need to be clear of any track envelopes for tankers operating in Jetty 3. For clarify however, I repeat that in my view the simulations undertaken showed that safe operation of a suitably designed tug facility can be achieved. In Figure 1 below for illustrative purposes is another possible tug design clear of the manoeuvring area for Awanuia. I consider that the references in Mr Arbuthnot's evidence to contact with the tug facility, and ships running aground, are misleading.

³ The location of the tug facility was updated/refined during the design process.

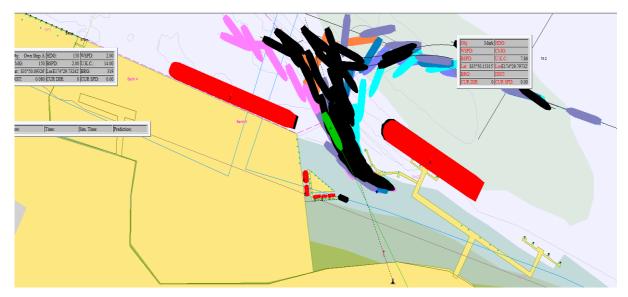


Figure 1: Illustration of possible tug design

- 25. Paragraph 5.7: The tug berths will be placed in an appropriate location well clear of the manoeuvring area for a tanker using Jetty 3. This is well recognized by Northport and allowed for in the simulations.
- 26. Paragraph 5.8: This statement and the associated Figure 3 are misleading. As described above, the final design of the tug facility will safely accommodate the manoeuvrings of a bunker ship.
- 27. Paragraph 5.9: The evidence of Mr Arbuthnot summarises the content of Mr Mills' evidence (which, unhelpfully, has not been filed). Mr Arbuthnot does not appear to express a view on the statements which he suggests that Mr Mills does, or will, make.

Conclusion

28. Notwithstanding the confusing position adopted by Mr Arbuthnot, I restate my opinion that the proposed development can safely accommodate a vessel of the manoeuvring standard and size of Awanuia. Any potential replacement ship for Awanuia is unknown and yet to be determined, but in my view (based on objective standards such as the Maritime Rules) will be required to be of a similar standard. If, in future, a larger vessel with substandard manoeuvre capability compared to Awanuia is in operation, this will require a reassessment of the manoeuvring space which can only be undertaken at the detailed design phase of the project. I understand that a process for considering and where necessary responding to the requirements for vessels accessing the Channel Infrastructure Jetty 3, and wider navigation safety issues, is incorporated into the draft conditions proposed by Northport attached to the rebuttal evidence of Mr Hood.