

**BEFORE THE OTAGO REGIONAL COUNCIL**

**IN THE MATTER** of the Resource Management Act  
1991

**AND**

**IN THE MATTER** of an application for resource  
consents for Project Next  
Generation

**BY** **PORT OTAGO LIMITED**  
**Applicant**

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**OPENING SUBMISSIONS**

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**OVERVIEW – NEXT GENERATION PROJECT**

1. This application for the Next Generation project is for work that is essential to Port Otago and the local community. However, Port Otago does not rely on that fact alone and has taken seriously its obligations to avoid, remedy and mitigate the environmental effects of the project. In that sense this application is very different to previous major capital works within Otago Harbour where there was not the same knowledge about the local environment or the actual or potential environmental effects of such works.
2. Port Otago employed experts to research, investigate and advise on the relevant environment and local knowledge of Otago Harbour and the off shore area has been significantly increased by this work because of the information contained in reports that have been shared with the community through widespread consultation on the project and publication on the Port Otago website.
3. Port Otago has considered and acted on advice from experts at every stage of planning this project, including the determination that A0 was the appropriate disposal site.
4. One matter that is fundamental to understanding the implications of the application is the Environmental Management Plan (“EMP”). It recognises that active management is required to remedy the situation if environmental effects of activities are greater than anticipated with that management occurring before such effects are at a level where they could harm the environment. It is hoped that those submitters who have fears that the environment will be harmed will study the EMP in order to see the proper steps being taken to avoid possible harm to the environment.

**OVERVIEW – PORT OTAGO**

5. Port Otago Limited owns the land based commercial port infrastructure at both Dunedin and Port Chalmers and has occupancy rights to the coastal marine area (CMA) at and adjacent to its berths and commercial port undertakings.
6. The Port Chalmers port has limited land space that has been obtained through reclamations. Efficient organisation means the adjoining land

space available is adequate for present and future needs but the shortness of the multipurpose wharf creates operational difficulties. (Refer Harbour Power Point slide and Timelapse DVD of visit of Maersk Denton in March 2010 showing the loading and unloading of the vessel).

7. Port Otago operates a fundamentally important part of the import/export supply chain for the lower South Island. It is New Zealand's third largest port (by cargo value) and, as the South Island's container export port, it is the international gateway for some of the country's most important export cargo. Global carriers such as Maersk Line, Hamburg Sud and Mediterranean Shipping call at Port Chalmers and offer access to and from worldwide markets. They also tranship to other New Zealand ports as well as those in Australia.
8. Port Otago, and its predecessor the Otago Harbour Board, has been at the forefront of New Zealand shipping history dating back to the 1800s, including the first refrigerated meat export in 1882 and was one New Zealand's first container ports in the 1970s. Central to this long history has been a clear vision and planning to meet future demand, and ongoing capital and maintenance dredging in Otago Harbour.
9. Port Otago's continued ability to provide the community and regional businesses with a competitive global shipping service relies on upgrading its port facilities, infrastructure and the harbour channel to meet future requirements of international shipping lines. In particular it must be able to accommodate larger vessels and offer efficient and reliable vessel turnaround in order to meet projected shipping demands and provide shipping lines with their desired level of service.

## **SHIPS**

10. The size of container ships has steadily increased over the last decade as shipping lines endeavour to move increasing volumes of freight around the world more efficiently and economically. There is a continuing worldwide trend towards larger vessels. A common industry measure of cargo capacity for container vessels is known as a "20 foot equivalent unit" (TEU), based on the volume of a standard 20 foot long shipping container. Larger container vessels of

increasing size will replace the 4100 vessels that currently service the New Zealand trade routes.

### **EXISTING DREDGING**

11. Port Otago currently maintains the commercial shipping channels, berths and swinging area within Otago Harbour in accordance. This is a permitted activity under the Otago Regional Council's Regional Plan: Coast ("the Regional Plan").
12. If it were not for the demands of increased shipping activity and larger vessels the Harbour channel would continue to be maintained largely as it exists at present. Port Otago owns and operates a trailing suction dredge "New Era" which has been maintenance dredging in the channel since the mid 1980s – refer photograph "New Era"

### **PROJECT NEXT GENERATION**

13. Port Otago now needs to plan and invest in port infrastructure to ensure larger vessels can safely and efficiently access the port when the shipping lines decide to increase the size of the vessels collecting the cargo exported from the port. This is similar to the situation in the 1970s when Port Otago geared up for the start of containerisation.
14. Project Next Generation is absolutely critical to the future of the port. Any restriction on the ability to service large vessels is likely to result in the loss of international shipping services at Port Chalmers and also affect Port Otago's ability to attract new services.
15. To accommodate larger vessels and their increased vessel dimensions (particularly their 14.5 metre draft) it is necessary to increase the depth and the width of the harbour channel via dredging and disposal of dredge material at sea.
16. The upgrading of the channel, berth and swinging area requires up to 7.2 million m<sup>3</sup> of material to be removed from the existing shipping channel and swinging basin in the Harbour. Alternatives have been carefully considered but there is no practical alternative to the disposal of this volume of dredged material at sea. Harbour dredge material has been disposed of at sea as an integral part of the development

and maintenance of Otago Harbour since the 1860s. There are three offshore disposal sites currently used for dredge material:

- a. Heyward Point;
  - b. The Spit;
  - c. South Spit (Shelly) Beach.
17. Disposal of dredge material from Project Next Generation will be managed between these existing sites and the new "A0" disposal site. It is important to Port Otago to maintain the ability to manage the disposal operation between the existing sites and site A0 in response to sea conditions and/or the nature of the material removed:
- a. Dredging is likely to be carried out in two levels of intensity;
  - b. The new offshore A0 disposal site will not receive any rock material as all rock material will be disposed of at the Heyward Point site;
  - c. Dredging using the existing equipment or similar (being Incremental Capital works) will be divided between the existing disposal sites and the new A0 site;
  - d. Dredging using a large contract dredge (being Major Capital works) will not go to the existing disposal grounds but will be disposed of to site A0;
  - e. Once Project Next Generation is completed site A0 will no longer be used.
18. The consent for the disposal of material from maintenance dredging expires in late 2011 and a renewal of this consent will be sought by 1 June 2011 so it can continue to be exercised until the renewal application is determined. The renewal of that consent does not form part of the Next Generation consents and the relevant application is limited to amending the consents to allow those consents to be used for disposal of dredging from Incremental Capital works and rocks (to Heyward Point) in addition to the current permitted maintenance dredging but without any increase in volume of material permitted to be disposed of. Accordingly, during this hearing there is no need to consider the merits of continued long term deposition at the existing

disposal sites. This approach is endorsed in the Council Officer's report at paragraph 536.

19. Port Otago will continue to operate a maintenance dredging programme throughout the capital works and after Project Next Generation is completed. This aspect of maintenance dredging at levels below what is permitted in the Regional Plan requires to be authorised by a coastal permit and this is applied for as part of the Next Generation suite of consents.

### **Wharf Upgrade**

20. To provide greater operational efficiency Port Otago proposes to extend the multipurpose wharf to provide 135 metres of extra workable deck over which to load and unload vessels.
21. The extension will allow one large or two small container vessels to be effectively worked or berthed on the multipurpose wharf while one or two other vessels are in port. The extended berth will be capable of servicing the existing 4100 TEU vessels as well as larger ones in the future.

### **Fishing Jetty**

22. Port Otago proposes to construct a fishing jetty at the end of the public walkway that has been constructed around Boiler Point. It will extend 30 metres into the CMA and is a completely separate structure from the multipurpose wharf. Measures will be taken to promote public safety and separate the structures to maintain the required level of port security. The jetty will be available for recreational fishing purposes and will enhance public amenity and access to the CMA.

## PROJECT IMPLEMENTATION

23. Dredging of the Harbour shipping channel will be undertaken incrementally and the dredging plant used will depend upon the materials to be removed and the timing of larger vessels arriving into the port. Vessel size is likely to increase in steps.
24. Initially and until Port Otago is notified that larger vessels are imminent it will undertake dredging using the New Era, possibly one additional dredge of a similar capacity, and a barge mounted back hoe or grab dredge and it is this work that is referred to as Incremental Capital Dredging.
25. After Port Otago is notified that larger vessels are imminent then it will engage a large capacity contract dredge and this is the work that is referred to as Major Capital Dredging. The actual dredge will depend on what is available at the time. This could have a hopper size of up to 11,000 m<sup>3</sup> (the largest size practical for the harbour) and an ability to dredge and dispose of material in the order of 1,000,000 m<sup>3</sup> per month and the assessment of effects has been prepared on this basis. A smaller dredge of, for example, 6,000 m<sup>3</sup> capacity would take longer to complete the job.
26. The expectation is that channel depth and width will increase in discrete steps to align with increasing import and export demand and vessel size. The intensity of the dredging programme will vary depending on whether the dredging is Incremental Capital or Major Capital dredging.
27. **Incremental Capital** dredging involves dredging down to lower levels, using existing plant or similar plant. It is a low intensity activity that is more similar in scale, intensity of operation and effects to the current maintenance regime. The total volume of material removed through Incremental Capital dredging will be a maximum of 1.45 million m<sup>3</sup> per annum and likely to be considerably less than that amount. The differences from the existing maintenance dredging operation would include:
  - a. The New Era, or dredging plant with similar capacity, working extended hours through multi shift crewing;
  - b. The use of barge mounted back hoes or grab dredges to undertake shallow dredging at Harrington Bend, the eastern

extent of the Swinging Basin, and also removal of rock at Acheron head and Rocky Point. This would provide sufficient depth to enable use of a New Era type dredge and would also remove harder materials that cannot be removed using a New Era type dredge.

- c. The bringing in of additional plant such as a second dredge of similar capacity to the New Era.
28. **Major Capital** dredging works involve the removal of the balance of the 7.2 million m<sup>3</sup> of material that remains to be removed when the Major Capital dredging works commence:
- a. It will complete the full development depth and width of the channel;
  - b. It would be higher intensity than Incremental Capital Dredging and likely to take up to 7 months to complete with an 11,000 m<sup>3</sup> dredge;
  - c. It would occur when Port Otago was notified of a need to accommodate larger container vessels;
  - d. It is likely that some work would be carried out by New Era and a barge mounted back hoe or grab dredge during the period of Capital Dredging.

## **RESPONSE TO SHIPPING TRENDS**

- 29. In the near term, within one to three years, vessels are likely to increase from the current 4100 TEU to 5000 TEU. Subsequently shipping lines are expected to move to 5500 and ultimately 6000 TEU.
- 30. Flexibility in undertaking the dredging and disposal is essential for Port Otago to be in a position to quickly to respond to increased vessel size decisions made by shipping lines.
- 31. A staged approach to channel widening and deepening is proposed:
  - a. To accommodate up to 5500 TEU vessels, Port Otago will dredge to a nominal depth of 14 metres and 15.5 metres at the Harbour entrance. It is estimated that the volume of material to

be removed to achieve a channel depth of 14 metres is around a 1,000,000 m<sup>3</sup>.

- b. The initial stages of dredging will also involve the removal of a portion of material at the base of the sloping batter of the deepened channel in order to maintain a safe navigable channel. This will be necessary because increased channel depth will lead to changes to the channel sides, and the batter slopes will continue to adjust and slip down into the channel until eventually a stable profile is achieved. It is estimated that an additional 1,500,000 m<sup>3</sup> of material will be removed over time to achieve the 14 metre channel depth. The need for ongoing dredging from channel side adjustment is not uncommon and will reduce over time.
  - c. The channel at Harington Bend and the Port Chalmers Swinging Basin will be widened, probably after a channel depth of 14 metres is achieved. The volume of material to be removed from these two areas is approximately 775,000 and 1,000,000 m<sup>3</sup> respectively.
  - d. Dredging of the channel beyond 14 metres would be undertaken once Port Otago is notified that shipping line demands require an increased channel depth to match increased vessel size requirements.
32. Generally Port Otago will do only the minimum that is required to keep the channel operational and meeting shipping line customers demands. If Port Otago is given a long lead in time when larger size vessels will commence port visits then it will work towards it incrementally at lower intensity. However, if notice of larger vessels comes in a shorter timeframe and requires more urgency then Major Capital dredging will necessarily be undertaken in a shorter timeframe at higher intensity.
33. Project Next Generation is a major undertaking and a capital intensive operation. It is imperative that the Next Generation suite of consents are flexible enough to allow Port Otago to respond to shipping line demands as they arise, and that any consent conditions allow for the different intensities of dredging operations.

**CONDITIONS/ENVIRONMENTAL MANAGEMENT PLAN**

34. The timing of the need for Port Otago to dredge to the proposed depths is dependent on demand by international shipping lines.
35. The Incremental Capital dredging and Major Capital dredging will be required over different timelines and at different intensities. Therefore the conditions of resource consent and the EMP need to be structured to allow both types of dredging programmes to proceed in a timeframe that Port Otago cannot necessarily control.
36. Added to this, because the work is in the marine environment then it involves many variables such as weather, sea conditions, tide, movements of wildlife, seasonal variation and the like. Therefore, the proposed conditions of consent and the EMP provide a range of environmental limits and within those a range of trigger levels and management responses which can enable Port Otago to adaptively manage the project in a variety of ways. For example if the dredging creates a sediment plume that exceeds the first trigger level, there are a range of management responses that can manage that potential effect and ensure it does not escalate. Examples of management responses include reducing the intensity of operation or moving locations to reduce readings below the trigger level.
37. The EMP and proposed consent conditions identify a range of key parameters that set out mandatory limits which shall not be exceeded. Examples include upper turbidity levels, avoidance of certain areas when godwits are feeding, albatrosses are nesting etc.
38. Overall this approach to managing a complex project such as this is seen as the most appropriate way to set enforceable environmental bottom lines, but within that identify key parameters where a specified range of management responses are available. There needs to be a degree of flexibility for Port Otago to implement the project and manage effects within the key parameters, variables and timeframes that it faces.
39. The approach of requiring environmental management plans as a method to adaptively manage a large project has been approved by the Environment Court in a number of cases. For example the Environment Court in ***Golden Bay Marine Farmers v Tasman District Council*** (W19-03 at 411) stated:

**The impact and scrutiny [management plans] received not only by a consent authority but by the environment court on appeals should not be underestimated. They may be included as conditions of consent, or to provide more flexibility as anticipated here, providing information about the way in which the consent holder intends to comply with the more specific controls or parameters laid down by the conditions of consent; see *New Zealand Rail Limited v Marlborough District Council* [1993] to NZRMA 449.**

40. On appeal to the High Court this decision of the Environment Court was upheld.<sup>1</sup>
41. There are a number of other examples where the court has used adaptive management techniques. Examples include:
  - a. ***Clifford Bay Marine Farms v Marlborough District Council*** C131-2003
  - b. ***East Bay Conservation Society Inc. v Marlborough District Council*** (W106-2006)
  - c. ***Bio Marine Ltd v Auckland Regional Council*** (A14-2007).
42. Overall, for large, complex projects in the marine environment, adaptive management and the use of environmental management plans is an accepted and responsible way to manage the implementation of the project. Port Otago's proposal follows this approach. The EMP offered by Port Otago is the result of combined scientific expertise and port operational knowledge, and aligns with the recommendation made in the Regional Council officer's report.

## **BENEFITS**

43. This project is an essential investment by Port Otago to ensure the channel and port can accept larger ships that have deeper drafts. The need for this is dictated to Port Otago by international shipping lines.
44. The project contributes a range of regional benefits such as:

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<sup>1</sup> Minister of Conservation v Tasman District Council HC Nelson CIV-2003-485-1072, 9 December 2003 at 46.

- a. It is an essential upgrade to future proof the port to ensure it remains a viable destination for international ships.
  - b. Port Otago needs to remain available for international shipping lines to import and export freight to and from Otago and beyond. This is an essential service for a range of Otago businesses and industries to ensure freight can be imported and exported cost effectively and locally. The net present value to the New Zealand economy of deepening the channel has been calculated by Mr Butcher to be between \$200 million and \$1,210 million depending on whether Lyttleton port is also able to receive the large ships.
  - c. The viability and efficiency of the Port contributes to the economic wellbeing of a wide number of businesses and industries in the region generating a direct economic output of \$53 million per annum, \$41 million of which is business and household income (including \$21 million in wages and salaries) and 320 jobs. Mr Butcher has calculated that the inclusion of downstream multiplier effects means Port Otago currently generates a regional output of \$85 million a year and generates 480 jobs in the region.
  - d. The construction project itself is a significant investment in terms of employment and services that will contribute significantly to the local and regional economy through payments to employees, contractors and the like. .
45. The project also contributes to a range of localised benefits such as:
- a. Providing continued employment and the possibility of growth for Port Otago and its employees.
  - b. Part of the project is the construction of a fishing jetty for use by the public to access the harbour in the vicinity of the port. Recent security requirements for ports have largely required the exclusion of the public from the operational wharfs. This fishing jetty is specifically provided for public use to enable public recreation to safely occur at the end of the Boiler Point Walkway.

## **SUBMITTERS**

46. Submitters in opposition to the project can be broadly grouped into 6 main topic areas:
- a. Careys Bay – 27 submitters opposed, 1 neutral;
  - b. Fish – 28 opposed, 1 neutral, 1 support;
  - c. Northern coast – 11 opposed, 2 neutral, 1 support;
  - d. Recreation – 25 opposed, 3 neutral, 1 support
  - e. Environment generally – 33 opposed, 3 neutral, 1 support, 2 support with conditions;
  - f. Other general matters – 26 opposed, 3 neutral.
47. Port Otago has carefully considered all submissions since they were lodged and, where possible, within each topic area Port Otago has carried out consultation with some of the submitters. This consultation has driven the development of Port Otago's EMP. Port Otago is confident that it has addressed key concerns raised in submissions.
48. It is important to recognise that there are 29 submissions in support of the project. They come from individuals, industries, port users, tourism operators and recreational users of the harbour (including Alliance Group Ltd, Silver Fern Farms Limited, City Forests Ltd, Hamburg Sud New Zealand Limited, Tourism NZ, Tourism Dunedin, Monarch Wildlife Cruises Ltd, Cruise New Zealand Incorporated, Otago Yacht Club Incorporated, Dunedin Coastguard, and Otago Southland Employers Association). Most of them (62%) will not appear at the hearing but their submissions provide some balance and highlight the positive aspects of the project.

## **EFFECTS**

49. Port Otago engaged experts to provide detailed assessments of effects that may arise from Project Next Generation. All assessments have adopted approaches that are consistent with internationally accepted practice. Port Otago has endeavoured to identify and manage effects in a responsible way. Some examples follow.

**Turbidity**

50. A main effect of dredging and disposal will be increased suspended sediments and turbidity. The potential impact of this has been considered for benthic communities, fish, birds and mammals. The harbour is naturally turbid at times. Most communities can tolerate periods of high suspended sediment concentrations and lower water clarity for short periods. It is predicted that levels of sediment arising from Project Next Generation will not have an adverse environmental effect. Nevertheless Port Otago has taken a responsible and precautionary approach and volunteered to monitor key areas identified by experts – the harbour seagrass beds, the Aramoana Ecological area, Quarantine or Pudding Island, Wellers Beach/Omate Beach and intertidal cockle beds opposite Acheron Head. A range of adaptive management responses are contained in the EMP to address turbidity if it is experienced at trigger levels. Further, Port Otago will monitor the plumes during capital works to confirm the accuracy of plume model predictions. This will occur both within the harbour and at the disposal ground.

**Wildlife**

51. Potential impacts on wildlife in the harbour and coastline environments have been fully considered.
52. To minimise effects Port Otago has volunteered a range of mitigation, such as:
- a. Avoiding dredging and disposal operations during sensitive breeding times for birds at Taiaroa Head and Aramoana sand flats;
  - b. Limiting the timing of explosives, removing and relocating resident crustaceans to the extent practicable and, delaying blasting if mammals are observed in the blast area;
  - c. Taking appropriate action to watch for and avoid mammals near dredging equipment.

**Contamination**

53. Testing the seabed for contamination has been carried out and the evidence will be that very low levels of contamination, were identified that are within acceptable levels based on national guidelines. Further, Port Otago commissioned elutriate testing for 3 "worst case" sites (plus a reference site) for algal and blue mussel larvae. The elutriate tests came back with no toxicity for both species.

**Noise**

54. Port Otago has had noise assessments on all aspects of Project Next Generation undertaken by Marshall Day. All noise, apart from blasting and Major Capital works, will comply with the New Zealand Construction Noise Standard. A variety of adaptive management practices have been volunteered to manage dredge related noise from the different types of activity and equipment. It is predicted that noise effects from dredging are likely to be minor.

**Recreational activities**

55. The Harbour and coast is recognised as an important area for recreational activities including boating, fishing, diving and surfing. Diving and fishing is popular around rocky reefs and the Mole:
- a. Waves and currents will disperse any dredge material that settles in these areas so impacts on fish and visibility are likely to be localised and short term.
  - b. Dredging will not change navigational procedures for recreational boaters and a wider harbour channel will allow greater separation between commercial and recreational users of the harbour.
  - c. There is likely to be a negligible reduction in wave height at Aramoana beach (about 0.01metre) arising from the deeper harbour entrance, but otherwise beaches will remain the same with no increase in erosion or accretion.
  - d. Sediment from disposal site A0 is predicted to disperse to the north as a result of the Southland current and any sediment that reaches the coastline will be at levels that are not discernable to beach users.

56. Port Otago has recognised the importance of recreational values by volunteering to restrict dredging and disposal operations, and construction of the multipurpose wharf and fishing jetty, to avoid some summer holiday periods particularly Christmas.

### **Land Transport**

57. Port Otago assessed the effect of the project on existing land transport networks. Reports 21 and 22 attached to the AEE confirm that the road and rail networks have the ability to service the Port in the future once Next Generation is implemented, without affecting the capacity or safety of the networks. As the Officer's report acknowledges (at paragraphs 342 and 344), there are no effects on the local community arising from this project that need to be addressed in conditions of consent.

### **CULTURAL VALUES**

58. Port Otago acknowledges that the Otago harbour and coastline has a significant a cultural and spiritual meaning for tangata whenua. It has commissioned a cultural impact assessment report as part of Project Next Generation and engaged in productive consultation with tangata whenua.
59. Port Otago is committed to ongoing collaborative engagement during the project. Accordingly it has volunteered to establish a Manawhenua Consultative Group and to encourage input and ongoing dialogue on matters of interest to tangata whenua.

### **STATUTORY FRAMEWORK**

60. The relevant statutory provisions to have regard to are:
- a. Section 104
  - b. Part 2

61. There are also a number of relevant plans which are analysed in detail by Port Otago's planner, Mr Mitchell.

#### **New Zealand Coastal Policy Statement (NZCPS)**

62. The NZCPS was recently modified and came into force on 3 December 2010.
63. The NZCPS contains a range of national policies. These are analysed by the Applicant's planner, Mr Mitchell. In particular I draw your attention to policy 9 which provides:

**Recognising that a sustainable national transport system requires an efficient national network of safe ports, servicing national and international shipping, with efficient collections with other transport modes.**

64. This is particularly relevant to the Project Next Generation as the need for this project is to ensure the port remains available and safe for international shipping.

#### **Otago Regional Policy Statement ("RPS")**

65. The RPS provides an overview of resource management issues for the region, with policies and methods to achieve the integrated management of natural and physical resources of the region. Project Next Generation is consistent with stated objectives and policies that seek to:
- a. Enable the community to provide for their social, economic and cultural wellbeing, and
  - b. Safeguard environmental quality.

#### **Regional Plan: Coast for Otago ("the Regional Plan")**

66. The Regional Plan contains the policy framework for managing the CMA in Otago. The evidence of Mr Mitchell will outline how Project Next Generation is consistent with the objectives of the Regional Plan.

### Permitted Baseline

67. There is a discretion to disregard any effects that arise from activities that are permitted (section 104(2) RMA).
68. In this case, the existing maintenance dredging of the channel and swinging basin occurs as a permitted activity under the Regional Plan (Rule 9.5.3.2). Dredging to maintain the lower channel is permitted provided that the channel is maintained at a depth of no more than 13 metres and the Port Chalmers berths and swinging areas to 14.5 metres below chart datum.
69. The permitted baseline is therefore a relevant and helpful consideration in this case. The manner in which Port Otago currently dredges the channel as a permitted activity will continue when Incremental Capital dredging occurs as part of Project Next Generation. The difference will be that the dredge will spend more hours on the activity as it is likely double shifts will be worked. .
70. When assessing this project (both the effects of Incremental Capital Dredging and the effects of the Major Capital dredging) it is worth keeping in mind that existing maintenance dredging is an essential and permitted activity required to operate the port. Effects from this level of permitted activity can properly be disregarded.

### London Convention & NZ Guidelines for Sea Disposal of Waste

71. The *New Zealand Guidelines for Sea Disposal of Waste*<sup>2</sup> ("the NZ Guidelines") has been jointly prepared by the Maritime Safety Authority of New Zealand and the Ministry for the Environment. They are New Zealand's way to give effect to the London Convention (1972) ("the London Convention") and the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter (1996) ("the 1996 Protocol").
72. The NZ Guidelines were modeled on the guidelines produced by Environment Australia in 2002. The Australian 2002 guidelines were

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<sup>2</sup> New Zealand Guidelines for Sea Disposal of Waste (Advisory Circular, Maritime Safety Authority of New Zealand), 30 June 1999

subsequently updated in 2009<sup>3</sup> but the NZ Guidelines have not been updated.

73. It is notable that the London Convention, the 1996 Protocol, and other European guidelines which also give effect to the London Convention, were largely designed around considering disposal of material with high concentrations of contaminants, which is far more common in that part of the world.
74. The NZ Guidelines aim to assist applicants to safely dump waste at sea (including dredged material). Section 4 of the NZ Guidelines describes a process for characterising waste including dredged materials. The guidelines refer to a four-stage process of characterisation, increasing in detail and complexity depending on the nature of the material from Level 1 to Level 4.
75. The NZ Guidelines provide guideline concentrations for contaminants that may be present in waste proposed for dumping at sea (referred to as the 'Action List'). The Action List is largely based on the ANZECC 1998 Guidelines for Fresh and Marine Water Quality ("the ANZECC Guidelines"). The ANZECC Guidelines are primarily based on biological effects guidelines developed overseas, with modifications to reflect New Zealand conditions. The Action List specifies a lower (effects range – low, ER-L) and an upper (effects range – median, ERM) level.
76. The approach taken by Port Otago to assess the potential effects of dredging and disposal of dredge material in project Next Generation is in accordance with the NZ Guidelines.
77. The following extract is commentary from the NZ Guidelines:

**Decisions on applications for consents for dumping within the CMA are made under the RMA and the Resource Management (Marine Pollution) Regulations 1998. There is no obligation on regional councils to have regard to these guidelines. They are, however, available to councils to use as they see fit as an aid to decision making under the RMA and its regulations.**

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<sup>3</sup> National Assessment Guidelines for Dredging (Australian Government)

78. Under section 104(1)(c) of the RMA the NZ Guidelines contain relevant provisions that may be considered as *"any other matter the consent authority considers relevant and reasonably necessary to determine the application"*. In a New Zealand context it is the NZ Guidelines that are most relevant as they are based on the London Convention, and other international guidelines and it is these guidelines that you should be focused on rather than the London Convention or 1996 Protocol. Port Otago's expert witness Mr Hickey will refer you to the relevant parts of the NZ Guidelines.

## **OTHER LEGAL ISSUES**

### **Construction Noise**

79. There are no specific noise limits in the District and Regional Plan rules that would apply to dredging and other construction activities. Port Otago's noise expert has applied the New Zealand Construction Noise Standard.

### **Port Noise**

80. The operational use of the wharf extension is covered by Rule 21.5.2 of the Dunedin City Council District Plan, the Port Noise Management Plan and the Port Noise Mitigation Plan.
81. The Port Noise regime at Port Chalmers follows a decision of the Environment Court adopting in the District Plan a solution that was offered by Port Otago Ltd with the agreement of the Dunedin City Council and other interested parties to resolve the conflict that occurs because residential activity is sited close to a busy working port.
82. The principles underlying the regime are:
- a. Port Otago accepts responsibility for all port noise;
  - b. Port Noise is monitored and recorded 24 hours a day;
  - c. Noise contours are produced showing the levels of port noise received by properties;
  - d. Port Otago's obligations and the rights of property owners in the residential zone depends on the level of Port Noise being

received by the property with the consequence that Port Otago's obligations increase if port noise increases;

- e. The Port Noise Management Committee is actively involved in noise mitigation.
83. Port Otago has spent approximately \$780,000 purchasing 5 houses and \$1,000,000 providing acoustic treatment to 16 properties to date implementing the provisions of the District Plan.

#### **Occupation of CMA**

84. Port Otago has an existing coastal permit to occupy the CMA in the area of the Port Chalmers wharves, swinging area and proposed fishing jetty for the purpose of operating and managing the port (Consent number 2010.011). That permit does not authorise any activities and it is better seen as a right to exclude people from the area of the permit which is necessary for the safe and efficient running of the port if, for example, someone was obstructing a ship trying to tie up. This is because the public generally has the right to use the CMA with that right only limited when some person has the exclusive right to occupy. That right can be absolute or, like here, can be a limited right given to Port Otago to exclude the public to the extent necessary to enable the port to operate.
85. The Council Officers' section 42A report recommends the granting of a coastal permit for the fishing jetty to occupy the coastal marine area. There is a critical issue for Port Otago if that permit is granted. From time to time there may be a need to exclude the public from the fishing jetty for operational or safety reasons. To achieve this, there needs to be recognition in the coastal permit allowing the fishing jetty to occupy the coastal marine area that Port Otago's existing coastal permit gives it the right to exclude the public from that area if it needs to do so for operational or safety reasons. To achieve this Port Otago proposes a condition in the fishing jetty consent that makes this ability clear and links in with the existing occupation consent held by Port Otago. The proposed addition to this consent is:

**The fishing jetty shall be available to the public at all times except where Port Otago Ltd needs to exclude the public pursuant to its rights under its existing Coastal Permit over the same area**

**[consent number 2010.011] (such exclusion being only permitted for operational or safety reasons).**

## **SECTION 42A REPORT**

### **Definitions of Incremental Capital Works and Major Capital Works**

86. In the draft permits prepared by the Council officer to disturb and remove dredge material (Consent Number 2010.193, 195, 198) there are definitions of Incremental Capital Works and Major Capitals Works.
87. There is one important point of clarification Port Otago wish to see made to these definitions.
88. These definitions are clearly designed to cover disturbing the seabed and removing material, and subsequently depositing it at the approved disposal sites. It is those activities that require coastal permits to lawfully occur.
89. When vessels navigate the channel between the dredging area and the disposal grounds this is not an activity governed by section 12 RMA and is not an activity that requires a coastal permit.
90. The definitions require amendment to make it clear that the navigation of vessels along the harbour channel is not an activity governed by the permits. This becomes important because there might be dredging that can occur in the swinging basin outside the excluded periods to protect birds. It is necessary to ensure it is clear that dredge vessels passing along the shipping channel are no different to any other vessel passing along the channel and it cannot be claimed that such vessels are prevented from doing so by conditions on the consents to extract and deposit material. To achieve this it is proposed to add to the definitions the following;
- (c) The definitions of Incremental Capital Works and Major Capital Works above do not include vessels navigating the shipping channel to or from dredging or disposal areas.**
91. Additionally, Port Otago considers that all definitions in the consents ought to be included as conditions rather than advice notes. In particular, the definitions of Incremental Capital Works and Major

Capital Works have considerable significance in the interpretation of conditions in consent 2000.472 and the status of the definitions needs to be clear and binding to avoid the risk of a challenge to the meaning of the words contained in the consent on the basis that the definition in the consent forms part of advice notes and is “advisory only”.

### **Fixed Turbidity Monitoring Two Kilometres Down Tide**

92. Draft Coastal Permit Number 2010.195 sets out a range of conditions that deal with turbidity monitoring (Conditions 4, 5, 6 and 12
93. This monitoring regime requires the placement of six turbidity metres in identified locations in the harbour. Condition 5 requires monitoring;
  - a. For the first six months from commencement of Incremental Capital Work.
  - b. If the report from that first six months indicates more monitoring, then further monitoring for a minimum of 12 months.
94. Port Otago accept this monitoring regime. Port Otago understands and recognise this turbidity monitoring as important to ensure a rigorous and detailed monitoring programme so that the trigger levels and environmental limits are known and adhered to, and regularly reported to the Regional Council.
95. Condition 5(c) then provides consent monitoring is required
 

**At any time when Incremental Capital Works are being undertaken within a two kilometre distance down tide of any of turbidity monitoring areas identified in condition 4 of this consent.**
96. The turbidity monitoring sites are spread along the length of the shipping channel. Throughout the Incremental Capital Work, it is inevitable that dredging will occur within a two kilometre distance of one of the monitoring sites almost constantly. Therefore this condition has the effect of requiring a fixed turbidity monitor to be in place throughout the duration of the Incremental Capital work. This nullifies the purpose of conditions 5(a) and (b).

97. This also has a significant cost implication for Port Otago in terms of purchasing, maintaining and reporting on data from fixed turbidity metres throughout the duration of the project.
98. Port Otago considers such an expense and obligation to be out of proportion to the results that are likely to be obtained from monitoring during Incremental Capital work.
99. Condition 5 (a) and (b) are perfectly adequate and require an initial constant monitoring programme which can be extended depending on initial results.
100. It is Port Otago's position that condition 5(c) should be deleted.
101. Alternatively, if the purpose of condition 5(c) is to ensure that monitoring under 5(a) and (b) is fairly representative of turbidity effects, Port Otago recommends another way to frame the condition, as follows:

**So as to obtain monitoring results that are representative of any effects resulting from the works, when the monitoring specified in (a) and (b) above is undertaken the consent holder shall ensure that Incremental Capital works are periodically undertaken within the vicinity of the monitoring areas identified in condition 4 of this consent.**

102. For completeness, fixed turbidity monitoring is to be required during Major Capital dredging at all times. This is accepted by Port Otago as in proportion and appropriate.

#### **Change to Turbidly Meter Control Location**

103. The evidence will be that the turbidity control location should be changed in consent 2010.195 and a new plan substituted for plan A1 11251 (produce).

#### **WITNESSES**

104. For Port Otago there will be evidence presented from:
  - a. David Faulkner, Chair of Port Otago Limited

- b. Geoff Plunkett, Chief Executive Officer of Port Otago Limited
- c. Lincoln Coe, General Manager, Infrastructure, Port Otago
- d. Stuart Jennings - Maersk
- e. Nigel Jones - Fonterra
- f. Herbert Harris and Mark Willis – Chamber of Commerce
- g. Geoff Butcher, Economist
- h. Maurice Davis, historian
- i. Keith Ballagh, Acoustics
- j. Associate Professor Keith Probert
- k. Dr Robert Bell
- l. Dr Martin Single
- m. Dr Mark James
- n. Dr Christopher Hickey
- o. Richard Boyd
- p. Paul Sagar
- q. Martin Cawthorn
- r. Philip Mitchell, Planner

## **CONCLUSION**

- 105. This project is an essential capital upgrade for Port Otago to remain viable and competitive. The need for the dredging is to accommodate larger ships that shipping lines will inevitably use. .
- 106. The project will ensure Port Otago can remain available for international shipping lines. This has a wide spin off benefit for the Otago region and a range of businesses and industries that import and export through the port. These benefits are long term and wide spread. The project significantly contributes to the social and economic wellbeing of Port Otago and a range of related businesses and industries that rely on Port Otago.

107. All adverse effects have been identified and assessed by experts. The proposed conditions (with a few revisions) and the associated EMP will ensure the project can be implemented successfully, while appropriately avoiding or mitigating all effects. The evidence will be that the adverse effects of Project Next Generation are appropriately managed and that the proposal is consistent with the relevant objectives and policies of the NZCPS, RPS and the Regional Plan.
108. The proposal does achieve sustainable management and Port Otago seeks a decision granting the consents sought to allow this investment in the port to proceed.

Dated this 4<sup>th</sup> day of April 2011

L A Andersen

Counsel for Port Otago Limited