BEFORE THE DECISION-MAKING COMMITTEE
AT AUCKLAND

IN THE MATTER	of the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012
AND	
IN THE MATTER	of an application for a marine dumping consent by Coastal Resources Limited to dump dredged material at a deep-sea site east of Great Barrier Island

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STATEMENT OF EVIDENCE OF CRAIG MCGREGOR SHEARER ON BEHALF OF EMPIRE CAPITAL LIMITED

BACKGROUND

Qualifications and experience

1. My full name is Craig McGregor Shearer. I am an Environmental and Planning consultant. I hold a Master's degree in Geography from University of Canterbury. I have been a consultant for thirteen years working for a variety of private and public sector clients on a range of projects, including preparing resource consent applications and providing evidence for council and Environment Court hearings. I am a qualified hearings commissioner with chairing endorsement, and regularly sit on hearing panels for councils across New Zealand.

2. I also have experience in the operation and consenting requirements of marinas. I act as a consultant for three marinas in the Auckland region – Bayswater, Pine Harbour and Hobsonville marinas. I have prepared applications for a variety of coastal permits for those marinas including for dredging and occupation and have also provided submissions on their behalf to the Auckland Unitary Plan (AUP) development process. I have also prepared marine dumping permits for the disposal of dredged material at the former Auckland Explosive Dumping Ground.

3. In addition, I have also provided evidence to the Council hearing and the Environment Court in support of the recently consented Kennedy Point Marina at Waiheke Island.

4. Prior to becoming a consultant, I was the Director of Policy and Planning at the Auckland Regional Council for thirteen years, and led the development of a range of regional planning documents. I was also accountable for the Council's input into district planning and consenting processes.

Scope of my evidence

5. My evidence today will:

   - Set out the context for marinas in the Auckland region, their projected growth, and their reliance on dredging and dumping of dredged material;

   - Summarise the consents granted to the Empire Capital owned marinas for dredging and quantities approved;

   - Assess disposal options;

- Briefly review the statutory relevant provisions;

- Provides conclusions the evidence;

Expert witness code of conduct

6. I have been provided with a copy of the Code of Conduct for Expert Witnesses contained in the Environment Court's Practice Note dated 1 December 2014. I have read and agree to comply with that Code. This evidence is within my area of expertise, except where I state that I am relying upon the specified evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

CONTEXT - OVERVIEW OF MARINAS IN THE AUCKLAND REGION AND THEIR RELIANCE ON DREDGING AND DUMPING OF DREDGED MATERIAL

7. To provide context to the importance of dredging and disposal of this material to the marina sector, I have investigated the number of recreational boats and marina berths within the Auckland region. A 2012 study of recreational boating[1] in the Auckland region reviewed different estimates of the number of recreational boats and calculated there were 11,000 yachts and launches in the Auckland region as at 2010. The report estimated that the number of yachts and launches would increase by approximately 100 each year.

8. At the time of the study there were 15 marinas in the Auckland region including two dry stack facilities. This excluded the more recently consented marinas at Sandspit and Kennedy Point (Waiheke Island). These marinas have a total of 6,377 berths and this is expected to grow to 7,600 by 2041. The combined number of berths at Pine Harbour, Hobsonville and Bayswater Marinas is 1581.

9. Most of the region's marinas need regular dredging to preserve all tide access by vessels moored in them. Mr McInnes for example in his evidence on Hobsonville Marina has said that sediment accumulates at a rate during one year of 0.1 metre. In 4 years, the marina would only be navigable in the upper half of the tidal range for a large portion of boats. Ultimately even access during high tides would not be available without regular dredging. Without

[1] Auckland Recreational Boating Study prepared for Auckland Council by Beca Infrastructure 2012.

adequate access there would be no marina. The effects on jobs in and around the marinas would likely be significant. Mr Boersen addresses this impact in his evidence.

10. The need for dredging of other marinas is also emphasised by Messrs Boersen, Thompson, Russell and Wilson in their evidence. As Mr Thompson has said, the dredging company he manages undertakes dredging at many of Auckland's marinas to enable all tide access for vessels to be maintained. Other dredging companies actively dredge other marina basins such as at Westhaven marina and the Port Company.

11. So, although dredging is needed for the survival of many of the Region's marinas, so too is a feasible location, with adequate capacity, for the dumping of dredged material. I note also that the proposal is to cater for dredged material derived from other regions, the Waikato region in particular.

CONSENTED DREDGING – EMPIRE CAPITAL MARINAS

12. I have seen various estimates on the total amount of dredged material likely from the Empire Capital marinas – Pine Harbour, Bayswater and Hobsonville. Below in Table 1 is the combined consented dredging consents for these marinas, with the terms and quantities approved.

Table 1: Consented dredging Empire Capital marinas

Marina	Date consent granted	Duration of Consent	Amount (m^3 per annum)
Hobsonville Marina	2014	35 years	20,000
Hobsonville Marina (channel dredging)	2018	35 years	5,000
Bayswater Marina	2014	35 years	5,000
Pine Harbour Marina	2015	35 years	13,000
Total m^3/annum all Marinas			**43,000**

13. Although Coastal Resource Limited has assessed demand and used figures from the above marinas, I note that until recently much of the material was disposed of at the Auckland Explosives Dumping Ground, now closed. The Empire Capital Marinas have approval for up

to 43,000m³ of material to be dredged per annum, to date this maximum has not been dredged in any one year. However, I am also aware that sedimentation is a significant issue for all three marinas and a key factor preventing dredging to these maximums has been the ability of berth holders to fund this level of dredging and subsequent dumping at the disposal sites. As sedimentation issues worsen I consider it is inevitable that these maximums will be required in the medium term. Theoretically nearly all of the existing approved 50,000m³ at NDS could be utilised by the Empire Capital marinas.

14. Given that there is no other marine option for the disposal of dredged material offshore from Auckland, the existing disposal consent held by Coastal Resources Limited – 50,000m³ per annum - is therefore in my opinion inadequate in the medium to long term when one considers there are also several other marinas in the region requiring regular dredging as well as port areas. Mr Male alludes to some of these in his evidence[2]. In addition, there is the possibility of demand for access to the Northern Disposal Site from marinas and other areas to be dredged outside the Auckland region as well as from additional marinas and port areas within the Auckland region.

WHAT ARE THE DISPOSAL OPTIONS?

15. I have considered options, aside from disposal at sea, for the disposal of dredged material from Auckland's marinas.

16. In late 2015 I carried out some preliminary investigations into determining the viability of obtaining approval for continued use of the Auckland Explosive Dumping Ground 28 nautical miles east of Cuvier Island. The depth of water at this site varies between 571 metres and 1310 metres. After discussions with EPA staff and other potentially affected parties I quickly determined that the requirements of section 39 of the Exclusive Economic Zone and Continental Shelf Act for an impact assessment – and in particular for identifying the effects of the activity on the environment and on biological diversity and integrity of marine species, ecosystems and process - would be extremely difficult. Vessels able to carry out such investigations are very limited, very specialised and expensive in New Zealand. And ultimately such investigations with the associated cost may lead to a decision that the impacts

[2] Paragraph 44 Male evidence

were too great. The presence of unexploded munitions at the site was also a key issue in terms of surveying. The initiative was therefore abandoned.

17. Another obvious option, which some submitters have suggested, is land disposal, either at a cleanfill site or at a landfill site. Even though the material dredged is derived from a marine environment and transported into marina basins via tidal movements, I have nevertheless investigated land disposal in the past when preparing applications for dredging and dumping of the dredged material.

18. My assessments and conclusions of land-based options was very similar to that set out in the evidence of Simon Male for the applicant company. Material needs to be de-watered, and a significant area of land is needed for this purpose. There are potential problems with the discharge of the water because of its saline nature. With a marina such as Hobsonville, with consent to dredge 25,000m³ per annum, over 7ha would be needed to spread the material for drying (at a depth of 0.3m). The alternative would be to dry the material at the disposal site, and again a specialist location would be required although the transport costs would increase significantly as the material to be transported would be close to being slurry.

19. The environmental and economic costs of transporting material to a land facility would be huge. Using Hobsonville as an example "pre-dried" material would require 3,571 truckloads, or 7,142 total movements. For all three marinas owned by Empire Capital this would equate to 12,285 truck movements per annum if the consented dredging was undertaken. If the material was wet then more truckloads would be required and the trucks would need to be tankers. These figures must also be considered in the context of the locations and road networks within which marinas are located. Bayswater Marina for example is located in an area already tightly constrained by heavy congestion on Lake Road, the only road route out of the wider Devonport Peninsula.

20. I have also investigated the costs associated with land disposal and I agree with Mr Male' assessment in which he estimated the costs to be approximately $250/m³. Disposal costs varied from $40/m³ for a cleanfill site to $160/m³ at a landfill. The material is unlikely to be suited to cleanfills however due to the tip face requirements of material placed in cleanfills. The drying and transport costs must be added to these figures for land disposal. Land based disposal is likely to be 3-4 times that of conventional disposal at the NDS site.

21. I also agree with Mr Male's assessment that there are no reclamations proposed in the region which will accept dredged material from the Empire Capital marinas, even if it was suitable for that purpose. This is an option I have assessed on behalf of the marinas I provide consulting services to and there are no obvious options within the Auckland Region.

22. I am aware the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 ("EEZ Act") requires the Decision Making Committee to also take into account whether there are practical opportunities to reuse, recycle or treat the waste or other matter (dredged sediment in this case). As stated above there is potential for reuse of the dredged material in reclamations, but there are none available and new reclamation is not favoured in the Auckland Unitary Plan. The other opportunities (recycle and treat) are not available for dredged sediment.

23. My conclusion is that the only viable option for disposal of dredged material is in to the marine environment, at an approved site. There is no other practical option, and without an approved site that is reasonably accessible from the Auckland region, the marina sector will disappear.

STATUTORY PROVISIONS – EEZ ACT.

24. I have reviewed the statutory requirements for disposal of dredged material in the EEZ Act to refresh myself on the process one must undertake to gain approval for disposal of dredged material as applied for by Coastal Resources Limited. Mr Hay has set out the overall planning framework prescribed in the EEZ Act in the application and in his evidence. I agree with his assessment so do not repeat it. In my assessment the application complies with the requirements of sections 38 and 39 of the Act.

25. Section 59 of the EEZ Act sets out the considerations that the marine consent authority must consider in its determination. These matters are laid out in subsections (2) and (2B) which mainly deal with the effects of the proposed activity, as well as subsection (3).

26. The Empire Capital Group of companies has not undertaken a detailed impact assessment of the proposal. I have however reviewed the application material including the technical reports, and have read the evidence for the applicant as well as many of the submissions to determine the level of effects and other matters as required by section 59 of the EEZ Act.

27. In terms of effects of the activity the Bioresearches report has undertaken a very detailed technical assessment of effects on the environment and in particular assessed source material and the ecological and sediment quality effects of disposal. The report concludes the site is suitable for marine sediment disposal and the environmental effects do not present a risk to human health. In support of that assessment Simon West has provided evidence for the applicant. His advice is that biodiversity has not been impacted by the disposal activity to date and proposed conditions of consent will limit disposal to achieve ANZEEC standards.

28. Mr West has said that benthic biota will be buried by the disposal of marine sediments at the NDA however the biota are expected to recolonise the surface sediments. He has also said the low concentrations and short-term duration of plumes are not expected to result in significant effects to fish within and beyond the NDA boundary and disposal of marine sediments at the NDA is not expected to adversely affect any seabirds at population level. The evidence of Mr Childerhouse for the applicant is that the proposal poses a very low or low risk to marine mammals.

29. The Beca report on the oceanographic effects of the disposal of dredged sediment is very comprehensive. The report summarises that there is no evidence of deposited material beyond 250m from the centre of the disposal site, supporting the non-dispersive classification for the NDA. The report also concludes the disposal of dredged sediment will continue to be contained well within the disposal site and that the 1500m radius site has potential to accommodate disposal at a rate of 250,000m3/year for the 35 year application period.

30. In my opinion the applicant's technical material is very comprehensive. No other party to date has provided assessment to this level of detail. I therefore accept the applicant's expert advice on the effects of the dumping of dredged sediment on the NDS, that the effects have been taken into account, and I conclude the effects will be not be significant enough to warrant declining of the application.

31. I have also read Mr Hay's assessment of the other marine management regimes (Section 59(2)(h) and agree with his assessment. I also agree with his assessment of Section 59(2B)(b) – the effects on human health of the …..other matter… if consent was granted. His conclusions are similar to those I reached when undertaking preliminary investigations into obtaining consent for continuing to use the Auckland Explosives Dumping Ground. The

distance – in this application 25km – from any occupied land is the major determinant in effects on human health.

32. I conclude that the application has adequately taken into account the matters set out in section 59 of the EEZ Act and is consistent with the Act's provisions.

CONCLUSIONS

33. I have assessed the Coastal Resources Limited application material, the evidence of the expert witnesses, and assessed many of the submissions to the application. I have read the evidence of the Managers of Hobsonville, Bayswater and Pine Harbour Marinas, as well as the Manager of Dredging NZ. In my opinion without an approved marine dumping site with adequate capacity for dredged material, accessible to the Auckland region, many of the marinas and potentially port areas in Auckland will have a limited life. The consequences on recreation, employment, and the Auckland economy would be significant. The existing consent for the NDS has inadequate capacity and it will not cater for the region's demand for disposal of dredged material in the medium to long term.

34. I do not consider there are any viable alternatives for the disposal of tis material – the only option is to a marine site. I have assessed the application material and evidence submitted, including the technical reports and conclude that the site proposed by Coastal Resources Limited to dispose of dredged marine sediment at the Northern Disposal Area is appropriate. The proposal in my opinion complies with the statutory provisions set out in the EEZ Act. In my opinion the application can be granted, with appropriate conditions.

Craig Shearer

1 November 2018