28 June 2013

Department of Conservation (Attn: Dave Lundquist)

cc: Ministry for the Environment

PEPANZ comments on proposed changes to the 2012 Code of Conduct for Minimising Acoustic Disturbance to Marine Mammals

Introduction

This document constitutes the Petroleum Exploration and Production Association of New Zealand's (PEPANZ) input in respect of proposed revisions to the *2012 Code of Conduct for Minimising Acoustic Disturbance to Marine Mammals from Seismic Survey Operations* ("Code of Conduct" or "Code"), which was issued by the Department of Conservation (DOC) in July 2012.

The Code of Conduct is being referenced in new *Exclusive Economic Zone and Continental Shelf (Environmental Effects—Permitted Activities) Regulations 2013.* Planning for the next seismic survey season over summer 2013/14 is also well underway. PEPANZ accordingly recognises the need to focus this review on the most critical issues to enable the changes to the Code to be considered and progressed swiftly. Part 1 of this document focusses on responding to changes proposed by DOC in an email sent to stakeholders including PEPANZ on 14 June 2013. There are however some additional matters that we consider it is imperative are addressed at this time and these are outlined in Part 2 of this document.

There are more fundamental issues with the Code given its changed regulatory context that we consider should be addressed in time to make it a more certain and effective document. This would require a more thorough review and a fundamental rewrite of the Code and so we are not advocating doing this now due to time constraints. PEPANZ considers such a review of the Code and related regulatory requirements should be undertaken within the next two years (i.e. review commenced in mid-2014 and completed, with changes implemented, by July 2015).

This more comprehensive review could be done to a reasonable timeframe and incorporate knowledge gained from two more seasons of seismic surveying (13/14 and 14/15), international developments and research such as that being undertaken into interactions with New Zealand fur seals (discussed below). We would consider issues such as using STLM results and further MMO experience to refine the mitigation zones, the approach to PAM monitoring, the interface with marine mammal sanctuary rules, refining the areas of ecological importance, and standardising STLM analysis could be explored.

A separate but related matter is ensuring the appropriate and effective collection and management of data gathered under the Code on marine mammal sightings. Given the importance of this data, PEPANZ and its members are keen to work with DOC on resolving this information management issue.

Part 1 – Comments on the changes to sections of the Code proposed by DOC

Section 3.2 - Pre-survey planning and the MMIA process (fur seal exception)

Current wording

"It is acknowledged that operations in some areas could be significantly impacted by shutdowns to protect New Zealand fur seals, a relatively common species with no significant threat at the wider population level. If significant interactions with this species are identified as being a probability at the planning stage, proponents should contact the Director-General to discuss and agree potential mitigation options."

DOC's proposed change to the Code

Remove the wording above from section 3.2, in conjunction with changes to section 4.1.4 proposed below.

PEPANZ comments

We note that Pinnipeds were included in the Code as a species of concern on the basis that not to do so could be in inconsistent with the *Marine Mammal Protection Act* rather than specific evidence that eared seals such as New Zealand fur seals are adversely affected.

PEPANZ recognises the New Zealand fur seal is not listed as a 'species of concern' in the Code and fur seal sightings do not require shut downs of the seismic source. However, fur seal sightings within 200 m of the seismic source can cause delays in the initiation of soft starts and so frequent encounters with fur seals have the potential to be disruptive to seismic operations and result in needless costs in areas with high seal populations. We note a study underway at present by Chris Lalas (MMO) and Massey University (Helen McConnell) is attempting to measure the impact on seals by studying data on interactions between fur seals and seismic operations.

DOC has noted that the current wording is problematic in a code of practice referenced in regulations and that "while DOC would prefer to maintain this flexibility, it is likely not possible and notes that the issue becomes whether to explicitly include or exclude New Zealand fur seals from the provisions of the Code." As noted here and otherwise there are arguments for excluding fur seals from the Code, although we can appreciate why given the context of this review DOC may not want to take this approach.

From a drafting perspective PEPANZ recognises this sort of language becomes more problematic once the Code loses its current voluntary status, an inherent issue with referencing the Code in regulation. This is not the only part of the Code where this is the case and we are concerned about the consequences of piecemeal drafting changes. The current wording provides some flexibility and allows various approaches to be pursued in different areas to suit the specifics of the situation. We consider this is a pragmatic approach at this stage.

For these reasons PEPANZ does not support removing this wording from section 3.2. See also our comments below on the proposed changes to Section 4.1.4 concerning fur seals and delayed starts.

Section 4.1.2 - Observer requirements (last bullet point)

Current wording

"At all times while the acoustic source is in the water, at least one qualified MMO (during daylight hours) and at least one qualified PAM operator will maintain watches for marine mammals."

DOC's proposed change to the Code

Add text which will allow operations to continue for up to 2 hours in the absence of PAM if the following conditions are met:

- Sighting conditions are good
- The previous 2 hours of sighting conditions were good
- No marine mammals were sighted in the previous 2 hours
- Two MMOs maintain watch at all times during operations when PAM is not operational

PEPANZ comments on proposed changes to section 4.1.2

PEPANZ agrees that when no marine mammals have been visually or acoustically detected in the relevant area, shutting down where the PAM system malfunctions or is damaged is restrictive, costly, and does not necessarily result in any conservation gain.

PEPANZ has the following comments on the changes proposed to section 4.1.2 of the Code by DOC that would apply where PAM was not operational:

- Based on the limited practical experience to this point, two hours is a marginal time period for switching to a back-up PAM system where that option is available.
- Given that MMO observation has been proved to be the most effective method for detecting marine mammals, shutting down a survey in good sighting conditions due to a loss of PAM after an arbitrary time period of 2 hours is needless, costly and does not enhance conservation outcomes.
- The second bullet point condition that the previous 2 hours of sighting conditions were good is not relevant as PAM was active across that period of time.
- The third bullet point (no marine mammals were sighted in the previous two hours) would be unduly restrictive as those sightings may have been some distance from where the vessel now is (and is headed) and so we don't consider this, of itself, to be a basis for shutting down a survey. It would mean that if a marine mammal was sighted beyond the mitigation zone an hour previously, which would not require a shut down at the time, it would require a shutdown an hour later and many kilometres away if the PAM system goes offline.
- The proposed new text does not provide at all for situations at night as this is by definition not good sighting conditions. The first and fourth bullet points would require operations to cease immediately whenever PAM stops at night. This is restrictive and leaves the Code out of step with requirements in many other jurisdictions where operations could continue in these circumstances. Where a survey was operational we consider it would on balance be sensible to continue to the end of the survey line to avoid the issues associated with having to reshoot that segment of line at a later time. In this case an absolute time limit of 2 hours, whilst arbitrary, is perhaps a pragmatic balance.

PEPANZ proposes an alternative approach to PAM outages occurring during active operations. Different conditions would apply as follows depending on the nature of the sightings conditions at the time:

- In situations where sighting conditions are good:
 - \circ $\;$ Two MMOs maintain watch at all times during operations when PAM is not operational.
- In situations where sighting conditions are poor:
 - Operations can continue for up to 2 hours in the absence of PAM where no marine mammals were detected in the mitigation zones in the previous 2 hours.

Section 4.1.3 - Pre-start observations (last bullet point)

Current wording

"When arriving at a new location in the survey programme for the first time, the initial acoustic source activation must not be undertaken at night or during poor sighting conditions unless: In addition to normal qualified PAM operator requirements at the specific time of activation, MMOs have undertaken observations within a radius of 20 nautical miles of the planned start up position for at least the last 2 hours of good sighting conditions during the daylight hours preceding proposed operations, and no marine mammals have been detected."

DOC's proposed change to the Code

Add text which includes an additional option to activate the acoustic source if the following conditions are met:

- Sighting conditions have been good for less than 2 hours in the 24 hours preceding proposed operations
- PAM monitoring has been conducted for 6 hours immediately preceding proposed operations
- Two MMOs have conducted visual monitoring in the 2 hours immediately preceding proposed operations with a preference for one of the MMOs on a support vessel circling the 1.5 km mitigation zone
- No marine mammals have been sighted during acoustic or visual monitoring

PEPANZ comments on proposed changes to section 4.1.3

PEPANZ agrees that the current requirements for pre-start observations (notably good sighting conditions meaning daylight, visibility > 1.5 km, Beaufort scale < 4) are unnecessarily restrictive and the current exception outlined above is not practical in many circumstances. New Zealand waters are often windy and it might be necessary to wait for many days to get "good sighting conditions", notably a sea state of Beaufort 3 (characterized as a gentle breeze). Operations can as a result be unable to start, at substantial cost, even where MMO (with decent visibility) and PAM monitoring reveals no marine mammals.

The current exception provided is not very practical to achieve in a vessel towing streamers and still relies on there being a 2 hour period of "good sighting conditions" at some stage. As such we support alternative options being provided in the Code.

We support the intent of the proposed change to the Code and consider that the specific exception it carves out would have value in some circumstances. However it is very specific in its link to the existing wording of the Code (bullet point 1) and there are realistic scenarios where neither the current or proposed exception would apply. It is also potentially excessive in our view to what is necessary achieve conservation outcomes (bullet point 2).

We consider it sensible to focus on the mitigation zone as proposed on bullet point 3 and there may be circumstances where it is possible to locate an MMO on a support vessel. However, this transfer can only sensibly be conducted in relatively calm seas, which by definition would not be the case if the conditions are above Beaufort 3, and even so would create additional safety risks. There are also possible practical issues with the support vessel actively seeking out marine mammals (not its purpose for support), the requirements under the *Marine Mammals Protection Regulations 1992* and that whilst more agile it is unlikely to be as good a platform for observation as the source vessel. We consider the requirement to have not sighted any marine mammals (bullet point 4) is, particularly when combined with the proposed six hour period for PAM monitoring, greater than necessary to achieve conservation outcomes.

PEPANZ considers a simpler and more flexible alternative (that provides a great level of pre-start observation than a within-survey start up) would be to provide an option to activate the acoustic source in a new location if the following conditions are met:

- PAM monitoring has been conducted for **2 hours** immediately preceding proposed operations; and
- **Two** MMOs have conducted visual monitoring in the **2 hours** immediately preceding proposed operations; and
- No species of concern have been sighted during acoustic or visual monitoring.

We recognise there are potentially other options that could be workable and we would be happy to engage further with DOC on this.

Section 4.1.4 (and 4.2.4) – Delayed starts and shutdowns (Other Marine Mammals within a mitigation zone of 200 m, second bullet point)

Current wording

"Despite continuous observation, 30 minutes has elapsed since the last detection of a marine mammal within 200 m of the source, and the mitigation zone remains clear."

DOC's proposed change to the Code

Modify the text of the second bullet point to read as follows:

• Despite continuous observation, 10 minutes has passed since the last detection of a New Zealand fur seal within 200 m of the source and 30 minutes has elapsed since the last detection of any other marine mammal within 200 m of the source, and the mitigation zone remains clear.

PEPANZ comments on proposed changes to section 4.1.4 (and 4.2.4)

We have commented above on interactions with New Zealand fur seals in relation to proposed changes to section 3.2 of the Code, including the potential for consideration to be given to excluding them from the Code. However, if DOC decides to keep fur seals in the code then given the potentially large numbers of fur seals in some parts of New Zealand and the fact that a seismic vessel will generally move more than 1000 metres in a 10 minute period, PEPANZ considers the proposed 10 minutes is a more appropriate time period than 30 minutes for the last detection of a fur seal within the 200 metre zone before commencing a soft start. An alternative to allow more case-by-case consideration would be to include a further condition to this section providing that where populations of New Zealand fur seals are identified to be large through the MMIA process, DOC is able to reduce or waive these requirements.

General changes to the wording of the Code (specifically replacing "will" with "must")

Proposed change

Change all instances of "will" to "must" in the Code.

PEPANZ comments

PEPANZ does not support simply changing every instance of "will" to "must" in the Code.

Replacing "will" with "must" may be appropriate in some places but creates problems in others. For example in the second paragraph of section 3.2 on page 7 this would create an issue as inflexible "must not" then contradicts with later flexibility beginning with "However". This is arguably an issue already but would be compounded by the more definitive language. As noted above there are many ways in which the Code could be redrafted to improve its clarity and we don't consider that simply making one change throughout is a sensible approach without considering it more widely, which is impractical as part of this focussed review.

Part 2 – Additional changes to the Code of Conduct proposed by PEPANZ for consideration at this time

As well as responding to the specific issues raised by DOC, PEPANZ considers there are some additional matters that should be addressed at this time given the Code is now referenced in regulations. We consider these are changes that do not undermine the Code's intent or objectives and so can be considered and implemented through this brief review.

- 1. Clearly providing for separate surveys to be treated as one for the purposes of the MMIA in some circumstances. At present the Code suggests that each survey requires a unique MMIA. Where two surveys are undertaken using the same vessel and in adjacent or nearby areas at a similar time, likely consecutively (this has occurred), then it may be appropriate to treat them as effectively one survey. This would presumably result in one more broadly scope MMIA rather than two very similar but separate and more narrowly scoped MMIAs. This would likely be more efficient for the relevant operators and DOC.
- 2. Including a timeframe within the Code for assessing MMIA's to provide some additional certainty. We recognise that formalising a process timeline that provides the right incentives to all parties and avoids perverse outcomes is challenging. Nonetheless given the change to the legal status of the Code more definitive timelines should be included. For example we consider it reasonable that DOC complete its initial review of an MMIA within 10 working days. This is something PEPANZ would welcome the opportunity to discuss further with DOC and we recognise DOC's experience in putting in place processing arrangements for applications under various legislation.
- 3. Modifying the definition of "good sighting conditions" to make it more realistic for New Zealand conditions. Specifically allow more than Beaufort 3. With corresponding changes to "poor sighting conditions". We consider this would be appropriate based on the ability of MMO's to detect whales beyond the mitigation zones in above Beaufort 3 conditions.