SUBMISSION

STRATERRA™
NATURAL RESOURCES OF NEW ZEALAND

Submission to the Ministry for the Environment on

"MANAGING OUR OCEANS: A DISCUSSION DOCUMENT ON THE REGULATIONS PROPOSED UNDER THE EXCLUSIVE ECONOMIC ZONE AND CONTINENTAL SHELF (ENVIRONMENTAL EFFECTS) BILL (JUNE 2012)"

INTRODUCTION

1. Straterra Inc. represents 90% by value of New Zealand minerals production, exploration, scientific research, service, and support, on land and in the oceans[1]. Our members include Trans-Tasman Resources, Chatham Rock Phosphate, Neptune Minerals, GNS Science, and the National Institute of Water and Atmospheric Research. We work closely with other marine resource interests. A schedule of Straterra members is attached to this submission (**Appendix 1**).

2. We consulted extensively in the preparation of this submission. Consultation extended industry wide and included formal meetings with our "Oceans Group"[2] and numerous iterations via email, meetings and conversations with members of the Oceans Group, other advisors, and officials. A list of those companies who are part of our Oceans Group and who contributed in this process is attached to this submission (**Appendix 2**).

3. New Zealand's Exclusive Economic Zone and Continental Shelf – the EEZ – presents major opportunities for the New Zealand economy[3] and the resource sector: ironsands, rock phosphate, base and precious metal deposits in seabed massive sulphides (SMS), as well as oil & gas, metal nodules and crusts, and methane hydrates. While current mining is restricted to oil & gas, there is significant potential in the other areas mentioned.

4. Straterra welcomes the opportunity to submit on the discussion paper[4]. We do so from the perspective that resource management decisions must strive for an appropriate balance between economic, social and environmental objectives, and be based on sound information. As well, the New Zealand resource sector may legitimately expect to find clarity, transparency, and certainty, or, failing that, predictability in legislation and regulations. This is necessary for upholding the rule of law, and promoting New Zealand's attractiveness for investment.

[1] About Straterra http://www.straterra.co.nz/About+Straterra
[2] Our Oceans Group was formed in 2011 to bring together companies and organisations active and/or interested in minerals activity in the oceans. While Straterra convenes the Oceans Group, participation is not confined to Straterra members.
[3] Straterra economic case studies http://www.straterra.co.nz/Economic%20benefits
[4] Straterra's submission covers principally "seabed mining".

5. Straterra wishes to engage further with officials in developing a regulatory framework that is consistent with, and supports the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Bill, and that is appropriately informed by operational and technical requirements – fit for purpose.

EXECUTIVE SUMMARY

General

6. Straterra has three key concerns with the draft regulatory framework: (1) it is inconsistent with the primary draft legislation in failing to achieve balance; (2) it enters into spurious and inappropriate detail, leading to errors of fact and interpretation, inappropriate classifications of activities, and unnecessary uncertainty for operators; and (3) it provides for third-party approvals not envisaged or provided for in the Bill.

7. We believe that most if not all minerals prospecting and exploration activities should be classified as permitted activities, subject to standard conditions. Mining, as a rule, is exercised at a much larger scale than prospecting and exploration, with different effects, and a classification of discretionary would be appropriate in most if not all cases.

Key issues

8. The proposed regulatory framework for classifying activities is deeply flawed, leading to many factual errors and inconsistencies, and preventing reasonable minerals prospecting and exploration activities being classified as "permitted", subject to standard conditions to ensure net effects on the environment are less than "significant in the circumstances" (cf. Clause 29 (4) of the EEZ Bill).

9. Most significantly, the balance between environmental and economic considerations, which is a key feature of the primary draft legislation, has been lost. This is a serious shortcoming, opening the way for disallowance of any regulations developed under the proposed scheme.

10. We make recommendations for amending the decision tree on classifying activities (**Appendix 3**). We further argue that the key issue is the *effects* of activities on the environment, and how they are managed, NOT the activities themselves. That consideration argues for a new approach to developing regulations.

11. We recommend the Ministry for the Environment to contract experts in writing regulations to work with industry and researchers with direct experience of working in the marine environment

to develop maximum thresholds for net effects on the environment. In this way, most if not all minerals prospecting and exploration activities would be classified appropriately as permitted, subject to standard conditions.

12. On the other hand, most mining activities would fall into the discretionary category. That is logical and appropriate, with adaptive management provided for in restricted circumstances (as per Clauses 33A (3) and 60A (3) of the Bill).

13. We believe the Environmental Protection Authority needs to develop a register of wāhi tapu in the EEZ, with a procedure or process, and criteria for decision-makers to determine what is and is not wāhi tapu, or, failing that, provide for alternative approaches to ascertaining information on any wāhi tapu. Otherwise, iwi will be granted an opportunity for rent seeking, and investment will be discouraged by unnecessary uncertainty.

14. On that note, all requirements for third-party approvals by others than the EPA should be removed because they would create powers not provided for or envisaged in the Bill.

15. It is noted that it is normal practice for industry to engage with iwi on a wide range of matters.

16. We believe the costs to industry to undertake EPA processes could be very high, all the more reason to classify all reasonable minerals prospecting and exploration activities as permitted, subject to standard conditions.

RECOMMENDATIONS TO MFE

a) Agree that the policy framework *includes* within its objectives **economic benefits**, for consistency with the EEZ Bill (Clause 10);

b) Agree that the *key issue to address* is the **effects of the activities** on the environment, NOT the activities themselves;

c) Agree to *replace* the **decision tree** with the decision tree proposed in Appendix 3, which provides for decisions on classification to be made in a way that is consistent with the Bill;

d) In relation to Rec. (c), agree to *delete* **Criterion 3 (a),** and *replace* it with a general consideration for the matters covered in that criterion, for consistency with Clause 33 of the Bill;

e) In relation to Rec. (c), agree to *replace* the wording in **Criterion 2** "no more than minor" with "less than significant in circumstances" for consistency with the Bill (Clause 29 (4));

f) Note that failure to implement **Recs. (c) – (e)** raises the possibility of being ultra vires the Act, opening the way for disallowance. As well, exposure to judicial review could arise;

g) Agree that *consideration is given in practice* to, if the effects are likely to be significant, to whether or not those effects can be managed to be less than "significant in the circumstances", in order for appropriate proposals to be classified as **permitted**, subject to standard conditions;

h) Note that the **NIWA report's** adoption of a precautionary approach is *inconsistent* with the Bill's favouring of "caution" in relation to environmental protection (e.g. Clauses 33A, and 60A (2) and (3) of the Bill);

i) Note errors of fact in the NIWA report;

j) On the basis of Recs. (h) and (i), agree to *ensure appropriate use* of the **NIWA report** when classifying activities;

k) Note many *inconsistencies* in the proposed **classifications of activities**, and **conditions for permitted activities** in the discussion paper;

l) Agree to *develop* **maximum thresholds for net effects** on the environment for the activities that cause these effects to be classified as permitted, subject to standard conditions (Rec. (g) refers);

m) Agree to *contract* **experts in writing regulations** to implement Rec. (l), noting that this is a specialised area of work, requiring extensive technical expertise, and that this expertise should be brought to bear when writing regulations;

n) In implementing Rec. (m), agree to *engage* with **industry**;

o) Agree that as a result of *implementing* Recs. (a) – (n), **most if not all reasonable minerals prospecting and exploration activities (as distinct from mining) should be classified as permitted**, subject to standard conditions;

p) Agree that most **mining activities would fall into the discretionary category**, with provision for adaptive management as part of marine consent conditions, only in the situations specified under Clauses 33A and 60A (3) of the Bill;

q) Agree to *direct* the EPA to develop a **register of wāhi tapu** in the EEZ, with a **procedure or process, and criteria** for decision-makers to determine what is and is not wāhi tapu;

r) Agree that the **Crown**, and not private interests, *is primarily responsible* for the **relationship between the Crown and iwi** (cf. Clause 14 of the Bill);

s) Agree to *remove* the requirements in regulations for **third-party approvals** by others than the EPA, as inconsistent with the Bill;

t) Note that *failure to implement* Rec. (s) could lead to **disallowance or judicial review**;

u) Note that the minerals industry, in the normal course of events, would *engage* with **iwi**, if they can be identified, in relation to a specific place in the EEZ, on a wide range of matters under this and other legislation, and generally;

v) Agree that any requirement in regulations for a person proposing to undertake an activity to **notify the EPA** should be *imposed only if necessary and if justified*, and the purpose for the notification should be specified, to avoid imposing onerous requirements on persons for no environmental benefit;

w) Note the **high costs to industry** of EPA processes, as proposed and estimated. This has a deterrent effect on investment, which is particularly negative for the early stages of prospecting and exploration work when, generally, the company will be fully equity funded and generating no revenue from the project in question;

x) Agree to *reconsider* the **costs of the EPA's processes** to applicants for marine consents; and

y) In light of Recs. (v) and (w), agree to *direct* officials to take great care to ensure that **most or all reasonable minerals prospecting and exploration activities are classified as permitted, subject to standard conditions that would ensure environmental effects are minimised.**

POLICY FRAMEWORK

Regulatory framework should be consistent with the purpose of the Bill

17. The purpose of the Bill is set out in Clause 10: "This Act seeks to achieve a *balance* between the protection of the environment and economic development … " (Straterra's italics). That purpose is encapsulated in the Minister's foreword to the discussion paper: "The aim is to maximise the economic opportunities while minimising the environmental risks". That said, the paper is developed on the presumption that economic activities harm the environment, and that environmental protection is the overarching aim. Scant regard is given to the economic side of the balance equation.

18. In light of the above, the proposed regulations are fundamentally flawed and potentially ultra vires the Bill. They may not survive the Legislation Advisory Committee (see Chapter 10 of the LAC Guidelines) or the Regulations Review Committee.

19. In evidence, the problem definition on Page ix and Page 9 of the discussion paper says: "there is the potential for unregulated activities to cause environmental harm". It is noted that the proposed policy framework for regulations (Page x, Page 10) fails to list in its objectives the benefits of economic development. On that basis alone, the proposed policy framework lacks consistency with the Bill.

20. The failure of the proposed regulatory model to reflect the Bill also means that the consultation process for the whole legislative package is flawed. We and others submitted on the Bill that draft regulations should be made available at the same time as the Bill. Submissions on the Bill were made in the good-faith expectation that the regulations would at the very least comply with the intent and provisions of the Bill. With Bill submissions now closed, MfE is placing interested parties (and by implication, New Zealand) at a disadvantage in the formulation of rules and processes in such an important area – important for the environment, and for the economic wellbeing of our country.

Assessment criteria - Decision tree should be redesigned

21. The proposed decision tree (Page 11) for assessing activities, to then determine whether or not they should be "permitted", "discretionary", or, potentially, "prohibited", needs to better reflect the Bill and its balancing approach. Granted, a decision tree needs to start somewhere, but the structure of that in the paper is skewed in placing tremendous hurdles to activities that have manageable environmental effects.

22. **Criterion 1**, by making international obligations the starting point - a "yes" answer makes the activity permitted as of right - has the effect of discriminating in favour of *foreign* scientists, and against *New Zealand* scientists who face greater hurdles in the decision tree. That is obviously an unhelpful outcome, which stems, we believe, from a narrow interpretation of New Zealand's international obligations (Page 12). Even if an activity were permitted under UNCLOS, e.g., submarine cable laying, that would be always subject to conditions imposed by the host State. The Quota Management System for commercial fisheries is an obvious example, as is the ban on whaling within the EEZ. Criterion 1 is, therefore, unnecessary for classifying activities. We propose deletion.

23. **Criterion 2** does embody in the proposed regulatory framework the concept of effects-based consideration of proposals for economic development, and is, therefore, a necessary criterion. It has two limbs, and both are important. The first is that effects must be "minor" to be considered a permitted activity. The second limb is that if the effects are more than minor, consideration must be given to whether or not those effects can be managed "so they are minor", and, if affirmative, the activity can be classified as a permitted activity. There are at least two issues of concern.

24. Firstly, there is no evidence that officials considered the second limb in their analysis of seabed mining (Page 72), and, as a result, have placed all activities where they consider the effects are likely to be more than minor into the discretionary category. That is inappropriate, and will lead to marine consents being required for activities that should be permitted, from the perspective of balance, cost-effectiveness of the regulatory regime, and net environmental effects. For example, sampling and bulk sampling, and establishing monitoring equipment arrays and buoys, may in many cases be carried out by scientists as a permitted activity, but that is not necessarily the case for industry even though the effects of the activity would be the same.

25. Secondly, the use of the term "no more than minor" appears to have been drawn from the RMA (e.g. Section 95A 2 (a)), and does not match the language used in Clause 29 (4) of the Bill: "significant in the circumstances". As well, the use of the term in the RMA relates to whether or not to publicly notify an application for a resource consent, whereas, in the EEZ context, the term is being used to describe the status of an activity or in decision-making on an application to carry out an activity. The circumstances are very different in each case, and should not be conflated.

26. The point is that "less than significant in the circumstances", and "minor" mean very different things. It is possible, even probable, that the proposed regulatory framework takes a more protectionist approach than the Bill, and, therefore, fails to reflect the Bill's purpose, as well as raising an issue of ultra vires.

27. Criterion 2 should be redrafted for consistency with the Bill, and it should be applied in its entirety when classifying activities.

28. **Criterion 3 (a)** provides for a consideration of various matters (cf. Clause 33 of the Bill). This appears in the wrong part of the decision tree because, inevitably, only some activities are subject to this consideration. This criterion is in the nature of a general consideration, important

to reflect the purpose of the Bill, and should be removed from the decision tree, and applied generally.

29. **Criterion 3 (b)** is logical and appropriate. It provides for adaptive management in restricted circumstances, and is consistent with the Bill (Clauses 60A (3) and 33A).

30. We propose a decision tree, attached as Appendix 3. This is as proposed by Trans-Tasman Resources Ltd in their submission. This sets up an appropriate logic for classifying activities, and, we suggest, resolves the shortcomings discussed of MfE's proposed decision tree.

PROPOSED CLASSIFICATION OF ACTIVITIES

Use of the NIWA report

31. Page 14 of the discussion paper discusses how the environmental effects of activities were assessed. In particular, MfE commissioned NIWA to assess the risks to the environment of a wide range of undersea activities in the EEZ, including minerals prospecting, exploration and mining. In their terms of reference, NIWA was tasked with taking a precautionary or worst-case-scenario approach to their work[5]. That is fine as far as it goes – noting that such an approach is inconsistent with the Bill's use of the term "caution" (Clause 60A (2) and (3)) - as were the instructions to NIWA to focus on risks, rather than effects, and to NOT consider the management of effects.

32. No doubt the narrow TORs were imposed to make the assignment tractable for NIWA. It is, therefore, important to make appropriate use of the NIWA report, in light of the TORs, and the context in which it was written. That is that the report is a broad-brush assessment made by scientists who are not, understandably, experts by and large in the minerals industry.

33. The NIWA report states for a number of seabed mining assessments that some activities "should be prohibited if no way can be found to avoid, remedy or mitigate their impact". Note that in every case that NIWA makes this assessment, there is no supporting analysis in their risk table. NIWA's risk assessment considers that a risk greater than 24 should be considered for prohibition (Table 3-1: Risk levels and categories of the NIWA report). The highest level of risk recorded in any of the seabed mining activity risk tables is 20, well below that considered for prohibited status.

34. Appropriately, MfE revised NIWA's proposals for prohibition into a classification of discretionary.

[5] http://www.mfe.govt.nz/publications/oceans/managing-our-oceans/risk-assessment-activities-in-nz.html

35. At a practical level, the NIWA report makes some errors of fact, and the submissions by Chatham Rock Phosphate (CRP), Nautilus Minerals, and GNS Science, among others, draw attention to those. Here, we mention a few examples to illustrate the dangers in making uncritical use of the NIWA report.

36. In terms of CRP's interests, the NIWA report (page 67) claims: "Over the lifetime of the mining operations it is possible that a significant proportion (20-50%) of the total phosphorite nodule habitat in the EEZ could be affected". CRP argues that is a gross over-estimate of the percentage of phosphorite nodule habitat that would be affected by any mining carried out on the Chatham Rise, by both CRP and Kiwi Phosphate Ltd. While existing prospecting licences cover some 30% of the phosphorite nodule habitat on the Chatham Rise (disregarding phosphorite nodule habitats occurring elsewhere in the EEZ), mining would not come close to covering that area. Less than 1% of the total habitat on the Chatham Rise would be a more accurate projection.

37. In the case of the Kermadecs, the undersea ecosystems are varied; therefore, to lump them together in one risk assessment is a blunt instrument. To say that "habitats related to massive sulphide deposits are particularly sensitive", as the discussion paper does, based apparently on the NIWA report, is a gross and largely unsubstantiated generalisation.

38. The evidence is that around 80% of hydrothermal vent-based ecosystems (underwater hot springs) in the Kermadecs are not associated with mineral deposits, and, therefore, will not be a focus of exploration. Secondly, mineral deposits may be found at active vents or non-active vents, where there are no seafloor ecosystems, sensitive or otherwise. Indeed, the evidence is that where these ecosystems exist, they are remarkably resilient.

39. For actively venting sites, there is evidence from around the world that these systems are in fact resilient to catastrophic disturbances such as volcanic eruptions. The chimney habitats grow back and the animal populations re-establish after a few months to years. There are few places on earth so dynamic and resilient. The NIWA document further supports this argument (lines 3 and 4, page 75). Inactive (dormant) vent sites tend to host slower-growing animals which may be more sensitive to disturbance, but these are more typical of animals found on hard substrate material elsewhere in the deep sea – i.e., these animals are part of a wider regional pool of species. In fact, the types of animals are likely to be similar to what is found on phosphorite nodules, as shown in Figure 5 of the discussion document. For this reason, it does not make sense that SMS should have different rules compared to other seabed mining industries. In many

cases, the effects of such natural processes would dwarf the effects of prospecting or exploration.

40. The NIWA report's approach appears to be based on a number of inaccuracies and incorrect and/or outdated assumptions, particularly re environmental conditions at SMS sites. We note that no environmental managers from relevant industries appear to have been engaged with, or consulted on the development of the report. Doubtless such stakeholders would have had valuable input and experiences to share. If not already carried out, we suggest an independent expert peer review of the report. We believe that many categories of effect can be managed to deliver net effects that are less than "significant in the circumstances".

Grouping activities for assessment

41. The discussion paper concludes that it is preferable to group activities by industry when classifying activities as "permitted" or "discretionary" (Pages 27-28). We contend that the table provided could be interpreted in any number of ways. Be that as it may, MfE's attempt at classification of activities has resulted in many errors and inconsistencies.

42. A scientist may drill core to a depth of 70m below the seafloor or "research" drill to 100m (Page 46), as a permitted activity, however, an oil/gas explorer can drill only to a depth of 50m (Page 56), and a minerals explorer to a depth of 10m (Page 66). In reality, the effects are the same, despite what the NIWA report argues, and are negligible or non-existent, other than the removal of a 15cm-wide drill core. In evidence, Nautilus Minerals will be providing images of drilling activity as part of their submission.

43. On the other hand, a scientist may collect 20m^3 of material via "research dredging" (over an un-specified research area), while a minerals explorer may collect up to 100m^3 via "rock dredging" (again over an unspecified area). This method has a far greater effect on the seafloor than drilling core samples, and is certainly far more invasive than ROVs, which move within the water column, and may settle on the seabed at places, but without moving across the seabed. (There is a compelling reason to not move an ROV across the seabed, which is that expensive equipment would very likely be ruined.)

44. For minerals exploration, one drill hole of 15cm wide is permitted per hectare, while for oil/gas explorers, that figure is 10 drill holes per hectare. Those requirements bear no relationship to the nature of minerals prospecting and exploration of the seabed, which is an incremental

process of investigation at spacings dictated by risk or uncertainty assessment[6] to identify, target, and assess economic ore deposits. No does it bear any relationship to the effects of this activity, as discussed above, which are negligible or non-existent.

45. One dredge sample of either 20m^3 or 100m^3 per prospecting area could mean one sample within more than 4000km^2, which, in this case, makes little sense. That would also be the case for prospecting areas of 1km^2, or 0.1km^2. It may be appropriate for one hectare (10,000m^2). Regardless, there is no rationale provided for having an area-based condition.

46. In the case of proposed permitted activities in the oil & gas industry, the EPA must be formally notified of various matters (Page 56). For seabed mining, that also includes a high-level assessment of the baseline environment, and regular assessments of how the baseline environment is affected by the activity (Page 66). As is the case for all of the above examples, there is no compelling rationale for the differences or inconsistencies.

47. As to unanswered questions: What happens if a minerals exploration company were to drill core to a depth of 11m? Would that be a prohibited activity, or a discretionary activity? It may happen that an attempt to drill at a site fails, and a second hole would normally be drilled alongside the failed one. Would that be possible as a permitted activity, or not?

48. It is also important to compare the rules applying to seabed prospecting, exploration and mining in territorial waters with that proposed for the EEZ. This is of particular relevance for ironsand mining off the western coast of the North Island. In the regions where Trans-Tasman Resources Ltd works, the proposed requirements in the EEZ to carry out permitted activities are stricter, which leads to the situation where proposed prospecting or exploration straddling the boundary of the EEZ and the territorial waters (the 22km limit) would be subject to different treatment depending on which side of the boundary activity takes place. This is obviously impractical.

49. To conclude, the proposed classifications for, and conditions on activities are largely inappropriate. In many cases, there is no difference between the activities carried out by scientists and industry, and, to add to the confusion, industry would contract scientific research institutions in many cases to carry out prospecting and exploration work. We believe this adverse outcome has arisen from inadequate knowledge of the detail on the part of officials,

[6] In Australia and NZ we have adopted the JORC code as a framework that sets out data requirements for reporting ore resources and reserves. MED broadly relies on JORC as a basis for companies to report exploration results, as appropriate, and these regulations should, as a minimum, allow activity consistent with the JORC code.

errors of fact in the NIWA report, compounded by a flawed policy framework, and the inherent complexity of seabed mining, where the technology continues to evolve.

50. Therefore, any attempt by officials to classify activities, no matter how well intended, will inevitably fail. Straterra believes a markedly different approach is necessary if the Bill is to be adequately implemented.

Recommended solution: focus on effects on the environment, and their management

51. We argue that the *methods* used to prospect, explore or mine the seabed for minerals, and whether or not the activities are "permitted" under UNCLOS, are immaterial when considering environmental effects regulation. Surely, society's concerns are the actual or potential environmental effects (regardless of the activity), and proposals for managing that, when making determinations in regulation of whether prospecting, exploration or mining proposals should be permitted; or discretionary, with or without adaptive management among conditions.

52. We accept fully that New Zealand is a party to international conventions, and that the position under those must be considered. That said, as stated in Clause 11 of the Bill, they are of interpretive value only in this context. They are not necessarily to be treated as a starting point when setting regulations.

53. By way of an example, if a sediment plume were considered to be covered by the EEZ Bill (noting that Clause 15 does not expressly address discharges), it should be dealt with in the following way. The key issues include density of sediment in the water column, radius of dispersal on the seafloor, and how that is measured and monitored, in terms of effects on the environment. The cause of the plume is irrelevant in assessing environmental effects (although it is relevant to the economic balancing exercise required by the Bill), as is whether or not any scientists involved are foreigners or New Zealanders. In that light, the regulator should be concerned with specifying threshold sediment plume indices for activities that cause these plumes. In practice, exploration and mining companies would manage sediment issues very carefully, and standard technologies exist to do that.

54. Any classification framework is a job for experts at writing regulations, working with industry and research institutions, to determine appropriate maximum environmental effects thresholds for permitted activities, to be managed under standard conditions, and related requirements for measurement, monitoring and reporting to the EPA.

55. The outcome of such a process would be to provide for most, if not all, minerals prospecting and exploration (as distinct from mining) to be regulated as permitted activities. Any activities falling outside the above considerations would fall by default into the discretionary category, and a marine consent would be required. On that basis, there is no need to identify, a priori, activities as discretionary. Indeed, the advantage of avoiding such a straitjacket approach is to allow for evolution in technology. Over time it is possible that an approach to exploration could be streamlined to enable the set of activities that exploration entails to be regulated as permitted, subject to standard conditions to ensure that net effects on the environment are less than significant in the circumstances. Surely, that would reflect the intent of the Bill.

56. Mining would fall normally into the discretionary category, where adaptive management would be provided for *only* in situations where: the activity were to be classified otherwise as prohibited in regulation (Clause 33A of the Bill), or if an application for a marine consent were to be declined when favouring caution and environmental protection under Clause 60A (3).

THIRD PARTY APPROVALS

57. The discussion paper presents the possibility of iwi consent being required in relation to proposals located within wāhi tapu in the EEZ, for permitted activities. That raises the following questions: What could legitimately constitute wāhi tapu in the EEZ? What process would be followed, or criteria used to determine wāhi tapu in the EEZ? As matters stand, it appears the Crown is attempting to shift its responsibility for its relationship with iwi to private interests. That would be inappropriate.

58. The definition in section 2 of the Historic Places Act 1993, to which the EEZ Bill refers, is of interest: "**wāhi tapu** means a place sacred to Māori in the traditional, spiritual, religious, ritual, or mythological sense". In an ocean setting, that could mean almost anything, and could potentially mean the whole ocean. Notionally, it could include the general routes taken by the taniwha guiding various waka in Māori tradition to different parts of New Zealand. On that basis alone, half the EEZ could find itself within a wāhi tapu, or wāhi tapu area.

59. Unlike the HPA (section 25), or Part 4 of the Heritage New Zealand Pouhere Taonga Bill[7], there is no process in the EEZ Bill, or in the proposed regulatory framework, for determining what is, or is not wāhi tapu. That introduces great uncertainty into regulation. It is accepted that the EPA

[7] Heritage NZ Pouhere Taonga Bill
http://www.legislation.govt.nz/bill/government/2011/0327/latest/DLM4005414.html?search=ta_bill_H_bc%40bcur_an%40bn%40rn_25_a&p=1

has said it is keen to engage with industry on these matters, to develop good process for engagement.

60. Putting that to one side for a moment, MfE is proposing a class of third-party approvals from authorities separate to the EPA, i.e., iwi or the Department of Conservation (acoustic disturbance of marine mammals), which is inappropriate because there is no provision for that in the Bill. Logically, those who are carrying out permitted activities, subject to conditions, should be answerable to the EPA, and that ought to suffice. It is noted that clause 29 (1) (d) provides for certification of compliance with a term or condition of a regulation, however, that is distinct from an approval or a consent, as normally understood in legislation. To press the point, if DOC consent were needed on any matter, that would be covered under other legislation or regulations than this Bill and regulations.

61. To conclude, the proposed regulations are elevating the scope for, and status of iwi consultation well beyond those envisaged under the Bill (viz. Clauses 14, 46 and 47).

62. Staying with this theme, there is no reason for placing the onus on companies carrying out activities to inform iwi and councils of their activities. The EPA could do that just as well, if not more readily. Indeed, there is a compelling rationale for the EPA to carry out that function, as argued in para. 52.

63. The point has been made by officials that industry would have to engage with iwi anyway, in the normal course of events. That is certainly the case in respect of permits under the Crown Minerals Act 1991. Such discussions are commonplace, and can cover a wide range of matters, including investment and employment opportunities, as well as discussions on wāhi tapu, and other interests that iwi may have. The material point is to ensure that the nature of such engagement is not constructed in the regulatory framework in a way that confers powers on iwi that are not provided for or envisaged in the primary legislation.

NOTIFICATION

64. Clause 36 (3) requires a person intending to undertake a permitted activity to notify the EPA before undertaking the activity, “if required to do so by regulations”. Although it may seem insignificant, a requirement to notify all permitted activities can be onerous, and result in no environmental benefit. It is also often the case that - because of the very variable weather patterns found in New Zealand’s marine jurisdiction - very little warning is presented within which to provide that notification. Thus any requirement in regulations for a person proposing to

undertake an activity to notify the EPA should be imposed only if necessary and if justified. The purpose for the notification should also be clearly specified.

COSTS

65. The top of page 22 of the discussion paper lists likely costs to applicants of marine consent processes. The figures are alarming, e.g. that it may cost the EPA $350,000 to handle a low-complexity marine consent application with no hearings. It could easily cost more than that.

66. Ironsands applications, for example, are likely to straddle the boundary of New Zealand's territorial waters and the EEZ, presenting the possibility of a multi-million dollar consenting process.

67. The time taken for processing, including any subsequent litigation, will entail significant costs, noting that the RMA portion of trans-boundary applications will be the most time consuming.

68. Note that the minerals industry earns no income from prospecting or exploration, while spending ever increasing sums on investment in finding, proving up, and determining the economic viability of development of a resource, including the costs of environmental management. The income only begins to flow once mineral ore is extracted, processed, transported, and the end-product sold in commercial quantities. That is a business model specific to petroleum and minerals, and must be taken into consideration when developing regulations.

69. All in all, great care must be taken when classifying activities, or sets of activities, to ensure that the discretionary category is appropriately assigned, taking into consideration the cost-effectiveness of regulation, and the business model for minerals discovery, assessment, and development.

APPENDIX 1: STRATERRA MEMBERS

COMPANY NAME	WEBSITE
Anderson Lloyd	www.andersonlloyd.co.nz
AQA	www.aqa.org.nz
Bathurst Resources	www.bathurstresources.com
Bell Gully	www.bellgully.com
Buddle Findlay	www.buddlefindlay.com
Brightwater Engineering	www.brightwater.co.nz
Chapman Tripp	www.chapmantripp.com
Chatham Rise	www.widespread.co.nz
Coal Association of NZ	www.coalassociation.org
CRL Energy	www.crl.co.nz
Deloitte	www.deloitte.co.nz
Dowgold Consultants	www.dowgold.com
EIS Ltd	www.eis.co.nz
George Hooper	
Glass Earth Gold Ltd	www.glassearthgold.co.nz
GNS Science	www.gns.cri.nz
Gough Group	www.goughgroup.co.nz
Greenwood Roche Chisnall	www.grclegal.com
Kenex Knowledge Systems Ltd	www.kenex.co.nz
KPMG	www.kpmg.c.nz
McConnell Dowell	www.mcconnelldowell.co.nz
Minter Ellison Rudd Watts	www.minterellison.co.nz
Minerals West Coast	www.mineralswestcoast.co.nz
Minserv International Ltd	
Neptune Minerals	www.neptuneminerals.com
New Zealand Energy Corp.	www.newzealandenergy.com
Newmont Waihi Gold Ltd	www.marthamine.co.nz
NIWA	www.niwa.co.nz
NZ Resources	www.nzresources.com
Oceana Gold Ltd	www.oceanagold.co.nz
Orica New Zealand Ltd	www.orica.com
Placer Gold International Ltd	www.placercorp.com
RDCL	www.rdcl.co.nz
RSC Mining and Mineral Exploration Ltd	www.rscmme.com
Russell McVeagh	www.russellmcveagh.com
Sams Creek Gold Ltd	www.modresources.com.au
SGS NZ Ltd	www.nz.sgs.com
Solid Energy Ltd	www.solidenergy.co.nz
Stellar Recruitment	www.stellarrecruitment.co.nz
Stevenson Engineering	www.stevensonengineering.co.nz
Todd Corporation	www.toddcorporation.com
Trans-Tasman Resources	www.ttrl.co.nz

APPENDIX 2: STRATERRA OCEANS GROUP

Companies that contributed via the Straterra Ocean's Sector Group for the Straterra Inc. submission for the Ministry for the Environment on "Managing Our Oceans: A Discussion Document On The Regulations Proposed Under The Exclusive Economic Zone And Continental Shelf (Environmental Effects) Bill (June 2012)":

Chatham Rock Phosphate

Fortescue Metals Group

GNS Science

Greenwood Roche Chisnall

Kenex Knowledge Systems Ltd

Minter Ellison Rudd Watts

Nautilus Minerals

Neptune Minerals

NIWA

NZMIA

Placer Gold International Ltd

Resource & Environmental Management Ltd

Robin Falconer Associates

Simpson Grierson

Trans-Tasman Resources

APPENDIX 3: DECISION TREE ON CLASSIFYING ACTIVITIES