BEFORE THE ENVIRONMENTAL PROTECTION AUTHORITY

IN THE MATTER of the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2011 (EEZ Act)

AND

IN THE MATTER of an Application for Marine Consent under section 38 of the EEZ Act by Trans-Tasman Resources Limited

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CLOSING SUBMISSIONS FOR FISHERIES SUBMITTERS

7 May 2014

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MAY IT PLEASE THE DECISION-MAKING COMMITTEE:

INTRODUCTION

1. Trans-Tasman Resources Limited's (**TTR**) proposal is the first application for marine consent to be considered under the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (**EEZ Act**).

2. It attracted a large number of submissions from the public and those parties with an existing interest in the South Taranaki Bight and its surrounding environment.

3. The present hearing commenced in March and it is now the beginning of May. During that time the Decision-Making Committee (**DMC**) has heard a significant amount of expert and lay evidence from a host of witnesses.

4. In addition, the DMC has had to address a number of procedural and interpretation issues which subsequent decision-makers will probably not have to contend with as the procedures for hearing notified applications bed in over time.

5. The Fisheries Submitters have taken issue with some of the DMC's procedural decisions. Nevertheless, in recognition of the difficult task that the DMC has undertaken, they wish to express their thanks for accommodating the presentation of their case to the extent you have.

6. By way of a broad overview my submissions address the Fisheries Submitters' position in respect of the:

   (a) Statutory framework & legal issues;

   (b) Potential effects on commercial fishing; and

   (c) Environmental Protection Authority's (**EPA**) proposed conditions.

7. I note that my submissions on the EPA's Conditions address matters of principle. I do not intend to speak to the specific changes that are sought. These are set out in **Annexure A** and can be dealt with on the papers, subject to any questions that the DMC might have.

STATUTORY FRAMEWORK & LEGAL ISSUES

Fisheries approach to interpreting statutory framework

8. The DMC (on behalf of the EPA) is going to need to make a number of decisions as to the statutory regime given that this is the first application for marine consent to be considered under the EEZ Act.

9. To assist the DMC with the task of statutory interpretation the Fisheries Submitters set out below (where relevant) those areas where they agree with other parties' interpretation of the EEZ Act and those areas where they hold a different view.

Sustainable management purpose

10. The EEZ Act, as with most modern legislation, takes a purposive approach to interpretation.

11. Section 5(1) of the Interpretation Act 1999 states that:

> The meaning of an enactment must be ascertained from its text and in the light of its purpose.

12. Case law indicates that although a search for grammatical meaning is the starting point, if it does not give effect to the purpose of the legislation, the grammatical meaning cannot prevail. Grammar must give way to a construction that promotes the purpose of the Act.[1]

13. J F Burrows adds in his text book "Statute Law in New Zealand" that:[2]

> Words should be given a liberal interpretation to ensure that the purpose of the legislation is achieved. Any shortcomings of the drafter of the Act should not be allowed to obstruct its purpose if that purpose is clear.

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1 *Kingston v Keprose Pty Ltd* (1987) 11 NSWLR 404 at 423 (New South Wales Court of Appeal); and *McKenzie v Attorney-General* [1992] 2 NZLR 14 at 17 (CA) - Sir Robin Cooke *"… the general principal of statutory interpretation …"* is *"… that strict grammatical meaning must yield to sufficiently obvious purpose."*

2 Burrows, J.F., "Statute Law in New Zealand" (Wellington, LexisNexis 2003) at 130.

14. The purpose of the EEZ Act is clearly set under s 10:

> (1) The purpose of this Act is to promote the sustainable management of the natural resources of the exclusive economic zone and the continental shelf.
>
> (2) In this Act, sustainable management means managing the use, development, and protection of natural resources in a way, or at a rate, that enables people to provide for their economic well-being while—
>
> (a) sustaining the potential of natural resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
>
> (b) safeguarding the life-supporting capacity of the environment; and
>
> (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.
>
> (3) In order to achieve the purpose, decision-makers must—
>
> (a) take into account decision-making criteria specified in relation to particular decisions; and
>
> (b) apply the information principles to the development of regulations and the consideration of applications for marine consent.

15. It is submitted that the rules of interpreting purposive legislation requires all the provisions of the EEZ Act to be read so as to promote its sustainable management purpose. This means *inter alia* that any decision-making powers exercised under the EEZ Act must also promote the Act's purpose.

16. The Director-General of Conservation's opening submissions provide a useful overview of the EEZ Act's purpose in relation to decision-making.[3] The salient points are that:

    (a) Section 10(2) is only concerned with enabling economic well-being, and not social or cultural well-being.

    (b) The relationship between enabling economic well-being and subsections (a) to (c) requires the exercise of *"an overall broad judgement"* that *"allows for comparison of conflicting considerations and the scale and degree of them, and their relative significance or proportion in the final outcome"*.[4]

    (c) In order to achieve the purpose of the Act decision-makers must:

        i. take into account the relevant decision-making criteria (i.e. s 59 and 60); and

        ii. apply the information principles to the consideration of applications for consent (s 61).

17. It is noted that the Environmental Defence Society (**EDS**) contend it opening submissions that an overall broad judgement is not the correct test. Rather, environmental bottom lines must be met as preconditions for the enablement of economic well-being.[5]

18. I agree that caution and environmental protection have much greater significance when exercising an overall broad judgement under s 10(2) in cases where the information available is uncertain or inadequate,. However, this does not mean as a general rule that environmental bottom lines must be satisfied as a precondition to enabling economic well-being.

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3 Opening Submissions on Behalf of the Director- General of Conservation, 10 March 2014, at paras [8] to [18].

4 D-G of Conservation's Opening, at paras [14] and [15]. See *North Shore City Council v Auckland Regional Council* (1996) 2 ELRNZ 305 at 347 (EC).

5 Opening Submissions for the Environmental Defence Society, 11 March 2014, paras [10] and [12(b)].

19. I address the decision-making criteria and information principles in further detail later in my submissions (under the sub-heading *"Decision-making criteria & information principles"*).

Impact assessment and existing interests

20. The decision-making criteria and information principles are not the only statutory provisions that the DMC needs to consider when exercising its decision-making powers.

21. The DMC also needs to consider all other sections of the EEZ Act relevant to an application for marine consent, including those sections setting out the applicant's responsibilities under the Act.

22. This is because conferral of a right under the EEZ Act to apply for a marine consent to undertake a discretionary activity is subject to certain requirements. Arguably the most fundamental requirement is that under s 38(2)(c)) which states that *"an application must … include an impact assessment prepared in accordance with section 39."* Section 39 in turn requires that:

> (1) An impact assessment must—
>
> …
>
> (c) identify the effects of the activity on the environment and *existing interests* (including cumulative effects and effects that may occur in New Zealand or in the sea above or beyond the continental shelf beyond the outer limits of the exclusive economic zone; and
>
> (d) identify persons whose *existing interests* are likely to be adversely affected by the activity; and
>
> …
>
> (h) specify the measures that the applicant intends to take to avoid, remedy, or mitigate the adverse effects identified.
>
> …
>
> (2) An impact assessment must contain the information required by subsection (1) in —

(a) such detail as corresponds to the scale and significance of the effects that the activity may have on the environment and *existing interests*; and

(b) sufficient detail to enable the Environmental Protection Authority and persons whose *existing interests* are or may be affected to understand the nature of the activity and its effects on the environment and existing interests.

[Emphasis added]

23. It is clear from s 39 that the applicant's impact assessment must identify the effects of the activity on existing interests. The word "effects" is not qualified and must be taken to mean any effects. The applicant must also identify persons whose existing interests are likely to be adversely affected. The identification of existing interests likely to be adversely affected is not subject to any threshold of effect (e.g. minor or significant). That means that existing interests must be identified regardless of the degree to which they are adversely affected. Finally, the applicant must specify the measures it intends to take to avoid, remedy of mitigate any adverse effects on existing interests.

24. The information provided must correspond to the scale and significance of the effects that an activity may have on an existing interest. The words *"may have"* indicate that the scale and significance of the effects are of importance as opposed to the probability of the effect. This is consistent with a precautionary approach. Furthermore, the information must enable the EPA and a person with an existing interest to understand the effects on the interest.

Effects on existing interests

25. Existing interests are defined under s 4 as including:

> (a) any lawfully established existing interest activity … including rights of … fishing.

26. The Fisheries Submitters hold transferable quota pursuant to the Quota Management System (**QMS**) under the Fisheries Act 1996. This is discussed in more detail under the subheading *"Other management regimes"*. For the moment it is sufficient to state that the Fisheries Submitters have an existing interest in the Exclusive Economic Zone (**EEZ**) area subject to TTR's proposal.

27. TTR's opening submissions on the statutory framework set out what TTR considers to be the EPA's duties under the decision-making criteria and information principles of the EEZ Act (s 59 to 61).[6]

28. TTR submits on the relationship between the terms "environment" and "existing interests" that:[7]

> 50. … the EPA is limited to considering effects on the natural environment and resources unless a specific matter is otherwise referred to in sections 59, 60, or 61 of the EEZ Act. For example, the EPA still must take into account effects *on existing interests of allowing the activity*, effects on human health, and the *economic benefit to New Zealand of allowing the application*.

29. This is a reasonable proposition; save that an existing interest's economic well-being might be adversely affected by TTR's application. Accordingly, any potential economic benefits need to be considered against adverse economic effects to appropriately consider the benefit of the application to New Zealand. This is consistent with s10(2) of the EEZ Act where the enabling of economic well-being applies generically to all people as opposed to a specified class of people (e.g. the applicant).

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6 Opening Representations on Behalf of Trans-Tasman Resources Ltd, 10 March 2014, para [43].

7 TTR's Opening, at para [50].

30. TTR's opening then goes on to state in relation to the EPA's decision-making criteria and existing interests that:[8]

> 56. Section 59(2)(b) of the EEZ Act requires that the EPA must take into account effects on … existing interests of other activities undertaken in the area covered by the application or in its vicinity …
>
> 57. This matter is related to the requirement to assess cumulative effects, except here the focus is clearly on other activities undertaken in the area as opposed to the effects of the proposed activity. We consider if an applicant was expected to provide detailed information about the effects of all other regulated and unregulated activities this would be an unduly onerous requirement and would in some circumstances be criticised as incomplete or insufficiently well informed. Instead we consider it is also for other parties to adduce evidence about the relevance of other activities.

31. It is acknowledged that TTR is making a general observation here about the effects of existing activities undertaken in the area as opposed to the effects of the applicant's proposed activity.

32. However, TTR's proposition that *"… we consider it is also for other parties to adduce evidence about the relevance of other activities"* is problematic. It indicates a general attitude that it is for existing interests to identify the effects of existing activities insofar as the form part of the existing environment when considering the proposed activity.

33. It is respectfully submitted that such an approach is inconsistent with the requirements for the applicant's impact assessment under s 38 and 39 of the Act. This is because in order to assess the potential effects of the proposal on existing interests under those sections of the EEZ Act the applicant must have some understanding of the nature of the existing activities and their effects on the environment.

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[8] TTR's Opening, at paras [57] and [57].

34. This is because the effects of existing activities (e.g. interests or use rights) form part of the existing environment against which an application for a new activity must be assessed. Authority for this approach is found in *Queenstown Lakes DC v Hawthorn Estate Ltd* (No 2) where the Court of Appeal held that:

> In our view, the word "environment" embraces the future state of the environment as it might be modified by the utilisation of rights to carry out permitted activity under a district plan. It also includes the environment as it might be modified by the implementation of resource consents which have been granted at the time a particular application is considered, where it appears likely that those resource consents will be implemented.

35. In *Chief Executive of the Ministry of Agriculture and Forestry v Waikato Regional Council* Judge Sheppard, having cited the Court of Appeal decision went on to hold that:

> [183] An activity carried on pursuant to existing-use rights forms part of the existing environment against which the effects of a proposal are to be assessed.

36. While the aforementioned cases were concerned with the assessment of future effects, they are important insofar as they clearly establish as a matter of principle that existing lawful activities and the effects of those activities form part of the existing environment. Accordingly, any base line assessment undertaken to assess the effects of a proposal must include existing lawful activities and their effects. This includes both positive and adverse effects.

37. It would be quite artificial to identify the potential effects of the proposal on an existing interest without understanding to some degree the relationship between the effects of the proposed activity and existing interest. The degree of assessment undertaken clearly needs to be one of judgement taking into account the scale and the significance of the effects that the proposed activity may have on the existing interests (s 39(2)(a). Such an assessment is necessary in order for the EPA - and persons with existing interest - to be able to understand the nature of the activity and its effects on existing interests (s 39(2)(b).

38. This point applies irrespective of whether the applicant is assessing the effects of its proposal on an existing interest, or the cumulative effects of the proposal together with the effects of existing activities. Whatever the case, the applicant needs to provide information on the existing environment in order to support its own application.

39. The degree of information that an applicant should provide concerning the the effects of existing activities and the proposed activity should be sufficient to enable the existing activity to assess the effects of the activity on their own interests.

40. This approach is clearly articulated in *AFFCO NZ Ltd v Far North District Council* where former Judge Sheppard held that:[9]

> … good resource management practice requires that sufficient particulars are given with an application to enable those who might wish to make submissions on it to be able to assess the effects on the environment and on their own interests of the proposed activity. Advisers to consent authorities and would-be submitters should not themselves have to engage in detailed investigations to enable them to assess the effects. It is an applicant's responsibility to provide all the details and information about the proposal that are necessary to enable that to be done. The proposal and the supporting plans and other material deposited for public scrutiny at the consent authority's office should contain sufficient detail for those assessments to be made.

41. It is submitted that an applicant for marine consent must assess the effects of activities forming part of the existing environment to the extent necessary to form a sufficient understanding of how the proposed activity might affect existing interests.

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[9] Decision A6/94 at 13 (PT); (1994) 1B ELRNZ 101, [1994] NZRMA 224

Avoid, remedy or mitigate

42. TTR contends in its opening that the Planning Tribunal's decision in *Trio Holdings v Marlborough District Council*[10] supports the proposition that *"not all adverse effects must be avoided, remedied or mitigated under the RMA"*.[11]

43. The Fisheries Submitters respectively disagree with TTR's view on this point. Rather, the view in EDS's opening is preferred insofar as *Trio Holdings* was concerned with the extent to which effects should be mitigated, not whether mitigation should occur or not.[12]

44. The part of the Planning Tribunal's decision relied on by EDS in support of this point is set out below for the DMC's convenience:[13]

> We consider that the definition of the sustainable management under s 5(2) for the purposes of these appeals requires managing the use and development of the coastal marine area and the protection of the area's natural resources in a way which enables the people of New Zealand and including the communities of the Marlborough district to provide for their social and economic well-being, and their health and safety, whilst achieving the caveats in s 5(2)(a)(b) and (c). This means we are required to ensure that the potential of the natural resources in question are sustained sufficiently to meet the reasonably foreseeable needs of future generations; and we are required to ensure that the life-supporting capacity of the waters of Waitata Reach and its ecosystems are safeguarded sufficiently also to protect their life-supporting capacity. *All of this is to be achieved by either avoiding, remedying or mitigating the adverse effects we have identified earlier in this decision*."
>
> *[Emphasis added]*

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10 2 ELRNZ 353 (PT).

11 TTR's Opening, at paras [67] and [68].

12 Opening Submissions for EDS, para [26].

13 2 ELRNZ 353 at 355 (PT).

Other marine management regimes

45. The term *"marine management regimes"* is defined under s 7(1) as including regulations, rules and policies applying to the territorial sea, EEZ or continental shelf. The term expressly includes marine management regimes established under the Fisheries Act 1996 (s 7(2)).

46. Section 52(2)(h) of the decision-making criteria requires the EPA to take into account *"the nature and effect of other marine management regimes*". The Fisheries Submitters have provided evidence that the Fisheries Act 1996 sets up a regime under the QMS for the allocation (or grant) of commercial catching rights known as transferable quota.[14]

47. The QMS was introduced in 1986 and is the cornerstone of New Zealand's fisheries management regime. Under the QMS, an annual catch limit (the Total Allowable Catch) is set for every fish stock. By controlling the amount of fish taken from each stock, the QMS is the foundation for ensuring the sustainability of New Zealand's fisheries.

48. Catch limits are set for every fish stock at levels that will ensure their long-term sustainability. Catch is closely monitored by the Crown and financial penalties are enforced if catch allowances are exceeded in any year (deemed values).

49. Under the QMS, the commercial catching rights for each of New Zealand's 636 fish stocks have been split into quota shares, known as individual transferable quota. This quota right is granted in perpetuity. The Court of Appeal has found that "*quota are undoubtedly a species of property and a valuable one at that…"*. This is qualified by the fact that *"the rights inherent in that property are not absolute."*[15] This is because quota rights are creatures of statue and granted subject to legislative requirements.

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14 Evidence of Dr Jeremy Helson, 4 April 2014, at paras [22] to [27].

15 *New Zealand Fishing Industry Association (Inc) v Minister of Fisheries*, CA82/97, 83/97, 96/97 at 16 (CA).

50. Despite the fact that quota rights are initially granted or sold by the Crown, they are a perpetual right that owners can buy and sell. The certainty and value of quota rights is reflected in the fact that mortgages can be, and are, registered over quota.

51. The Fisheries Submitters evidence has shown that quota rights are the foundation upon which most fishing companies are built. Fishing quota is a company's most valuable asset. Any adverse effect on the value of quota rights has the capacity to seriously undermine the economic viability of fishing companies. This may be through increased lending costs or reduced ability to raise capital, reduced certainty and volume of fish supply, or reduced incentives to invest in new plant, vessels or technology.

52. It is submitted that if the DMC is minded to grant TTR's application for marine consent under the EEZ Act it must take care that such a decision does not to unlawfully derogate from the grant of quota rights under the Fisheries Act 1996. This is because the High Court's decision in *Aoraki Water Trust v Meridian Energy Limited* makes it clear that the principle of non-derogation from grant applies to all relationships which confer a right in property.[16]

Decision-making criteria & information principles

53. The key provisions related to the exercise of marine consent decision-making are set out under the decision-making criteria (s 59 and 60) and the information principles (s 61).

54. The mechanical operation of these provisions has been canvassed in the opening submissions of other parties and I do not intend to repeat that exercise here.

55. Rather, I set out below some key issues that it is submitted decision-makers must bear in mind when applying this part of the EEZ Act. These are:

    (a) In considering the effects of TTR's proposal on commercial fishing the DMC *"must have regard"* to the matters set out in s 60(a) to (d).

[16] [2005] 2 NZLR 268 at 280 per Chisholm and Harrison JJ (HC).

(b) EDS is correct that the phrases *"must take into account"* and *"must have regard to"* do not promote any statutory hierarchy.[17] Rather, it is submitted that the phrase *"must have regard to"* simply operates to provide direction on those things that must to factored into any consideration of the matters to be taken into account under s 59.

(c) The D-G of Conservation is correct that s 59 to 61 operate to inform the decision-makers overall broad judgement.[18]

(d) The D-G of Conservation is correct that in circumstances where information is inadequate or uncertain s 61 requires caution and environmental protection to be favoured rather than weighed in the overall broad judgement.[19]

(e) Favouring caution and environmental protection does not necessarily mean that environmental bottom lines must be satisfied as a precondition to enabling economic well-being.

(f) TTR is correct that s 61(2) embodies the precautionary approach.[20]

(g) The exercise of the decision-making power under s 62 must achieve the sustainable management purpose of the Act.

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17 Opening Submissions for EDS, para [16].

18 D-G of Conservation's Opening, at para [21].

19 D-G of Conservation's Opening, at para [22].

20 TTR's Opening, at para [99.]

POTENTIAL EFFECTS ON COMMERCIAL FISHING

Existing interest

56. The Fisheries Submitters' evidence collectively establishes the nature and extent of their existing interest in the area actually and potentially affected by the mining operation.

57. The proposed mining area lies within a number of different fishery areas (e.g. SCH8 (school shark); TRE7 (trevally); SNA8 (snapper); SKJ1 (skipjack tuna); JMA7 (jack mackerel) and the surf clam fishery etc.). The variability of these fisheries provides a broad picture of the interface between existing fisheries interests and the proposed mining activity.

58. This interface is not characterised just in terms of fish type, fish response to mining activity or fishing method. It is also characterised in terms of the structure of the industry and the differing potential for changes in fishing catch to result in adverse effects on commercial viability.

59. The TTR analysis of effects on commercial fisheries failed to grasp the different ways in which the mining activity could affect this existing interest. This is because while TTR has modelled certain potential effects of the activity, it has not established an appropriate baseline of information concerning the existing interests of the commercial fishing industry against which to consider the scientific information it presently holds.

60. Even if TTR did have sufficient baseline information on commercial fishing activities, it does not have sufficient information on the potential environmental effects of the proposed activity against which to monitor potential effects on commercial fishing. This creates uncertainty as to the potential effects of the proposal on commercial fishing.

61. The Fisheries Submitters' evidence shows that commercial fishing activities in proximity to the proposed mining activity have significant economic value. It follows that an adverse effect on that economic value has the potential to be a significant adverse effect. This means a cautious approach is required.

Uncertainty and risk of potential significant effects

Seabed effects

62. Mr Andrew Smith, an experienced fisherman, for the Fisheries Submitters presented evidence (by way of examination-in-chief) on the adverse effects that seabed mounds would have on fishing activities within the 65km^2 mining site footprint.[21]

63. TTR's proposed conditions appear to indicate that seabed mounds could be as high as 9m and seabed pits could be as deep as 10m. Mr Smith's evidence was that variations in the seabed of even 2m to 4m could result in the trawling mechanisms becoming stuck.

64. Mr Smith stated Ms Gibbs was incorrect in her summary of evidence that such variations would be unlikely to have a negative impact on trawling.[22]

Sediment Plume

65. Beyond the direct effect of the mining operation on the 65km^2 to be mined, the proposed operation will potentially affect a much larger area through the sediment plume. The EPA proposed conditions present some limitations of the potential content of the sediment plume, including:

(a) An hourly and annual limit on the tonnage of material mined (Condition 37)

(b) A restriction on excavating any mud layer more than 1 metre thick (Condition 38)

(c) Grade control drilling and pre-mining assessment (Conditions 39 and 40)

(d) A total sediment discharge tonnage limitation and additional limitations on the hourly discharge of fines and ultra-fines (Condition 51).

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21 A Smith examination-in-chief, 1 May page 2479 Line 21.

22 N Gibbs cross-examination, 14 April page 1741 Line 35.

66. Should the consent be granted, the Fisheries Submitters would support those limitations. However, in terms of understanding many of the potential effects on commercial fishing the sediment plume-modelling exercise must be converted into an operational model. The limitations included in the conditions referred to above must be applied to the mining operation and the plume must be monitored. Dr Hadfield agreed that his model commenced with the discharge information he was given and that the concentrations would vary with the inputs.[23] Further, Dr Huber agreed that there was uncertainty with the fines (or mud) content of the plume and with the overall size of the plume.[24]

67. Related to this uncertainty is the uncertainty about the extent and nature of adverse effects on benthic habitat and organisms under the plume, water quality, fish biology, movement and behaviour, seabed sediment dynamics, primary productivity, and ultimately commercial fishing activity, including aquaculture, in the affected area.

Optical effects

68. One of the related effects of the sediment plume are changes in water clarity and the effects that this will have on primary productivity as phytoplankton respond to changes in light. The joint statement of the optical effects witnesses dated 26 March agreed that the most significant ecological effect arising in the South Taranaki Bight from the optical changes due to mining will likely be on the seabed.[25] These experts further agreed that *"spatial models of fish distributions given in MacDiarmid (2013) together with knowledge of typical diets of fish may be useful in considering which fish may be affected by these changes"*.[26]

69. Dr Pinkerton agreed that there is *"a lot of uncertainty"* about the effect of the changes at the benthic level up the food chain. This uncertainty is due both to the nature of these linkages and to the nature and extent of the plume.

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23 Hadfield cross-examination, 31 March, page 518 Lines 16 and 35.

24 Huber cross-examination, 1 April, page 599 Line 17 and page 600 Line 18.

25 Pinkerton cross-examination, 1 April, page 685 Line 12.

26 Pinkerton cross-examination, 1 April, page 685 Line 26.

70. The Fisheries Submitters evidence also shows that pelagic species of fish are at high risk of be displaced by the plume.

Effects on fishing catch and effort

71. One of the means by which the TTR witnesses have attempted to assess the potential effect of the mining activity on commercial fisheries is to evaluate the displacement of fishing by that activity. The conclusion of this assessment, which is that this displacement is only minor, has then been fed into other assessments, such as the economic assessment.

72. Ms Gibbs evidence advised of the value of displacement in her evidence in chief.[27] In her cross-examination she acknowledged some uncertainties about this assessment, including the lack of accuracy for smaller inshore vessels, and the short term of the data base (last five years) used to estimate the fishing effort and catch in the South Taranaki Bight.[28]

73. Dr Helson's supplementary evidence for the Fisheries Submitters identified additional shortcomings. These included that the Ministry for Primary (**MPI**) Industries model being used by Ms Gibbs has not been approved by internal MPI processes and that the catch data used was not intended to support such fine scale spatial analysis.[29]

74. However, Dr Helson also identified the greatest shortcoming with Ms Gibbs analysis, which was that the area from which fish are displaced is limited to the mining area. As Dr Helson noted, in relation to the Joint Statement of Experts on the Field of Effects on Fish and Zooplankton (20 March 2014), the experts agreed that there was uncertainty as to how fish species will react to increased levels of sediment concentration. The experts were not aware of any reports that address these effects. Estimating the displacement of fish as a result of the sediment plume should be the first step in any assessment of the effects on fisheries. This is a core issue and it has not been addressed.

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27 N Gibbs Statement of Evidence, paras [31] to [46].

28 N Gibbs cross-examination, 14 April, page 1731 Line 44 to 1732 Line 14.

29 Supplementary Evidence of Dr Jeremy, 29 April, 2014.

75. This analysis is particularly important for some species, such as pelagic tunas and mackerels, which are known to be very sensitive to changes in water turbidity. For migratory tuna species, any material alteration to the migratory patterns for these transient species could have a significant impact.

76. Asserting that displaced fish will be available elsewhere, as Ms Gibbs did, fails to understand that fishing is a highly targeted activity and fishers must target optimal aggregations to make fishing economically viable. Any significant disturbance to fish distribution can make a particular fishery economically unviable (albeit that the fish may still be present, somewhere). A number of factors will increase the costs of fishing, sometimes significantly. For example, if fishers have to search for fish in new locations, catches are smaller or occur at lower rates, or if catches are taken in different compositions, this requires sourcing added annual catch entitlement or incurring deemed values. This effect was explained in the evidence of Mr Mawson in relation to his inshore set net fishing for rig and school shark.[30]

77. The result of the above identified shortcomings is that Ms Gibbs analysis significantly underestimates the displacement effect of the mining operation.

Economic effects

78. It is important to understand that unlike ecological effects, which are largely limited to the intrinsic, physical effect on a species or ecosystem, the assessment of effects on commercial fisheries as existing interests also has to account for the potential effect on the actual market value of the fish sold.

79. When asked about the reputational risk that might arise due to perceived effects on fish quality as a result of the mining activity, Ms Gibbs considered that it was for the fishing companies to deal with the market consequences.[31] It is accepted that the fishing companies are the experts in their own marketplace. However, if Ms Gibbs was inferring that the mining activity should be able to have a significant effect on the sales income for

30 K Mawson Statement of Evidence, 4 April, paras [22] to [28].

31 N Gibbs cross-examination, 14 April, page 174 Line 1.

fishing companies without some means of redress, then that is a proposition which is totally rejected.

80. The Fisheries Submitters consider that, if consent is granted, there should be both monitoring to identify any adverse effect from the mining activity on fishing catch and the market value of the fishery, and the provision for compensation to existing interests if this effect is proven.

81. TTR has raised questions as to whether the EPA has jurisdiction to impose conditions requiring compensation for adverse effects.[32] The Fisheries Submitters remain silent on that point for the moment due to the time constraints faced in preparing this closing. Nevertheless, as discussed above (under the subheading – *"Avoiding, remedying or mitigating adverse effects"*), TTR is required to either avoid, remedy of mitigate the adverse effects of its proposal on existing interest activities.

82. The Fisheries Submitters have produced evidence that adverse effects on catch and market may in turn adversely affect the viability of commercial fishing in some areas. The level of this risk is unknown, but the consequences would be significant for the industry. This potential effect must therefore be avoided, remedied or mitigated. In these circumstances the applicant needs to consider whether a compensation condition should be offered to the commercial fishers on an *Augier* basis.

Biosecurity issues

83. Mr Johnston's evidence for the Fisheries Submitters addressed biosecurity concerns for aquaculture in Admiralty Bay in the Marlborough Sounds.[33] It is understood that Admiralty Bay could be used as the location for anchorage and/or transfer between the bulk carrier vessels and the floating ore carrier. Mr Johnston identified that there were 30 marine farms at risk from a biosecurity breach within Admiralty Bay and hundreds of farms in nearby Pelorus Sound.

84. Biosecurity concerns include both ballast water risks and the potential for biofouling marine pest organisms.

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32 TTR's Opening, at paras [105] and [212].

33 Johnston Statement of Evidence, 4 April, para [33].

85. The EPA proposes conditions in relation to both these matters, and further comment is made below about amendments to these conditions sought by the Fisheries Submitters to ensure the most appropriate level of protection under the current standards is applied.

CONDITIONS

Annexure A - fisheries track changes to conditions

86. **Annexure A** to these submissions contains a tracked change version of the proposed EPA Conditions. In the very short time available the Fisheries Submitters have only been able to concentrate on the matters that have greater relevance to their existing interests. The Fisheries Submitters have previously examined the proposed TTR Conditions, and there are a number of matters that are common to both of these sets of conditions. The EPA Conditions also depart significantly from the TTR approach in a number of areas. I address the Fisheries Submitters position on matters in common and areas of departure as follows.

87. Common to both sets of conditions is the framework for the consent that includes environmental performance objectives, baseline monitoring, the setting of environmental standards using a “trigger value” approach for a range of parameters and a review clause.

Review clause

88. The review clause under the EPA Conditions proposes an entirely different approach to establishment of baselines and triggers to that proposed by TTR. The approach set out under Condition 14A is reliant on the review provisions under s 76(1)(a)(ii) of the EEZ Act.

89. Importantly, triggering s 76 means that any review must be publicly notified and the marine consent submission and hearing procedures will apply. Such an approach would enable the participation of affected interests in the final decision. However, the Fisheries Submitters have not had sufficient time to consider whether this approach is *intra vires* the EEZ Act.

90. Setting aside the *vires* of the EPA review approach, the Fisheries Submitters have concerns that its implementation does not provide for the involvement of persons with commercial fishing expertise in the sampling methodology under the Baseline Environmental Monitoring Plan (**BEMP**) (Conditions 4 to 6) or the approval of the (operational) Environmental Monitoring and Management Plan (**EMMP**), which includes environmental performance criteria, operational monitoring schedules and details of trigger values (Condition 14).

91. The TTR Conditions provided for an independent review of the BEMP and EMMP by a Technical Project Review Group (**TPRG**). In complex resource consents under the RMA, such as mining and landfill projects, where independent review or expertise is not available within the consent authority, the use of a TPRG type group is common-place.

92. The Supreme Court's recent decision of in *Sustain Our Sounds Inc. v NZ King Salmon Company Ltd*[34] required, in relation to the adaptive management approach to be used by King Salmon, that:[35]

> The baseline report and the ongoing monitoring reports are to be prepared by an independent person, monitored by the peer review panel and have to be approved by the Council.

93. Irrespective of the proposal for a s 76(1)(a)(ii) review, the Fisheries Submitters continue to support the TPRG condition.

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34 [2014] NZSC 40 (SC).

35 [2014] NZSC 40 at para [136] (SC).

Adaptive management

94. As the application by TTR has significant uncertainties in terms of environmental effects and effects on existing interests, the activity is only able to proceed using the adaptive management approach as defined under s 64(2) of the EEZ Act. Implicit in both sections 2(a) and (b) of that definition is that the activity is measured against environmental standards which relate to environmental effects so that, depending on the results, it can be *"discontinued, or continued with or without amendment, on the basis of those effects."*

95. The specific components of an adaptive management regime are not strictly defined under the EEZ Act, but s 64(2)(a) promotes a small scale or short period consent. The *Sustain Our Sounds decision* contains a thorough analysis of the adaptive management regime and states that:[36]

> The overall question is whether any adaptive management regime can be considered consistent with a precautionary approach.

96. The Supreme Court identifies *"the vital part of the test"* (as set out in paragraph 129(d)) as being:[37]

> … the extent to which an adaptive management approach will sufficiently diminish the risk and the uncertainty.

97. The Supreme Court then confirms the factors identified by the Board of Enquiry as appropriate for assessing the degree to which adaptive management will diminish risk and uncertainty in that case. These are:[38]

    (a) there will be good baseline information about the receiving environment;

    (b) the conditions provide for effective monitoring of adverse effects using appropriate indicators;

    (c) thresholds are set to trigger remedial action before the effects become overly damaging; and

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36 [2014] NZSC 40 at para [129] (SC).

37 [2014] NZSC 40 at para [133] (SC).

38 *Ibid*.

(d) effects that might arise can be remedied before they become irreversible.

98. It is submitted that the DMC needs to take care in applying the adaptive management approach taken in the *Sustain Our Sounds decision* to the present case. This is because both the baseline information for the environment in which the King Salmon activity was proposed and the nature of the salmon farming activity were better understood than the environment of the South Taranaki Bight (including existing interests) and the nature of the proposed sand mining activity. Further, the conditions of consent for the consented salmon farm contained a wide range of quantitative environmental standards (i.e. triggers or thresholds).

99. Taking into account that the *Save Our Sounds decision* can be distinguished from the present application on the facts the Supreme Court's approach to adaptive management in that case can be summarise as follows:[39]

(a) While normally one would expect there to be sufficient baseline information before any adaptive management approach could be embarked on, that deficiency was to be remedied before the activity started.

(b) It was sufficient for the monitoring of adverse effects to be against environmental quality standards in the consent, with the development of quantitative standards as part of the consent.

(c) It appeared acceptable for trigger thresholds to be set as part of the consent, and to place reliance on these triggers to be acted upon by the consent holder.

(d) As the Board of Enquiry appeared to accept the conditions as complying with precautionary approach, this also meant it accepted that effects could be remedied before they became irreversible.

[39] *Ibid*, paras [135] to [138].

100. It is submitted that if the DMC is minded to apply to Supreme Court's approach it needs to keep in mind Judge Shepherds finding in the *AFFCO NZ Ltd decision* that *"good resource management practice requires that sufficient particulars are given with an application to enable those who might wish to make submissions on it to be able to assess the effects on the environment and on their own interests of the proposed activity."*[40] The ability of people with an affected interest to inform the ultimate decision on a notified application for any type of consent should not be dispensed with lightly. This is because such an approach is in danger of being contrary to the statutory intent of a notified process.

101. In any event, the Fisheries Submitters agree with the D-G of Conservation's observation, in respect of the most recent suit of conditions, that baselines remain to be identified.[41] The Fisheries Submitters submit, in this respect, that TTR has failed to properly assess the commercial fisheries baseline, in the South Taranaki Bight and the wider EEZ and coastal marine area.

102. This could only have been undertaken through much more extensive consultation with quota holders and fishermen about the extent of the mining operation and the related sediment plume. The broad scale snapshot of commercial fishing activity gained through MPI figures is clearly inadequate. If that inadequacy is to be remedied through the consent, then it can only be on the basis of the details set out in the amended conditions under **Annexure A**.

103. In relation to paragraph [99(b) and (c)] above, there appears to be a significant difference in the approach approved of in King Salmon to what TTR have presented to date. It is noted that the reference in (b) is to environmental quality standards, not simply environmental performance objectives. If this difference is to be reduced to semantics only, then the performance objectives adopted by the DMC in its decision will need to contain much more directive rigour than what is contained in the TTR conditions.

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40 Decision A6/94 at 13 (PT)

41 Memorandum on behalf of the Director-General of Conservation, 6 May 2014, at para [19].

104. The EPA staff have omitted listing these objectives/qualitative standards, leaving it to the DMC to decide. If it is not clear now to the DMC what the range of effects that should be measured and controlled is, and what the (at least initial) trigger values for thresholds of compliance should be, then the applicant needs to undertake more work to identify these prior to any consent being granted.

105. However, if the DMC chooses to adopt the approach recommended in the EPA conditions then it is submitted that there should be additional opportunities for the Fisheries Submitters, and other groups, to be directly involved in the setting of the performance standards and trigger values.

Baseline Monitoring and Operation Monitoring for Commercial Fisheries

106. The EPA Conditions make specific mention of two components of the baseline survey in Conditions 7 to 12.

107. The Fisheries Submitters consider that an equally important part of the baseline is that relating to commercial fishing. A new condition has been suggested (Condition 13A) which specifies the content of this survey and the role that the industry expects to have in its design and implementation.

108. Similarly to the proposals for operational monitoring, a new condition (Condition 23A) addresses matters to be included in a commercial fishing operational monitoring survey.

Biosecurity Conditions

109. The Fisheries Submitters consider that Condition 68 on the bio-fouling standard should be made more specific and have suggested words to this effect.

CONCLUSION

110. The Fisheries Submitters do not oppose seabed mining under the EEZ Act. They accept that seabed mining activities should be able to be undertaken if they can be shown to satisfy the sustainable management purpose of the Act.

111. However, the regime of the Act satisfies the sustainable management purpose *inter alia* by ensuring that sufficient baseline information is obtained in relation to existing interests. This baseline information can then be used to monitor the proposal to ensure that it does not have any significant adverse effects on the existing activity.

112. The Fisheries Submitters evidence shows that TTR has not established sufficient baseline information on their existing interests to be able to determine with any degree of certainty that fisheries interests will not be significantly affected by the proposal. This must be a key consideration when deciding whether to grant or refuse the application for consent.

113. It is submitted that if the DMC is minded to grant consent that any conditions imposed under s 63 must require TTR to establish *inter alia* baseline information in consultation with the fishing industry and quantitative triggers to avoid adverse effects on the existing fishing interests. These conditions and others are set out under **Annexure A**.

114. It is noted that the suggestions in **Annexure A** have been hurriedly put together. The Fisheries Submitters are concerned, in this respect, that there has not been sufficient opportunity to consider the EPA Conditions or other parties' responses to those conditions.

115. It is submitted that, if the DMC is minded to grant consent, an interim decision might be issued together with a draft set of conditions and a further opportunity for comment.

116. Such a direction could be made pursuant to s 159 and 160 of the Act, which would enable the DMC to double the timeframe within which it is required to provide a decision.

117. This would provide further opportunity for the EPA and parties to resolve outstanding issues and hopefully reduce the prospect of any appeals.

Dated this 7th day of May 2014

Counsel for
The New Zealand Federation of Commercial Fishermen, Southern Inshore Fisheries Management Co Limited, Talley's Group Limited, Macdonald & Brown Limited, Fisheries Inshore New Zealand Limited and Sanford Limited