

**BEFORE THE ENVIRONMENTAL PROTECTION AUTHORITY
AT WELLINGTON**

IN THE MATTER of the Exclusive Economic Zone and Continental Shelf
(Environmental Effects) Act 2012

AND

IN THE MATTER of applications for marine consents and marine discharge
consents by Trans-Tasman Resources Limited to
undertake iron ore extraction and processing operations
offshore in the South Taranaki Bight

**MEMORANDUM OF COUNSEL ASSISTING THE DECISION-MAKING
COMMITTEE – RESPONSE TO MINUTE 28**

3 March 2017

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MAY IT PLEASE THE COMMITTEE:

INTRODUCTION

1. In Minute 17, the Decision-Making Committee (the "**DMC**") invited counsel for the parties to address, in opening legal submissions, the scope of the definition of "*adaptive management approach*" in the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 ("**EEZ Act**") and relevant matters for considering how to identify conditions "*that together amount or contribute to an adaptive management approach*".
2. This memorandum of counsel responds to that Minute and Minute 28 of the DMC, dated 21 February 2017, inviting further comment on the scope of that definition, including "*the distinction – in a legal and/or practical sense – between conditions 'that together amount or contribute to an adaptive management approach', and conditions that do not.*"
3. We comment on these issues below, adopting the following structure:
 - (a) two background matters, namely:
 - (i) relevant provisions of the EEZ Act; and
 - (ii) related points of interpretation on which counsel have expressed a common view;
 - (b) a discussion of the scope of the definition of "*adaptive management approach*", comprising:
 - (i) an introduction;
 - (ii) brief analysis of the EEZ Act's purpose and the changes that introduced the current regime relating to marine discharge consents;
 - (iii) a comment on the two distinct functions of the definition of "*adaptive management approach*", which serve to complicate interpretation;
 - (iv) a textual analysis of the definition of "*adaptive management approach*" in section 64, seeking to distinguish between conditions that "*together amount or contribute to an adaptive management approach*" and conditions that do not;

- (v) a discussion of key principles arising in case law decided under the Resource Management Act 1991 ("**RMA**"); and
 - (c) a conclusion on the issue.
4. We acknowledge at the outset that this memorandum explores the issue in some detail; this has been done in light of the two requests by the DMC, and in order to traverse a variety of potentially related points so as to enable further consideration and comment by the parties.

BACKGROUND

Key relevant provisions of the EEZ Act

5. Subpart 2 of Part 3 of the EEZ Act sets out the marine consent regime, including provisions addressing applications for marine consent, the process for notification of applications, submissions, hearings on applications, decisions on applications by the Environmental Protection Authority ("**EPA**"), the imposition of conditions, the nature and duration of consents, and the transfer, review and cancellation of consents. Under those provisions, the EPA may refuse a marine consent application, grant it, or grant it on conditions.
6. The "*information principles*" in section 61 provide, among other things, that the EPA "*must favour caution and environmental protection*" if the information available is uncertain or inadequate. However, if favouring caution and environmental protection "*means that an activity is likely to be refused, the EPA must first consider whether taking an adaptive management approach would allow the activity to be undertaken*".¹
7. The EPA's power to impose conditions on a marine consent is a broad one, extending to conditions "*that together amount or contribute to an adaptive management approach*".² Section 64 contains a definition of the term "*adaptive management approach*", and is set out in full in **Appendix A** to this memorandum.
8. Subpart 2A of Part 3 (comprising sections 87A to 87J) sets out the regime for marine discharge consents and marine dumping consents. That subpart was added to the EEZ Act on 31 October 2015, when the relevant provisions in the Exclusive Economic Zone and Continental Shelf (Environmental Effects)

¹ Section 61(3).

² Section 63(2)(b). Section 63 is set out in full in **Appendix A** to this memorandum.

Amendment Act 2013 (the "**Amendment Act**") came into force. It provides for a regime similar to that for marine consents, but with some material differences; many, but not all, of the provisions of Subpart 2 apply to applications for marine discharge consents and marine dumping consents. Section 87A provides that Subpart 2 "*applies in relation to an activity described in [Subpart 2A] only as set out in [Subpart 2A]*" (emphasis added).

9. Section 87F is the key relevant provision in Subpart 2A. It provides that:
 - (a) the EPA may grant or refuse an application for a marine discharge consent or marine dumping consent (section 87F(1));³
 - (b) in certain circumstances the EPA must refuse an application for marine dumping consent (section 87F(2));
 - (c) the EPA may refuse an application if it considers it does not have adequate information to determine the application (section 87F(3)); and
 - (d) "*If the EPA grants the application, it may issue the consent subject to conditions under section 63, but not under section 63(2)(b)*" (section 87F(4)).
10. Section 87F(4) thus links to section 63 of the EEZ Act, which describes the power to impose conditions, but prohibits the imposition of conditions that together amount or contribute to an "*adaptive management approach*" (which term is defined in section 64).
11. Section 87E relevantly sets out "*information principles*" to be applied by the EPA when considering applications, including that the EPA "*must favour caution and environmental protection*" when making a decision, if the information available is uncertain and inadequate.⁴ Section 87E omits, however, the requirement on the EPA to consider whether taking an adaptive management approach would allow the activity to be undertaken, if favouring caution and environmental protection means that the activity is likely to be refused.

³ Section 87F(4) makes no distinction between conditions that may be imposed on marine discharge consents and those that may be imposed on marine dumping consents.

⁴ Section 87E(2).

The application of section 87F(4) and associated provisions

12. As recorded in Minute 28, counsel for various parties, in their opening legal submissions, expressed a common view that, in respect of marine discharge consents, section 87F(4) has the effect of prohibiting the EPA from imposing conditions *"that together amount or contribute to an adaptive management approach"*.⁵
13. We agree that that interpretation best reflects the plain meaning of section 87F(4), particularly in light of:
 - (a) the statement in section 87A that the provisions of Subpart 2 of Part 3 (which includes conditions 63 and 64) apply to marine discharge consents and marine dumping consents *"only as set out in [Subpart 2A of Part 3]"*; and
 - (b) the lack of a reference, in the information principles in section 87E, to an *"adaptive management approach"*.
14. Some parties also expressed the view that:
 - (a) the *Augier*⁶ principle is not available to override the express statutory prohibition in section 87F(4);⁷ and
 - (b) there are practical difficulties, in this case, in separating the activities for which marine consent is sought from those requiring marine discharge consent, in respect of applying conditions to address adverse effects on the environment and/or existing interests.⁸
15. We agree with those propositions.

⁵ Opening legal representations on behalf of Trans-Tasman Resources Limited at [228]; opening submissions for KASM and Greenpeace at [42]; opening submissions for legal counsel for the fisheries submitters at [104]; opening submissions on behalf of the Royal Forest and Bird Protection Society of NZ Inc at [34]; opening submissions for Origin Energy Resources Kupe NZ Ltd at [4.13].

⁶ *Augier v Secretary of State for the Environment* (1978) 38 P & CR 219 (QB).

⁷ Opening legal representations on behalf of Trans-Tasman Resources Limited at [243]; opening submissions for KASM and Greenpeace at [53]; opening submissions on behalf of the Royal Forest and Bird Protection Society of NZ Inc at [41]; counsel for Origin Energy Resources Kupe NZ Ltd in transcript of proceedings for day 1 of the hearing, 16 February 2017, page 123 at In 15.

⁸ Opening legal representations on behalf of Trans-Tasman Resources Limited at [247]; opening submissions for KASM and Greenpeace at [43]; opening submissions for legal counsel for the fisheries submitters at [111]; opening submissions on behalf of the Royal Forest and Bird Protection Society of NZ Inc at [46]; opening submissions for Origin Energy Resources Kupe NZ Ltd at [4.15].

SCOPE OF THE DEFINITION OF "ADAPTIVE MANAGEMENT APPROACH"

Introduction

16. The residual issue on which the DMC has sought further input is the scope of the definition of "*adaptive management approach*" in section 64, and relevant matters for considering how to identify conditions "*that together amount or contribute to an adaptive management approach*". Put another way, the DMC has asked for comment on "*the distinction – in a legal and/or practical sense – between conditions 'that together amount or contribute to an adaptive management approach', and conditions that do not.*"
17. Given that the current proposal is the first notified application for a marine discharge consent since section 87F took effect, no decision of the EPA or a court has yet expressed a view on this issue of interpretation.

The purpose of the EEZ Act and the prohibition on an adaptive management approach for marine discharges

18. The purpose of the EEZ Act is as follows:⁹
 - (a) *to promote the sustainable management of the natural resources of the exclusive economic zone and the continental shelf; and*
 - (b) *in relation to the exclusive economic zone, the continental shelf, and the waters above the continental shelf beyond the outer limits of the exclusive economic zone, to protect the environment from pollution by regulating or prohibiting the discharge of harmful substances and the dumping or incineration of waste or other matter.*"
19. Paragraph (b) of that provision was added through enactment of the Amendment Act, which also introduced Subpart 2A of Part 3.
20. The prohibition on granting a marine discharge consent on conditions "*that together amount or contribute to an adaptive management approach*" must be interpreted from the text of the relevant provisions, in light of the amended purpose of the EEZ Act.¹⁰ The aspect of protecting the environment from pollution is clearly relevant in that context, although we note that the balance of the purpose requires a broader range of considerations (including promoting sustainable management) to be taken into account as well.

⁹ Section 10(1) of the EEZ Act. The term "*sustainable management*" is defined in section 10(2).

¹⁰ Section 5, Interpretation Act 1999.

21. The Amendment Act also introduced subsections 11(c) and (d), which state that the EEZ Act continues or enables the implementation of New Zealand's obligations relating the International Convention for the Prevention of Pollution from Ships, 1973 ("**MARPOL**") and the Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter, 1972 (the "**London Convention**"), among other obligations.
22. We note that the marine discharge-related provisions in Subpart 2A of Part 3 of the EEZ Act are premised on a different approach to MARPOL and the London Convention, that is relevant to this application. That is, sediments from mining activities (other than petroleum extraction) are included in the definition of "*harmful substance*" in the Exclusive Economic Zone and Continental Shelf (Environmental Effects – Discharge and Dumping) Regulations 2015,¹¹ which has the effect of a consent being required for such a discharge.¹²
23. In contrast, under MARPOL the term "*discharge*" does not include "*release of harmful substances directly arising from the exploration, exploitation and associated offshore processing of sea-bed mineral resources*".¹³ Similarly, the London Convention does not cover "*the disposal of wastes or other matter directly arising from, or related to the exploration, exploitation and associated off-shore processing of sea-bed mineral resources*".¹⁴

Different functions of the definition of "*adaptive management approach*"

Introduction

24. One complexity in interpreting the definition of "*adaptive management approach*" in section 64 is that it performs two distinct functions in the legislation. A challenge to interpreting the section is to find a meaning that reconciles those two functions. The functions are as follows:
 - (a) The 'section 61 context' arises where a marine consent application is likely to be refused, in which case "*the EPA must first consider whether taking an adaptive management approach would allow the activity to be undertaken*".¹⁵ This means that the EPA must undertake a final check as to whether an activity, otherwise likely to be refused, can be enabled using an adaptive management approach.

¹¹ Regulation 4(d).

¹² Sections 20A and 20C of the EEZ Act.

¹³ MARPOL, Article 2 (3)(b)(ii).

¹⁴ London Convention, Article III(1)(c).

¹⁵ Developing regulations involves a similar process; section 34(3).

- (b) The 'section 87F(4) context' relates to the prohibition on the EPA granting a marine discharge consent on conditions that *"together amount or contribute to an adaptive management approach"*.

Interpretation issues in the 'section 61 context'

- 25. In the 'section 61 context', the EEZ Act contemplates an adaptive management approach being established through conditions on a marine consent. The EEZ Act gives the EPA a broad power (on its face) to impose conditions,¹⁶ including those that together amount or contribute to such an approach. Likewise, the definition of *"adaptive management approach"* in section 64 appears capable of a broad reading, given:
 - (a) the inclusive nature of the definition (ie *"an adaptive management approach includes (...)"*); and
 - (b) the words *"any other approach that allows (...)"* in section 64(2)(b).
- 26. In the 'section 61 context', therefore, issues of interpreting the term *"adaptive management approach"* are likely to relate to the lawfulness and appropriateness of imposing conditions that together amount or contribute to such an approach, requiring an assessment of:
 - (a) the breadth of the EPA's condition-making power in section 63(1) and (2), by reference to section 64; and
 - (b) the restrictions on that power in section 63(3) and (4); and
 - (c) any further restrictions established through case law, which in our view are likely to include the guidance provided by the Supreme Court in *Sustain Our Sounds*¹⁷ as to what is required for an adaptive management approach to be valid (notwithstanding the different statutory context for that case, discussed further below).

Interpretation issues in the 'section 87F(4) context'

- 27. In the 'section 87F(4) context', the key issue of interpretation, as the DMC has identified in the present case, is to understand what characterises conditions *"that together amount or contribute to an adaptive management approach"*. Put another way, what is *"the distinction – in a legal and/or*

¹⁶ Section 63 provides that the EPA *"may grant a marine consent on any condition (...)"*; *"conditions that the EPA may impose include, but are not limited to, conditions (...) that together amount or contribute to an adaptive management approach"* (emphasis added).

¹⁷ *Sustain Our Sounds Inc v New Zealand King Salmon Company Inc* [2014] NZSC 40.

practical sense – between conditions 'that together amount or contribute to an adaptive management approach', and conditions that do not'? Or, what are the essential elements of an adaptive management approach, which (together) cannot be reflected in conditions on a marine discharge consent?

The wording of section 64

Section 64(2)(a): "allowing an activity to commence on a small scale or for a short period (...)"

28. The first part of the definition of *"adaptive management approach"* in section 64(2)(a), namely *"allowing an activity to commence on a small scale or for a short period so that its effects on the environment and existing interests can be monitored"*, is relatively straightforward. In our view it is fairly clear that, in respect of a marine discharge consent, conditions cannot be imposed that allow the activity to commence on a small scale or for a short period, or in stages otherwise contemplated by subsection 64(4) (leaving aside the issue of how conditions respond to a 'stage' having unacceptable effects, discussed below).
29. Subsections 64(3) and (4) develop this concept of staging further, and in our view their operation is clear in the 'section 61 context', in that:
 - (a) subsection (3) serves to avoid any doubt that the conditions on a marine consent prescribing an adaptive management approach, imposed under section 63(1), section 63(2)(b), or section 64(1), may *"authorise the activity to be undertaken in stages, with a requirement for regular monitoring and reporting before the next stage of the activity may be undertaken or the activity continued for the next period"*; and
 - (b) subsection (4) provides additional guidance on the term *"stage"*.
30. Subsection (3) creates some uncertainty in the 'section 87F(4) context', in that it introduces a new term, *"reporting"*, that is not found in the core definition in section 64(2)(a). This raises a question, at least in theory, whether *"reporting"* is an essential element of an *"adaptive management approach"*, despite *"reporting"* not expressly forming part of the definition. In practice, however, the issue falls away because monitoring and reporting the results of that monitoring are intrinsically linked.
31. Another aspect of the drafting affecting the interpretation of section 64(2)(a) is the use, in section 64(2)(b), of the words ***"any other approach that allows***

an activity to be undertaken so that its effects can be assessed and the activity discontinued, or continued with or without amendment, on the basis of those effects" (emphasis added). The words quoted in bold indicate that Parliament intended the approach described in section 64(2)(a) to be one express example – a subset – of the concept described in section 64(2)(b). In our view this reinforces a meaning that is probably implicit in section 64(2)(a) (and section 64(3)) in any event, namely that conditioned responses – ie the activity being "*discontinued, or continued with or without amendment, on the basis of those effects*" – are a necessary corollary of an "*adaptive management approach*" involving staging.

Section 64(2)(b): "any other approach that allows (...)"

32. In our view the meaning of the balance of the definition of "*adaptive management approach*", namely "*any other approach that allows an activity to be undertaken so that its effects can be assessed and the activity discontinued, or continued with or without amendment, on the basis of those effects*" is less clear, particularly in the 'section 87F context'.
33. We consider that this part of the definition could support a range of different interpretations, falling along a spectrum.
34. A very broad approach might rely on interpreting the word(s):
 - (a) "*effects*" as including any effect of a proposal, regardless of its nature (such as whether it is a direct effect of a discharge, ie the addition of the discharged matter into the sea, or a subsequent effect arising from that discharge) or its significance;
 - (b) "*so that its effects can be assessed*" as encompassing conditions requiring **any kind** of ongoing assessment, by any party (eg the consent holder or the EPA), of an activity's effects on the environment or existing interests; and
 - (c) "*and the activity discontinued, or continued with or without amendment*" to include conditions contemplating **any possible response** by a consent holder to further information gathered, post-implementation, about an activity's effects.
35. At this extreme, section 87F(4) would disallow any conditions requiring ongoing monitoring (or other 'assessment') intended to manage uncertainty regarding the potential effects of a proposed marine discharge. In granting

such a consent, the EPA would likely have to be satisfied that the information before it regarding the activity's effects was sufficiently certain that the activity could be approved, that those effects were acceptable, and that no further 'assessment', post-consent, was required to verify that information.

36. As noted above, the text of section 64(2)(b) could be said to support this interpretation, because the definition of "effect" in section 6 is expansive, the ordinary meaning of "assessed" is broad, and "*discontinued, or continued with or without amendment*" covers the entire range of potential responses. Some support for this approach is also found, arguably, in the 'environmental protection' aspect of the EEZ Act's purpose.
37. We see a number of practical and contextual issues with that interpretation, however, such that we consider it unlikely that Parliament intended the meaning of "*adaptive management approach*" to be so broad, in the 'section 87F(4) context'.
38. For example, conditions requiring the ongoing assessment (of some kind) of an activity's effects on the environment or existing interests, and associated responses, are likely to be desirable for many types of activities for which marine discharge consent is required, even those with relatively minor adverse effects. Prohibiting the EPA from imposing conditions in those circumstances would unduly limit the broad condition-making power that the EPA otherwise has for marine discharge consents, by virtue of section 63(1) and (2).
39. Further, if Parliament's intention was that the EPA could not impose conditions on a marine discharge consent requiring ongoing monitoring or observation of an activity's effects, the ongoing provision to the EPA of information from that monitoring, or allowing the EPA to respond to that information by initiating a review, one would expect it to have expressly disabled the application of:
 - (a) section 63(2)(a)(iii) and section 66, regarding monitoring;
 - (b) section 63(2)(a)(iv) and section 67, regarding observers;
 - (c) section 63(2)(a)(v), regarding making available records for audit; and
 - (d) section 76, which envisages the EPA reviewing conditions "*to deal with any adverse effect on the environment that may arise from the exercise*

of the consent and with which it is appropriate to deal after the consent has been granted", or for "any other purpose specified in the consent".

40. In our view the EPA is empowered to impose conditions of those types on marine discharge consents, which indicates that the very broad possible interpretation of *"adaptive management approach"* outlined above is not the correct one.
41. Such an approach would also risk contravening the purpose of the EEZ Act, in terms of enabling *"people to provide for their economic well-being while (...) avoiding, remedying, or mitigating any adverse effects of activities on the environment"* (part of the definition of *"sustainable management"*), and potentially the direction to *"protect the environment from pollution by **regulating** or prohibiting the discharge of harmful substances"* (emphasis added). Conditions requiring ongoing monitoring and reporting of the effects of marine discharges, and appropriate operational responses, are a form of regulation.
42. Lastly, an inability for the EPA to impose conditions requiring the consent holder to undertake ongoing assessment or monitoring of its activities may hamper the exercise of the EPA's enforcement functions.
43. A narrower interpretation of *"adaptive management approach"*, based on the text of section 64(2)(b), could involve one, or a combination, of the following approaches.
44. First, the response options *"discontinued, or continued with or without amendment"* could be read conjunctively so that, in order for conditions to amount or contribute to an adaptive management approach, they must provide for **all three** possible responses (or at least two of them, discontinuing or continuing the activity). Adopting such an interpretation, an adaptive management approach would be reserved for situations where the effects of the proposed activity are so uncertain and potentially significant that an appropriate possible response to the activity's effects, following ongoing assessment, is the consented activity being discontinued altogether.
45. In our view this interpretation is supported by the words of section 64(2)(b), and the EEZ Act's purpose (including to regulate discharges of harmful substances).
46. An even narrower interpretation of section 64(2)(b) might involve reading *"so that its effects can be assessed"* as only applying to a situation where

consent is granted for an activity before acceptable **quantitative limits** for its effects have been identified. Some condition sets approved in the RMA context (and described as 'adaptive management'), discussed further below, have contained specified qualitative outcomes to be achieved in undertaking the consented activity, but have left quantitative limits, to achieve the specified qualitative outcomes, to be developed later. As such, an "*adaptive management approach*" could be typified by the lack of express quantitative limits on certain effects (perhaps limited to those of a potentially significant nature and scale).

47. While this interpretation might align with a relatively common usage of the term "*adaptive management approach*" in the RMA context, however, it requires a specific context to be read into what otherwise appear to be broadly framed words in section 64(2)(b). It could also prove difficult to apply in practice, because not all effects are capable of quantitative measurement, and not all measurable effects are likely to require quantitative limits to be imposed through conditions. As such, in our view this interpretation would leave a measure of uncertainty as to when an "*adaptive management approach*" is in play.
48. A further possible argument in favour of a narrow interpretation, in relation to the present application before the DMC, relies on drawing a conclusion that the section 87F(4) prohibition on applying an adaptive management approach to marine discharges is to give effect to MARPOL and the London Convention. As noted above, the EEZ Act appears to regulate a broader class of discharges than those Conventions, by encompassing discharges from seabed mining activities. It could be argued that a narrower interpretation was available for discharges not regulated by those Conventions. We do not consider this argument to be valid, however, because Parliament can be assumed to have deliberately chosen to treat all harmful substances, as defined by the Exclusive Economic Zone and Continental Shelf (Environmental Effects – Discharge and Dumping) Regulations 2015, in a consistent way.
49. Drawing these points together, in our view a relatively narrow interpretation of "*adaptive management approach*" is warranted, in the 'section 87F(4) context'. We consider that one relatively clear way to do so would be to limit the definition to:

- (a) allowing the activity to commence on a small scale or for a short period, or in stages otherwise contemplated by subsection 64(4), with its effects monitored, and where a possible conditioned outcome is the activity being discontinued on the basis of the observed effects; or
- (b) any other approach reflecting, through conditions, that an appropriate possible response to the activity's effects, following ongoing assessment, is the consented activity being discontinued.

50. We acknowledge, however, that a range of interpretations are available, on the words of section 64.

"Adaptive management approach" includes (...)

- 51. A further complication is that the definition of *"adaptive management approach"* appears to be non-exhaustive in nature (ie the definition *"includes"* rather than *"means"* (a) and (b)).
- 52. In our view this requires consideration of other uses of the term *"adaptive management"* and judicial guidance in relation to the term, including outside the EEZ Act context. This is discussed in a later section of this memorandum.

The parties' positions (to date) on section 64

- 53. In the discussion below we comment on the key points made by parties' legal representatives in their opening submissions, as we understand them, relevant to the approach to be taken to interpreting section 64.
- 54. The opening submissions on behalf of **Trans-Tasman Resources Limited**:
 - (a) emphasise the 'staging' elements of the definition of *"adaptive management approach"*,¹⁸
 - (b) note that adaptive management is *"only required to be considered where there is uncertainty or inadequacy in the available information"*, and assert that the effects of its proposal *"are sufficiently certain"*,¹⁹
 - (c) explain why, in that party's view, the proposed conditions do not provide for ongoing assessment of the effects of the activity, in the sense of *"establishing what the likely effects are"*, but are to ensure

¹⁸ At [226].

¹⁹ At [227].

compliance with limits and other consent parameters proposed to be reflected in the conditions;²⁰

- (d) seek to distinguish between conditions of the type described in section 63(2)(a), which the party considers can be imposed on a marine discharge consent, and those *"that together amount or contribute to an adaptive management approach"*;²¹ and
- (e) conclude that conditions amounting to an adaptive management approach *"must be limited to those which are focused on determining the effects of an activity, rather than monitoring compliance of an activity with set thresholds"*.²²

55. In short, our views on those matters are as follows:

- (a) We agree that staged developments are likely to meet the definition of *"adaptive management approach"* (depending on the response to any unacceptable effects).
- (b) We likewise agree that adaptive management is a tool for managing uncertainty, but note that section 64 does not clearly posit a test relying on the level of uncertainty (of activities or effects) to be applied by the EPA in the circumstances. That is, section 64 does not give any express guidance as to when a proposed activity is so uncertain that an adaptive management approach becomes in play (or, conversely, when a proposal is *"sufficiently certain"* that an adaptive management approach is not needed).
- (c) It is difficult to discern, in the words *"so that its effects can be assessed"*, an intention by Parliament to distinguish between different scales or types of effect, and/or different types or purposes of assessment. As discussed above, we doubt (for example) that the text of section 64 supports reading those words as meaning *"so that its effects can be assessed [in order to determine appropriate quantitative limits]"*.
- (d) In our view, however, the significance of effects is relevant when interpreting the words *"discontinued, or continued with or without amendment"* and, as discussed above, we consider that an available

²⁰ At [232]-[235].

²¹ At [237]-[239].

²² At [240].

interpretation is for an "*adaptive management approach*" to be limited to situations where the level of uncertainty and the significance of potential effects are such that discontinuing the activity may be an appropriate response.

(e) In our view section 87F(4) does not operate to exclude the types of conditions listed in section 63(2)(a) from those that can contribute to an "*adaptive management approach*". We agree that the section 63(2)(a) conditions, for example regarding monitoring, can generally be imposed on a marine discharge consent, but not, in our view, if they "*amount or contribute to an adaptive management approach*". As discussed above, the ability to impose section 63(2)(a) conditions on a marine discharge consent suggest, in our view, that it would be incorrect to apply a very broad interpretation of "*adaptive management approach*".

56. The opening submissions on behalf of **KASM and Greenpeace** note the four-part test from *Sustain Our Sounds*,²³ discussed further below, but otherwise consider the wording of section 64 to be clear²⁴ and the definition of "*adaptive management approach*" to be very broad.²⁵
57. The opening submissions on behalf of **the fisheries submitters** refer to the key features of an adaptive management approach identified in the *Crest Energy* decision (discussed below), and assert that "*any proposed conditions which, when read as a whole, reflect [those] key features should be treated as contributing to an adaptive management approach*".²⁶
58. The opening submissions on behalf of the **Royal Forest and Bird Protection Society of New Zealand** assert that section 64 "*encompasses much more than staging*",²⁷ but counsel accepted that monitoring to demonstrate compliance with a quantitative limit set in conditions would not (of itself) amount to an adaptive management approach.²⁸
59. The opening submissions on behalf of **Origin Resources Kupe New Zealand Limited** emphasise "*the need for any adaptive management approach to require, where there are significant adverse effects or unanticipated adverse effects, the activity to be reduced in scale or discontinued. The latter is explicitly recognised as a potential outcome of an*

²³ At [48].

²⁴ At [47] and [49].

²⁵ Transcript from hearing day 1, page 83, line 17.

²⁶ At [115] and [116].

²⁷ At [52].

²⁸ Transcript from hearing day 1, page 110, line 42.

adaptive management approach".²⁹ This position largely aligns with the narrow approach to interpreting the definition, discussed above, which we consider to be available on the text of section 64 and supported by the EEZ Act's purpose.

Guidance from RMA case law

Introduction

60. While neither "*adaptive management*" nor "*adaptive management approach*" is defined in the RMA, the terms are in relatively common usage and there is a growing body of case law discussing the concept.
61. It is important to note, however, that RMA case law has analysed a different issue to that raised by the DMC in this case.
62. In the RMA context, the courts have tended to focus on identifying the minimum requirements for an adaptive management approach to be **valid**. As such, the key decisions (including *Sustain Our Sounds*) have had the effect of limiting the potential overuse of the concept as a cure-all for any measure of uncertainty about a proposal's potential adverse effects.
63. The courts, in that context, have not had any regard to the EEZ Act definition of "*adaptive management approach*", nor have they sought to define the essential characteristics of such an approach; that exercise is unnecessary under the RMA, which does not prohibit imposing an adaptive management approach through conditions (or, as noted above, define the term).
64. That being the case, in our view the RMA case law provides useful guidance for the EEZ Act definition in the 'section 61 context', ie to understand what the elements of a **valid** adaptive management approach imposed by the EPA might include, but is of less use in the 'section 87F(4) context'. We return to this point below.

Significant RMA decisions discussing adaptive management

65. A timeline of the key decisions under the RMA discussing adaptive management is as follows:

²⁹ At [4.16].

- (a) *Golden Bay Marine Farmers v Tasman District Council* (2001 and 2003);³⁰
- (b) *Clifford Bay Marine Farms Ltd v Marlborough District Council* (2003);³¹
- (c) *Lower Waitaki River Management Society Inc v Canterbury Regional Council* (2009);³²
- (d) *Crest Energy Kaipara Ltd v Northland Regional Council* (2009);³³ and
- (e) *Sustain Our Sounds Inc v New Zealand King Salmon Company Inc* (2014).³⁴

66. Aspects of those decisions, focusing on judicial commentary regarding definitions or common features of adaptive management approaches, are set out in turn in **Appendix B** to this memorandum.

RMA case law – concepts accepted as forming part of an adaptive management approach

67. The case law and other guidance outlined in **Appendix B** demonstrates that a number of key elements are commonly present in conditions reflecting an adaptive management approach. They include the following:

- (a) a level of uncertainty about the potential adverse effects of the activity in question, coupled with a risk that the activity will do real (and potentially irreversible) damage to the environment.
- (b) adequate baseline information about the state of the environment, which would allow the effect of the activity on the environment to be assessed. In some cases (including *Sustain Our Sounds*), provision is made for baseline information to be bolstered to adequate levels through monitoring that takes place before the activity is commenced.
- (c) certainty as to the desirable environmental outcomes or, put another way, a clear understanding of what effects, at a broad level, would be unacceptable. In *Sustain Our Sounds*, qualitative objectives and monitoring requirements were set in conditions. The results of initial monitoring were intended to contribute to a baseline report, and to

³⁰ EnvC Wellington W42/2001, 27 April 2001; EnvC Wellington W19/2003, 27 March 2003.

³¹ EnvC Christchurch C131/2003 22 September 2003.

³² EnvC Christchurch C80/2009, 21 September 2009.

³³ EnvC Auckland A132/2009 22 December 2009.

³⁴ [2014] NZSC 40.

allow quantitative effects-based thresholds to be set, against which the activity could be monitored and assessed.

- (d) monitoring of the state of the environment, and the effect that the activity is having on the environment. In some cases, monitoring occurs both before and (if the activity is permitted to commence following that monitoring) after the activity is commenced. In other cases, monitoring may only take place once the activity commences.
- (e) provision for the results of the monitoring to be analysed, and for the consented activity to be adjusted, depending on the information obtained through monitoring and subsequent analysis. The intention will generally be that any adjustment can occur before the activity results in irreversible and unacceptable effects on the environment.
- (f) that adjustment will often be formally 'triggered' by quantitative thresholds.
- (g) the possible adjustments to the consented activity will be some combination of the following:
 - (i) for the consent to be, in effect, cancelled, if pre-commencement monitoring indicates the baseline state of the environment renders the activity inappropriate;
 - (ii) for the activity to be either halted, or reduced, if post-commencement monitoring shows it is having an unacceptable effect on the environment; and
 - (iii) for the activity to be expanded if post-commencement monitoring indicates that doing so would be appropriate (included in this general category are regimes that provide for the activity to commence in stages).

Does the RMA case law provide useful guidance as to the EEZ Act definition?

68. No single, precise definition of "*adaptive management*" or what amounts to an "*adaptive management approach*" has been applied consistently in the case law and other guidance summarised above. In general terms, attempts to provide a definition are couched in high-level, broad language (for example, the International Union for Conservation of Nature ("**IUCN**") definition referred to in *Sustain Our Sounds* – see **Appendix B**).

69. Where the elements of a sustainable management approach have been discussed in more detail, the context has often been a court considering whether a particular approach, promoted by an applicant as amounting to "*adaptive management*", is an appropriate response to the uncertainty about the effects of the proposed activity. As noted above, tests as to the validity of an adaptive management approach are likely to provide useful guidance, for cases under the EEZ Act, in the 'section 61 context'.
70. We consider that the possible elements identified above are of limited assistance in seeking to define "*adaptive management approach*" in the 'section 87F(4) context', however, for various reasons including that:
- (a) they are evaluative in nature, rather than providing clearly mandatory elements or a 'bright line' threshold beyond which an approach becomes adaptive management; and/or
 - (b) they are not consistently applied by the courts, in part because of the fact-specific contexts in which they arise.
71. Taking each possible element in turn:
- (a) **'Uncertainty of effect'** is an element common to most (if not all) circumstances in which adaptive management is proposed (and indeed almost all activities for which consent is sought). In our view, however, it does not usefully guide interpretation of the term "*adaptive management approach*". The **'risk of real and potentially irreversible damage'** is likewise commonly a precursor to adaptive management, but it is difficult to see how evaluating the scale or significance of that damage can form part of a clear, easily applied test for what constitutes an "*adaptive management approach*". That said, these concepts are indirectly reflected in what we consider to be an available interpretation of the section 64 definition, through the requirement that discontinuing the activity be a possible response to the uncertainty and potential significance of adverse effects.
 - (b) **Adequate baseline information:** this element is often central to the question of whether an adaptive management approach (as opposed to declining consent) is appropriate. It is something the decision-maker will evaluate, but is not easily translated into a clear legal test, for the purposes of providing a universally applicable definition.

- (c) **Certainty as to desirable environmental outcomes:** a decision-maker will generally require qualitative and/or quantitative objectives/limits to be set at the outset, against which the proposed activity can be monitored and assessed. This is also central to determining whether an adaptive management approach is appropriate, but is more difficult to translate into an objectively applicable element of a definition of an "*adaptive management approach*".
 - (d) **Monitoring, analysis of the results of the monitoring, and provision subsequent adjustment of the activity:** a framework of monitoring, analysis of the results of that monitoring, and the potential for the activity subsequently to be adjusted can reasonably be considered fundamental to an "*adaptive management approach*", and are expressly reflected in section 64 of the EEZ Act.
72. Considering the Supreme Court's decision in *Sustain Our Sounds* in particular, the Court did not set out to **define** adaptive management, but instead considered the circumstances in which an adaptive management approach would be appropriate. The Court held that the vital factor is "*the extent to which an adaptive management approach will sufficiently diminish the risk and uncertainty*" associated with the proposed activity.
73. The four factors identified by the Court for assessing the appropriateness of an adaptive management approach (at least, in the circumstances of that particular case) are set out in paragraph 15 of **Appendix B** below.
74. Of those four factors, (b) and (c) together tend to reinforce that provision for monitoring, and adjustment of the activity depending on the results of the monitoring, are necessary components of any "*adaptive management approach*". Monitoring and adjustment – potentially involving discontinuing the activity, in some circumstances – are expressly provided for in the section 64 definition. Otherwise, as discussed above, the practice of monitoring an activity's effects and responding to the results of monitoring is so ubiquitous that those elements are of limited use, in our view, in seeking to provide a test for determining whether a particular set of proposed conditions amounts or contributes to an adaptive management approach.
75. Factors (a) and (d), requiring (respectively) good baseline information and that effects can be remedied before they become irreversible, relate directly to an assessment of whether a proposed framework is appropriate. These

factors are not in our view usefully applied as part of a definition of what constitutes an *"adaptive management approach"*.

CONCLUSION

76. It is difficult to be definitive about the correct legal test, to be applied by the DMC in this case and by the EPA in future applications, for determining whether possible conditions together amount or contribute to an *"adaptive management approach"*.
77. While RMA case law has discussed adaptive management (including its common features) in some detail, the focus of the courts has been on the permissible limits of adaptive management, rather than the essential elements of such an approach. In our view the decisions are therefore of limited use in interpreting the definition of *"adaptive management approach"* in the EEZ Act, in the 'section 87F(4)' context.
78. That said, in our view a relatively narrow interpretation of *"adaptive management approach"* is supported by the text of section 64 itself, read in light of the EEZ Act's purpose. Adopting such an approach, *"adaptive management approach"* would mean:
- (a) allowing an activity to commence on a small scale or for a short period, or in stages otherwise contemplated by subsection 64(4), with its effects monitored, and where a possible conditioned outcome is the activity being discontinued on the basis of the observed effects; or
 - (b) any other approach reflecting, through conditions, that an appropriate possible response to the activity's effects, following ongoing assessment, is the consented activity being discontinued altogether.
79. We acknowledge, however, that a range of interpretations is available, on the words of section 64.

DATED at Wellington this 3rd day of March 2017



**Celia Haden / Michael Allan /
David Randal**

**Counsel assisting the Decision-Making
Committee**

APPENDIX A – EEZ ACT EXTRACTS

63 Conditions of marine consents

(1) The Environmental Protection Authority may grant a marine consent on any condition that it considers appropriate to deal with adverse effects of the activity authorised by the consent on the environment or existing interests.

(2) The conditions that the EPA may impose include, but are not limited to, conditions—

(a) requiring the consent holder to—

(i) provide a bond for the performance of any 1 or more conditions of the consent:

(ii) obtain and maintain public liability insurance of a specified value:

(iii) monitor, and report on, the exercise of the consent and the effects of the activity it authorises:

(iv) appoint an observer to monitor the activity authorised by the consent and its effects on the environment:

(v) make records related to the activity authorised by the consent available for audit:

(b) that together amount or contribute to an adaptive management approach.

(3) However, the EPA must not impose a condition on a consent if the condition would be inconsistent with this Act or any regulations.

(4) To avoid doubt, the EPA may not impose a condition to deal with an effect if the condition would conflict with a measure required in relation to the activity by another marine management regime or the Health and Safety at Work Act 2015.

64 Adaptive management approach

(1) The Environmental Protection Authority may incorporate an adaptive management approach into a marine consent granted for an activity.

(2) An adaptive management approach includes—

(a) allowing an activity to commence on a small scale or for a short period so that its effects on the environment and existing interests can be monitored:

(b) any other approach that allows an activity to be undertaken so that its effects can be assessed and the activity discontinued, or continued with or without amendment, on the basis of those effects.

(3) In order to incorporate an adaptive management approach into a marine consent, the EPA may impose conditions under section 63 that authorise the activity to be undertaken in stages, with a requirement for regular monitoring and reporting before the next stage of the activity may be undertaken or the activity continued for the next period.

(4) A stage may relate to the duration of the consent, the area over which the consent is granted, the scale or intensity of the activity, or the nature of the activity.

APPENDIX B – EXTRACTS FROM RMA CASE LAW

Golden Bay

1. This case related to aquaculture provisions in an RMA plan proposed by Tasman District Council, and a key issue was potential adverse effects on dolphins.
2. The second *Golden Bay* decision adopted³⁵ the definition of "*adaptive management*" from the glossary to the New Zealand Biodiversity Strategy, published in 2000, which is as follows:

"An experimental approach to management, or "structured learning by doing". It is based on developing dynamic models that attempt to make predictions or hypotheses about the impacts of alternative management policies. Management learning then proceeds by systematic testing of these models, rather than by random trial and error. Adaptive management is most useful when large complex ecological systems are being managed and management decisions cannot wait for final research results."

3. The Court noted, with apparent approval, that the planning evidence before it stressed, in order to constitute a valid adaptive management approach, "a need for:
 - *baseline surveys;*
 - *staging and the flexibility of staging;*
 - *(...) extensive monitoring and guidelines;*
 - *monitoring to be integrated with process bases which is to be undertaken by the Public Good Science Funded programmes in the next 2 – 3 years (now 1 – 2 years);*
 - *monitoring over time which will allow trigger levels to be set and the management regime refined accordingly;*
 - *a series of checks and balances that would protect against significant adverse effects;*

³⁵ At paragraph 405.

- *removal of structures should indicators show significant adverse effects;*
- *identification of appropriate sites for the long term;*
- *ecological controls incorporated into the draft rules based on other scientific work carried out;*
- *acknowledgement that locations for monitoring are based on predictive modelling and within blocks there will need to be some modification;*
- *benthic surveys within and along transects extending outside the blocks, along with a time series of water column monitoring at 5 sites around each block,*
- *a good overall management plan covering all the AMA and a management plan for each block with details of staging, a description of reporting and review requirements, along with resource consent conditions;*
- *reasons for considering density as another possible mechanism of staging because it would increase the flexibility to provide necessary feedback information about risk reduction;*
- *each stage is to be dependent on reviewed information so some flexibility has to be built in for it to be workable;*
- *a look at development of the whole AMA rather than trying to isolate the 250 hectare blocks entirely;*
- *continuity of monitoring, which will be more easily achieved with whole block management;*
- *feedback of monitoring information so that risk may be reduced in succeeding stage."*

Clifford Bay

4. Again, potential effects on Hector's dolphins from a proposed marine farm were at issue in this case, which centred on the appropriateness of proposed conditions to address such effects. The Court noted that:

"The applicant has proposed conditions of consent which involve staged development and monitoring. To this extent they have

*acknowledged at least the possibility that effects may follow which require avoidance, remedying or mitigation. The case must therefore turn on whether the conditions proposed, in particular the monitoring regime and adaptive management strategy can first detect and secondly, remedy any effects that might arise before they become irreversible.*¹⁶⁶

5. Consent was granted for a staged development. In doing so, the Court observed as follows:

"However our concerns are such that we considered whether we should limit the proposal to Stage I, and to a term no longer than enabled the consent authority to ensure the expeditious removal of the farm if adverse effects were detected. In deciding ultimately to grant consent beyond Stage I we place heavy reliance on condition 11, the review condition, to limit the expansion, and cut back the extent of the development should the research required by the consent suggest that this is necessary."

Lower Waitaki River Management Society Inc

6. This case related to issues of riverbed geomorphology and riverbed vegetation, arising in the context of a resource consent application for a water take from a dam reservoir. One particular focus of the Court's decision was seeking to ensure that the outcomes to be achieved through adaptive management were sufficiently certain and enforceable:

"[381] The concept of adaptive management has been discussed and approved by the Environment Court in a number of cases, e.g. Golden Bay Marine Farmers v Tasman District Council and Clifford Bay Marine Farms Limited v Marlborough District Council. The Court always has to be careful to ensure that the objectives for the adaptive management are reasonably certain and enforceable. Further, in this case, we consider that more detail is required in the management plans before we can be reasonably confident of their success."

Crest Energy

7. This case concerned a proposed tidal energy project in Kaipara Harbour. The interim decision, later finalised, indicated that there would be a positive

³⁶ At paragraph 118.

recommendation to the Minister of Conservation and possible consents for the balance of activities applied for, both subject to finalised conditions and a draft environmental monitoring plan.

8. The Court observed as follows:

"[225] The problems of modelling ecological responses to changes in conditions introduced by new technologies for water management regimes have led to the use of the [adaptive management] technique, very often through the imposition and subsequent refinement of management plans of various kinds.

[226] Important in the design of such management plans is the collecting of baseline knowledge upon which management plans can build in an on-going and cycling process. Steps have been identified in some such plans, that involve setting objectives, design and planning for management of the resource, the managing of the resource, monitoring, evaluation of monitoring results, reviewing and refining hypotheses, the management plan and programme to better meet the objectives. After that point the process will often start again at the design and planning level.

[227] We have deliberately stressed the setting of objectives, because, as was said in the Lower Waitaki River decision, the Court will always be careful to ensure that the objectives for adaptive management are reasonably certain and enforceable, and sometimes will call for further detail in draft management plans so as to be reasonably confident of their success.

[228] We are mindful of the findings of the Court in Director-General of Conservation v Marlborough District Council and Ors (Clifford Bay), that we should not place the applicant in the position of having to have carried out all necessary research before making an application or before a hearing by the Court, simply because it is seeking a privilege from the Crown. It would be unfair and unreasonable to hold that an applicant must try to anticipate and research all hypotheses that may occur to someone during the course of an application process.

[229] The converse is that the applicant must establish sufficient of a case to persuade the Court to grant consent on the basis of allowing the adaptive management processes to be embarked upon. That is,

the Court must be satisfied that the environmental management plan can operate in a way that will serve the purpose of the Act. (...)

[283] (...) The criteria and data obtained from the pilot survey will ultimately be critical to the Adaptive Management outcome. Until the pilot survey is undertaken, objectives set, and evaluation criteria framed, we do not feel sufficient confidence that the Adaptive Management regime will be appropriate or satisfactory."

Sustain Our Sounds

9. New Zealand King Salmon sought resource consents (and a plan change) to enable salmon farms in the Marlborough Sounds. A decision of a Board of Inquiry to grant consent for some farms was appealed to the High Court, and from there to the Supreme Court.
10. In discussing the concept of adaptive management, the Supreme Court noted guidance from the IUCN and courts in overseas jurisdictions, including Australia.
11. The IUCN's guideline states that any adaptive management approach should include the following core elements:³⁷
 - (a) monitoring of impacts of management or decisions based on agreed indicators;
 - (b) promoting research, to reduce key uncertainties;
 - (c) ensuring periodic evaluation of the outcomes of implementation, drawing of lessons and review and adjustment, as necessary, of the measures or decisions adopted; and
 - (d) establishing an efficient and effective compliance system.
12. One of the Australian cases cited in *Sustain Our Sounds* was *Environment East Gippsland Inc v VicForests*,³⁸ where the Victorian Supreme Court set out a test for considering when an adaptive management approach may be applied to remedy uncertainty, as follows:³⁹
 - (a) Is there a real threat of serious or irreversible damage to the environment?

³⁷ IUCN "Guidelines for applying the precautionary principle to biodiversity conservation and natural management" (approved May 2007). Cited in *Sustain Our Sounds* at [109].

³⁸ [2010] VSC 335.

³⁹ At [212]. Cited in *Sustain Our Sounds* at [119].

- (b) Is it attended by a lack of full scientific certainty (in the sense of material uncertainty)?
 - (c) If yes to (a) and (b), has the defendant demonstrated the threat is negligible?⁴⁰
 - (d) Is the threat able to be addressed by adaptive management?
 - (e) Is the measure alleged to be required proportionate to the threat in issue?
13. The Supreme Court in *Sustain Our Sounds* also noted that the New Zealand Coastal Policy Statement 2010 had adopted the definition of adaptive management from the New Zealand Biodiversity Strategy 2000, set out above.
14. Having considered the case law and other guidance on adaptive management, the Court reiterated that the vital factor in determining whether the use of an adaptive management approach is appropriate, as a response to risk and uncertainty, is:⁴¹
- "the extent to which an adaptive management approach will sufficiently diminish the risk and the uncertainty".*
15. The Court accepted that the four factors previously identified by the Board of Inquiry were appropriate to assess that issue, at least in the context of the case. Those four factors (framed as factors that should be present before an adaptive management approach should be applied) are:
- (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
 - (d) effects that might arise can be remedied before they become irreversible.

⁴⁰ In *Sustain Our Sounds* (at [120]), the Court noted this requirement may have been restricted to the facts of the case, rather than being a general statement of principle.

⁴¹ At [129] and [132].