

OMV marine discharge consent application

Submission Reference no: 64

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Submitter Type: Not specified

Source: Email

Overall Notes:

Clause

Do you intend to have a spokesperson who will act on your behalf (e.g. a lawyer or professional advisor)?

Position

No

Notes

Clause

Do you wish to speak to your submission at the hearing?

Position

Yes I/we wish to speak to my/our submission at the hearing

Notes

I live in Okato, so would prefer to speak at a hearing held in New Plymouth.

Clause

Do you wish to receive regular updates from the EPA about the progress of this application?

Position

Yes I/we wish to receive all communications relating to this application.

Notes

Clause

What decision do you want the Decision-making Committee to make and why? Provide reasons in the box below.

Position

Refuse

Notes

Refuse or defer such that a joint assessment of all relevant applications can be made. See attachment for full submission.

The submitter have elected to withhold their personal details from publication.

Before the Board of Inquiry of the Environmental Protection Authority OMV New Zealand Ltd 2018 Marine Discharge Consent Application

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

AND

An application by OMV New Zealand Ltd for a marine discharge consent to discharge harmful substances from the deck drains of a mobile offshore drilling unit associated with an exploration and appraisal drilling programme

Submission by Lyndon DeVantier, PhD

8th July 2018

Decision Sought

This application (EEZ100017) should be declined or deferred. There is a significant lack of information on a broad range of issues, including, at its most basic, which harmful substances will be discharged. What rational justification can be provided for issuing a discharge consent for unknown substances?

Under section 61(1)(c), the EPA must (c) take into account any uncertainty or inadequacy in the information available, and under section 62(2), if, in relation to making a decision under the Act, the information available is uncertain or inadequate, the EPA must favour caution and environmental protection.

The application is clearly premature, listing numerous related documents to be lodged for activities associated with the EAD, including applications for a marine consent and another marine discharge consent.

Disjoint processing

This prevents proper assessment of cumulative effects on the environment and existing interests, as required by the EEZ Act s 39(1)(d) and 59(2)(a)(i). The cumulative effects of the EAD programme, of

which the discharge of harmful substances is only one part, should not be assessed independently of the effects from other activities in the programme.

All the marine consent and discharge consent applications (notified and non-notified) associated with OMV's EAD programme should be assessed jointly (EEZ s 44), and with public input. This would help to provide EPA with a proper understanding of the risks of exploratory drilling and discharges, particularly the immediate risks and hazards associated with the drilling. It would also help to provide a better understanding of the cumulative effects of adding these activities to what is already a heavily industrialized region, in a rapidly changing physical, chemical and biological oceanographic regime of the Tasman Sea.

Cumulative effects

EPA has permitted all mining applications in STB under the EEZ-CS Act to date, despite cogent warnings of the risks of cumulative effects on threatened species from independent cetacean specialists, including Prof. Liz Slooten and Dr. Leigh Torres.

The South Taranaki Bight (STB) and eastern Tasman Sea region is of global importance for threatened cetaceans, and the cumulative effects on these and other threatened species are highly relevant under the EEZ-CS Act. This is explained in detail in my recent submission to EPA re Tamarind Taranaki Limited 2018 Applications for Marine Consent and Marine Discharge Consent.

To date, assessments of cumulative effects for the various notified applications that have been consented under the EEZ-CS Act for STB have focused principally on those of the application at hand, not on the overall impact, including synergisms, of adding that application to those already occurring and predicted to occur in STB.

Anthropogenic climate disruption to the EEZ, including STB, should be considered under the Act as a major and growing cumulative effect. Our oceans are changing fast, with cascading effects through food webs.

As Hoegh-Guldberg and Bruno (2010) stated: *"... rapidly rising greenhouse gas concentrations are driving ocean systems toward conditions not seen for millions of years, with an associated risk of fundamental and irreversible ecological transformation. The impacts ... so far include decreased ocean productivity, altered food web dynamics, reduced abundance of habitat-forming species, shifting species distributions, and a greater incidence of disease. ... create enormous challenges and costs for societies worldwide ..."*

STB is globally important for cetaceans in large part because of its productivity, evidenced for the baleen whales by the occurrence of krill *Nyctiphanes australis*. Krill populations, and hence those of their predators, shift seasonally throughout STB, related to upwelling, sea temperature and presence of phytoplankton (Bradford and Chapman 1988, James and Wilkinson 1988 among others).

Krill are at significant risk from increasing sea temperature (Johnson et al. 2011):

"Reduced nutrient availability in warm years leads to reduced production and a shift to smaller phytoplankton species, resulting in a drastic reduction in the biomass of larger zooplankton, especially krill (Nyctiphanes australis)."

And Ocean Acidification (eg. Kawaguchi et al. 2013):

“Unless CO₂ emissions are mitigated, the Southern Ocean krill population could collapse by 2300 with dire consequences for the entire ecosystem.”

And indeed from seismic surveys (McCauley et al. 2017).

Climate disruption, along with all the other cumulative effects, will increasingly impact this oceanographic setting, the food chains on which it is built and the trophic cascades that will follow, although I was unable to find any published work specific to STB, another apparent research gap.

Case in point: In May-June of 2018, at least 13 sperm whales, most if not all males, died at sea in the area, from presently unknown causes. Record heating of the Tasman Sea and months of seismic blasting from the Amazon Warrior in the preceding summer, along with other industrial activities, are obviously not conducive to a harmonious environment for these threatened whales. It is likely they were under significant physiological stress which may well have contributed to their deaths.

Obviously I am speculating here. Why? Because the relevant studies, as outlined above, have not been done. The Department of Conservation (DoC) claimed, in the ‘Stuff’ media, that it was extremely unlikely that the seismic blasting caused their deaths (<https://www.stuff.co.nz/national/104292673/extremely-unlikely-seismic-surveying-linked-to-death-of-12-sperm-whales>), but this is not known for a fact. Indeed, it may well have contributed to them, along with the exceedingly high sea temperature and related probable disruption of food webs, all part of the cumulative effects of human activities locally, regionally and globally.

The Act states (my highlighting in bold):

s6. Meaning of effect

(1) In this Act, unless the context otherwise requires, *effect* includes—

- (a) any positive or adverse effect; and
- (b) any temporary or permanent effect; and
- (c) any past, present, or **future** effect; and
- (d) any cumulative effect that arises **over time or in combination** with other effects; and
- (e) any potential effect of high probability; and
- (f) any potential effect of low probability that has a high potential impact.

(2) Subsection (1)(a) to (d) apply regardless of the scale, intensity, duration, or frequency of the effect.

And

s33. Matters to be considered ...

(3) The Minister must take into account—

(a) any effects on the environment or existing interests of allowing an activity with or without a marine consent, including—

(i) **cumulative effects**; and ...

(ii) the **effects of activities that are not regulated under this Act**; and

(d) the importance of **protecting the biological diversity and integrity of marine species, ecosystems, and processes**;

(e) the importance of **protecting rare and vulnerable ecosystems and the habitats of threatened species**; and

(f) **New Zealand's international obligations**; and

(i) the nature and effect of other marine management regimes; ...

And

s28 Regulations classifying areas of exclusive economic zone or continental shelf

(1) Regulations made under [section 27](#) or [29A](#) may identify and provide for areas of the exclusive economic zone or the continental shelf that—

(a) are important or **especially vulnerable because of their biophysical characteristics**; or

(b) are important for specific uses; or

(c) must be managed in co-ordination with other marine management regimes; or

(d) are, or are likely to be, the subject of competition or **conflict arising from the incompatibility of different activities**; or

(e) are experiencing, or likely to experience, **cumulative adverse environmental** effects.

(2) The regulations may close an area of the exclusive economic zone or the continental shelf to all or any activities described in [section 20](#) or [subpart 2](#) of Part 2. (Excludes 'permitted activities')

In the present case, OMV plans to drill 12 exploration / appraisal wells across six licensed areas off the Taranaki coast, and discharge undetermined quantities of un-identified harmful substances at sea. International experience has demonstrated that there can be devastating environmental and socio-economic impacts across huge areas from exploratory drilling.

Failure of prudent governance

I hold serious concerns re the legislative process that resulted in the EEZ Amendment Act 2013 and subsequent regulatory changes in 2014 that enabled non-notification of exploratory drilling (Regulation 5). Use of a Supplementary Order Paper, thereby avoiding the select committee process and public submissions, was not, in my view, good or prudent governance, particularly given that it occurred only a few years subsequent to the disastrous 2010 Deepwater Horizon exploratory drilling

catastrophe in the Gulf of Mexico. That single incident cost 11 lives, multiple billions of dollars in clean-up, and has left a multi-decadal regional environmental and human health disaster.

Exploratory drilling is inherently high-risk, as demonstrated by the Navigatus (2015) report to the Ministry of Transport. Drilling activity presents more risk than ongoing production activities. Given this, it is imperative that the required levels of assurance are increased before drilling commences to better reflect the potential financial implications of clean-up and compensation costs. Unknown risks include the pressure of the well, the substance in the well, and the volume of the well. Such drilling in the increasingly stormy Tasman Sea presents even greater risk. New Zealand has no adequate rapid response capability in the event of a well blow-out or other incident.

The EEZ-CS Act should be amended to a) ensure any future exploratory drilling be publically notified; b) include considerations of the effects of emissions on climate change; to c) be consistent with the forthcoming Zero Carbon Act.

Given that there are already far more known reserves of fossil fuels that simply cannot be burnt if we are to avoid catastrophic levels of climate change, no further exploration should be permitted to occur.

Lyndon DeVantier

8th July 2018