OMV marine discharge consent application

Submission Reference no: 67

Debbie Ngarewa-Packer, **Te Runanga o Ngati Ruanui**
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
Yes
Notes

Clause
Please list your spokesperson's first name and last name, email address, phone number, and postal address.
Notes
Debbie Ngarewa-Packer Kaiarataki of Te Runaunga o Ngati Ruanui Trust debbie.packer@ruanui.co.nz and office@ruanui.co.nz 06 278 0148 PO Box 594, Hawera

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

Clause
If you wish to speak at the hearing, please select all that apply:
Position
I/We wish to present in Te Reo Māori.
Notes

Clause
Do you wish to receive regular updates from the EPA about the progress of this application?
Position
Yes I/we wish to recieve 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
Grant with conditions
Notes
See attachment for full submission.

OMV New Zealand Limited's

Marine Discharge Consent Application – Deck Drainage

Te Rūnanga o Ngāti Ruanui Trust's Submission

Brief Description of the Application

OMV New Zealand Limited (OMV) is applying for a Marine Discharge Consent under Section 38 of the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (EEZ Act). This Discharge Consent is to permit the discharge of trace amounts of harmful substances from the deck drains of a Mobile Offshore Drilling Unit (MODU) associated with an Exploration and Appraisal Drilling (EAD) Programme.

The purpose of the EAD Programme is to determine the presence of hydrocarbons within a number of identified geological structures and to investigate the production potential within the OMV's permit areas. The EAD Programme includes the drilling of up to nine exploration wells and three appraisal wells which are anticipated to commence in 2019 and completed in 2025.

Comments

Te Rūnanga o Ngāti Ruanui Trust (Ngāti Ruanui) is committed in ensuring sustainability of our natural resources (taonga) for our hapu, whānau and future generation. We have reviewed the application and below are our comments and recommendations. We urge the Environment and Protection Authority (EPA) to consider these matters which would assist in achieving our commitments.

Mobile Offshore Drilling Unit (MODU)

There are two primary situations or 'threats' where incidental discharge could occur: during deluge or loss of containment of harmful substances on open deck system in emergency events; and during extended periods of torrential rainfall (stability of the MODU is at risk). During these circumstances large volumes of water/rainfall could overload/bypass the deck drainage system.

We recommend that the EPA considers applying a condition requiring a specially designed zero discharge MODU which is more stable to avoid stability risks, if consent is granted. This type of MODU is Ngati Ruanui's preference. Moreover, under exceptional circumstances for example during periods of excessive and continuous rainfall, a consent condition requiring the activity to cease until sea/weather conditions are considered to be safe to commence operation is appropriate.

Specific Harmful Substances

OMV has not yet contracted a MODU and at this early stage does not have the final well designs and final list of harmful substances. However, OMV has considered the following harmful substances which has the highest potential to enter the deck drainage system: 2 –marcaptoethanol (30%), Sodium Diethylene tri-aminepenta (30%), Ammonium Sulfate (30%), and Acetic Acid (60%). These substances have the following HASNO Classification respectively: 9.1A (very ecotoxic in the aquatic environment), 9.1B (ecotoxic in the aquatic environment), 9.1C (harmful in the aquatic environment), and 9.1D (slightly harmful to the aquatic environment).

Given that the Impact Assessment (IA) is reliant on the above information, we believe that it is appropriate that the EPA apply a condition reflecting the amount/percentage of harmful substances referred to and in accordance to their respective HASNO Classification. Should there be any changes that would increase the volume of substances or utilise increased amount of 'very ecotoxic' substances that would likely to change the calculations and IA, a new consent application should be submitted. This is appropriate given the abundance of cetaceans, seabirds, freshwater eels, etc noted in the existing environment and iwi's interest in fisheries. Moreover, most of these species have threatened classification (i.e. classified as nationally critical, nationally endangered, or nationally vulnerable), with several of these amongst the rarest and most critically endangered in New Zealand.

Discharge Volumes

To quantify the potential volume of stormwater discharge, the IA has utilised the largest MODU included in the OMV rig selection process with a main deck surface area of 5,826 m^2. **Given that at this stage the type of MODU to be used is not available and the IA has been based on the above surface area, we consider it appropriate that the EPA apply a condition limiting the deck area to no more than 5,826m^2. Further to this the consent, if granted, should be limited to the information provided particularly those references used in volume calculations. Any changes will require a new application to be submitted to the EPA.**

Three scenarios have been used to calculate probabilities associated with the length of time to complete drilling a well, that being: 90% of the time (drilling will be completed within 30 days); 50% of the time (drilling will be completed within 40 days); and 10% of the time (drilling will be completed within 50 days). Table 6 of the application provides the results of the calculations. Overall, Table 6 shows that highest calculated amount of rainfall is when drilling is completed over 40 days (50% of the time) and over 50 days (10% of the time). Rainfall calculations are lower when drilling is completed over 30 days and 90% of the time.

In our view, indicative discharge calculations including rainfall calculations should be modelled according to the Worst-Case Scenario and in this case should be modelled on the 'unlikely scenario' (10-50% of the time) where rainfall calculations are high and would likely to exceed the capability of a typical MODU OWS treatment system (approximately 10 m^3 per hour or 240 m^3 per day). We recommend that the EPA require further information which reflects the Worst-Case/Unlikely Scenario instead of 90% of the time (lower volume calculations), referred to in the IA. Moreover, if the 90% of the time data calculation is to be adopted, we recommend that the EPA apply a consent condition restricting drilling activities to be undertaken no more than 30 days.

Harmful Substances Dilution Calculation

Table 7 outlines a selection of typical 9.1 classified harmful substances, providing a range of classifications and ecotoxicological limits for specific harmful substances that are commonly used during exploration or appraisal drilling activities. This ecotoxicity information has been used to determine potential environmental effects for this Discharge Consent application. **All of the harmful substances exceeded the ecotoxicity thresholds seen in Table 7. Given this, we believe that it is necessary that the Worst-Case Scenario as mentioned under the Discharge Volume section of our comments should be provided.**

Drainage from Hazard Areas

The drainage water treatment system is made up of multi-chambered settling tanks. From here all water is put through an Oily Water Separator (OWS) fitted with an inline Oil-in-Water (OIW) monitor. The OWS allows water to be discharged overboard when the discharge has less than 15 ppm OIW content. If the OIW content is greater than 15 ppm the contaminated water is redirected back to the settling tank where further separation occurs, until the discharge stream has OIW concentrations of less than 15 ppm. It is not clear how the OIW concentrations and monitor treats harmful substances, if any, besides separating oil. **Further information is required in terms of the role, if any, of the OWS and OIW in treating harmful substances (referred to in Table 8).**

Drainage from Non-Hazard Areas

It is not clear where non-hazard areas are located in terms of hazard areas. **Although no harmful substances are permitted to be handled or stored in non-hazard areas, the areas may be close to each other and could potentially give rise to cross-contamination particularly during exceptional circumstances where the deck drainage system could be by-passed and MODU's stability is compromised. Hence, harmful substances could also be discharged from these areas.**

Physical Environment – Meteorology

There is currently no rainfall monitoring and recording equipment at any of the offshore installations in the South Taranaki Bight or at the Pohokura Field. The IA refers to rainfall records onshore. Given that the discharge of harmful substances is associated with off-shore rainfall, **we believe that it is necessary that the EPA applies a condition requiring the installation of a rainfall monitoring and recording equipment and that data be collected prior to commencement of activity to confirm the accuracy of data and IA.**

Customary Fishing

The application mentions the rohe moana of relevance to the northern, central and southern AOIs are as follows: Ngāti kinohaku, Ngāti Te Kanawa and Ngāti Peehi Rohe Moana (north of northern AOI); Ngāti Haumia Rohe Moana (south of Cape Egmont – inshore of central and southern AOI); Titahi-Ngaruahine Rohe Moana (south of Cape Egmont – inshore of central and southern AOI); and Te Atihaunui a Paparangi and Nga Rauru Rohe Moana (extends southwest from Wanganui – south of southern AOI). **Ngāti Ruanui also has customary fishing quota rights and interested within the AOI's and should be included with this section of the application.**

Cumulative Effects

Potential cumulative effects cannot be adequately assessed in this stage in the absence of information relating to the overall activities associated with the EAD programme.