

**BEFORE THE BOARD OF INQUIRY  
TAMARIND DEVELOPMENT DRILLING APPLICATIONS**

**EEZ100016**

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

**AND**

**IN THE MATTER** of a Board of Inquiry appointed under  
s52 of the Exclusive Economic Zone and  
Continental Shelf (Environmental  
Effects) Act 2012 to decide on Tamarind  
Taranaki Limited's marine consent and  
marine discharge consent applications

Held in the Blenheim Room at the Quality Hotel Plymouth  
International (on the corner of Courtenay and  
Leach Streets), New Plymouth, Thursday 8 November 2018  
at 10.30 a.m. (Day 3)

**Board Committee Members:**

Mr David Hill (Chair)

Ms Glenice Paine

Dr Dan McClary

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**TRANSCRIPT OF PROCEEDINGS**

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[10.30 a.m.]

**PRELIMINARY MATTERS**

5 **CHAIR:** We'll resume day 3 of the hearing. According to my  
schedule here we have 10 minutes of housekeeping but  
I've got no idea what that means. All right, so we're  
house-kept, are we? Right, good. I don't think  
submitters are appearing until 20 to on this schedule  
10 here. So, I don't know, Ms Wallace, whether you've got  
anything you want to tell me? No, okay.

**MS HEWETT:** We've got one here.

**CHAIR:** You are, sir?

**MR DEVANTIER:** Lyndon.

15 **CHAIR:** Dr Devantier, do you want to proceed?

**MR DEVANTIER:** There are people who want to listen, I could  
potentially go and round them up, that might be quicker.

**CHAIR:** Do you want to go and do a sheep dog thing?

**MR DEVANTIER:** Yes, sure.

20 **CHAIR:** Let's just take a short break. (Pause).

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25

**PRESENTATION BY DR LYNDON DEVANTIER****Submission Number 147**

**CHAIR:** Just come forward, Dr Devantier. I understand you're  
5 going to give us a Power Point demonstration, are you?

**MR DEVANTIER:** Yes, that's the intention.

**CHAIR:** And this isn't your first appearance, I'm we'll aware  
of that.

**MR DEVANTIER:** No, I've spent many hours now pretty much  
10 saying the same thing.

**CHAIR:** It did appear that way.

**MR DEVANTIER:** I know, but I think that there is scope within  
the Act to actually look at Cumulative Effects in a more  
broadly based approach than what industry and the  
15 scientists have done so far. So, that's my case and  
I'll try and make it as best I can.

**CHAIR:** Appreciate that, thank you.

**MR DEVANTIER:** So, yes, in my view the applications that have  
been assessed under the Act, particularly the fossil  
20 fuel ones, the interpretation of Cumulative Effects has  
been very narrow, and in fact in many cases it's only  
looked at the application at hand rather than the  
synergisms that are involved in a broader sense, and so  
I think that the Act itself, in the meaning of the  
25 Effects it provides scope for the Decision Making  
Committees or Boards of Inquiries to look at this in a  
different way, and this is the case that I want to make.  
I think that we really need to be thinking about this in  
a much broader sense than what we have been. So, the  
30 Act stipulates that future effects can be taken into  
account over time or in combination with other effects.

Effects of activities that are not regulated under  
the Act. I mean, I know I'm stating stuff that you guys  
will be well aware of but I just want to make the  
35 points. The text in blue is the important points and

particularly in regard to ecosystems, threatened species and our international obligations.

As you'll be aware, the UN Convention of Biological Diversity we signed on back in '91. It's very important we promote the recovery of threatened species and maintenance of viable populations of species in natural surroundings.

Why is all this relevant? Well, it's relevant because the Taranaki Bight and the Eastern Tasman Sea hosts the richest diversity of cetaceans on earth, and I think yesterday Dr Childerhouse mentioned 40 species of marine mammals. Well, there's at least 36 species of cetaceans offshore. There's only one other place, and that's off the coast of southern South America, but the whole of New Zealand's waters are exceedingly rich in cetaceans, and indeed with seabirds as we heard yesterday also. So, we have an incredibly important role to play here, and you are also well aware of why it's such an important place, it's all to do with the productivity. That productivity allows the growth of krill, and krill form the basis of marine food chains that directly feed the Baleen whales and indirectly feed the toothed whales.

So, it all would seem to be quite good with that, other than the fact that of the species that we have offshore here, a large number of them are in serious trouble. There are seven species on the international threatened list, six of which are endangered, one vulnerable. That's the International Union for Conservation of Nature Red List.

And our own New Zealand assessment is not much different. I've highlighted on that slide where there are differences but they make little real difference in terms of the level of threat that's posed to these species nationally and globally. So, recently, and

you're quite likely aware of this also, we've had the unexplained deaths of 13 Sperm Whales right in the area that the major oil and gas industry operates. They washed ashore dead just near Hawera. Their deaths followed very high temperatures for months in the Tasman Sea. In fact, they were world record breaking temperatures which almost certainly caused the failure of up-welling. The currents were not operational as they typically are and therefore food supply was probably very low.

The other issue of course is that the Amazon Warrior had been blasting for months in the region, and sperm whales and under toothed whales used echolocation in hunting, effectively seeing with sound. It's likely that the whales were under significant physiological stress from multiple impacts contributing to or causing their deaths. In my view these are Cumulative Effects.

Just to give you a sense of where the Amazon Warrior was working, that's the track. It wasn't the completed track. And to give you a sense of how intense the sound from seismic blasting is, the slide on the left of the, the graph on the left indicates that you've got 160 decibels of sound travelling for 5 kilometres away from those blasts. Now, sperm whales in particular dive deep for long periods of time and so observers may well not have even seen them.

You're also, I know from yesterday's discussions, well aware of the heat that is now being generated. The oceans have soaked up somewhere between 60% and 80% of the heat that our prolific burning of fossil fuels has generated and it's now becoming increasingly obvious that the whole oceanography of our world is changing rapidly. Unfortunately krill do not respond well to high temperatures and there was a paper published in 2011 by colleagues of mine from Tasmania that

demonstrated exactly that, that krill biomass crash when temperatures rise. So, we've got basically a recipe of disaster in terms of our threatened species in the Tasman Sea.

5           The future is a perfect storm of Cumulative Effects. The physical, chemical and biological oceanography of the Tasman Sea are changing, not just from local industrialisation but also from climate disruption. Rising sea temperatures, storms, ocean acidification,  
10           deoxygenation and associated impacts on productivity and food webs will all increase in coming decades.

          Sir Peter Gluckman, "For New Zealand, the resulting impact of changes in wind patterns, precipitation, and the chemistry of our oceans can be expected to be at  
15           least as significant as the changes in temperature itself".

          I believe that these are Cumulative Effects and they need to be taken into account in terms of any future permits that are issued.

20           Oxygen loss. Sadly, when we look back in history we discover that many of the major mass extinctions were associated with the oxygenation events in the ocean and right now we're heading into another one. The western Tasman Sea has already lost significant amounts of  
25           oxygen and globally this is going to be a major problem within a couple of decades, and it's indicating of course that the oceans are actually warming at a much higher rate than previously was thought.

          So, unfortunately the IPCC models have proved to be  
30           either on the money or conservative in their estimates of the rate of change. That's driving increasingly intense storm activity. There's now a very clear link between the intensity and the frequency of major storms unprecedented in the human record.

And, of course that will impact us here locally. Last summer we had three extratropical cyclones that rampaged through this region and slammed into the top of the South Island. That's a photo of the breakwater just  
5 down the road from here, and you can see with only 20 centimetres of sea level rise, that that breakwater is already at significant risk. And so what all of this means is that we've got significant future costs, massive costs related to where we're heading now. And,  
10 so just to decommission what we've got offshore here, the estimate for the Government is \$800 million.

Where in the middle, or the early stages perhaps of a mass extinction event, it's been called the Anthropocene, and unfortunately it's shaping up into  
15 exactly the same patterns as many of the previous major extinctions.

And, I just think that George Satayana's quote is just so relevant, "Those who do not remember the past are doomed to repeat it". And the science has been  
20 explaining this to us for decades, we have been well-warned.

So, cumulative effects of oil and gas mining applications have all been deemed by industry consultants to be low or negligible taking a  
25 reductionist, and I would say an extreme reductionist view, ignoring the fact that this industry is a major cause of the cumulative effects driving this extinction.

Dr Simon Childerhouse who has been witness for most of these oil and gas proceedings, he said that in the Shell Taranaki hearing here, "Assessments provided in  
30 the Impact Assessment and other comparable assessments undertaken...low or negligible impact such as those evaluated by the EPA in approved consents for OMV, STOS and TTRL".

We know that the TTRL one is different and it's now subject of a Supreme Court appeal, and Dr Childerhouse provided a similarly sanguine view yesterday.

5 Independent cetacean specialists did not agree with this. Leigh Torres back in 2017 raised an alarm in regard to blue whales. I won't read that because we haven't got a lot of time here.

10 And also Liz Sooten has been consistently critical of what's been going on offshore here. Her speciality is the Maui dolphins. She is a colleague in terms of the World Conservation Union, she's on the specialist group for cetaceans, and she's extremely concerned about the level of activity that is happening in offshore waters, and in fact she created this map. This was in  
15 regard to the TTRL hearing but it gives an indication of the amount of seismic activity trawling and gillnetting. The rigs of course are quite small structures in terms of what's going on, in terms of their spatial extent.

20 So, are Cumulative Effects negligible or low or minor? This begs the obvious question, how many minor or negligible effects does it take to make a moderate or major impact? Or how many industrial activities can be squeezed into New Zealand's coastal zone and EEZ with minor or negligible effect in a rapidly changing  
25 oceanographic regime. Having cakes and eating them, come to mind.

30 So, the actual assessment has been consigned to the too hard basket. Again, Dr Childerhouse, "To address cumulative impacts quantitatively is not possible as it is not possible to collect detailed data on all potential impacts across the region and their potential interaction due to their complexity and scale".

Well, if that was true then surely we should be falling back on to the Precautionary Principle under

these circumstances. That's what the Precautionary Principle actually says.

But, in fact there are ways of looking at Cumulative Effects. There are several quantitative and semi-quantitative approaches, including modelling future projections of changing sea temperature, acidification, upwelling and productivity based on present conditions and various IPCC scenarios. This approach can examine future habitat marginality and when coupled with population viability analyses, could provide important insights into future cumulative effects in the Bight on threatened species.

There's numerous examples of this being used elsewhere. There has been one I think population viability analysis conducted in New Zealand on Maui dolphins back in 2012, or thereabouts, in the Curry Report that was produced, but other than that we have been, I think, really really slack in terms of the science that's been put into this. We're relying in large part on expert opinion rather than on modelling.

I am impressed with the modelling that's been done on the oil spills. I think that's where, we should be doing the same thing with the biology and the ecology. The tools are there, we're just not doing it, and I question why we're not doing it because I am certain that it would provide a far better level of understanding of where we're actually headed in terms of the populations of these species, of which we do have international obligations.

So, I'll leave it at that. That's my presentation. Thank you very much for listening, and I'm happy to answer any questions.

**CHAIR:** Thank you, Dr Devantier.

**QUESTIONED BY BOARD COMMITTEE MEMBERS**

**CHAIR:** The difficulty that I see us having in this particular conversation is, I don't have an issue in terms of the fact that we have to turn our mind to cumulative effects, absolutely correct, but we have to start somewhere. We have to start from an effect from which there is a cumulative effect, and the difficulty with always starting it at the microcosm level is often you don't get beyond that.

10 I mean, can you identify specifically with respect to this application the effect that we might start that chain of custody on? I mean, from where do we start? From what effect do we start to actually get out into what you've canvassed here, which are much much broader issues, acknowledged?

**MR DEVANTIER:** Well, I think that the situation is dire already, so I would say that adding any further activity offshore here is unacceptable.

**CHAIR:** I absolutely accept that's the position that you and others have taken on that, but that's not a position that we can start from. As you're well aware from previous hearings, we have to start from the application in front of us and go from there, and so we need to make that link and it's difficult making that link, so I'm inviting you to make it for us.

**MR DEVANTIER:** I fully agree with you and I've been through the Act and I've discussed the Act with various people. And, of course the Act is an economic tool, although it does provide some degree of environmental protection and that's - and so I've been looking for that, and that's why I've actually ended up at Cumulative Effects, because I think that is really the best tool that you have.

35 Because I think everyone in the room here understands the situation in terms of climate disruption and the

loss of species. We really are in an extinction event and we have made obligations to our nation and to the international community that we're going to care for these animals, we're going to try and maintain what we can of the biosphere that we have.

And, so we have to stop. We cannot continue to burn fossil fuels, it's really as simple as that, as hard as that is for our civilisation to come to grips with. And, so I'm trying to find a way that the decision-makers can actually use the legislation as it stands, and I really hope that this legislation gets changed because at the moment it does not provide enough security for the biosphere in terms of fossil fuels.

**CHAIR:** And you're well aware our hands are tied by what we have in front of us in terms of legislation as well. It doesn't matter whether we agree with you or not, that's where we're at.

**MR DEVANTIER:** Yes.

**CHAIR:** So, we will certainly look at the issue of Cumulative Effect and we will see where we can go with it, and certainly, you know, appreciate your advice on that. (Board Committee Members confer). So, thank you very much. Are you going to morph into somebody else now?

**MR DEVANTIER:** Catherine is here. I'll sit up here with Catherine in case there's questions.

**CHAIR:** Yes, by all means. Welcome, Ms Cheung.

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**PRESENTATION BY CATHERINE CHEUNG**  
**ON BEHALF OF CLIMATE JUSTICE TARANAKI**  
**Submission Numbers 146/94**

5 **MS CHEUNG:** Thank you, thank you for the opportunity to  
speak. We are presenting on behalf of Climate Justice  
Taranaki. We have a few members here in the back.

**CHAIR:** Right, four hands waving, two people I think.

**MS CHEUNG:** Well, we'd like to think one of us represent a  
10 few hundred so lots of people -

**CHAIR:** I wasn't being numerical in that sense, no. I accept  
and I recognise that CJT has actually played a major  
part on the hearings to date across a whole range of  
issues.

15 **MS CHEUNG:** We've been on every one so far.

**CHAIR:** Yes.

**MS CHEUNG:** So thank you, thanks again. So, six key points  
that we're going to cover. The first two are very very  
well covered already. Dr Devantier is our core member  
20 and scientist, so they won't be repeated much but we  
will highlight a few things. And then the other points,  
like disjoint processing of related applications,  
non-notified applications, the economic side of things,  
and climate inaction which have economic implications as  
25 well as justice issues that our group is most concerned  
about.

Impacts on marine mammals. I put that slide on  
because this picture to me is so dramatic. When you see  
dead whales on the shore, it really hurts and I feel  
30 that it is easy for a consultant to say the risk is  
there but it is so rare and unlikely that we can ignore  
it but I don't see it that way. I think when there's  
risk, you really have the risk on a megaphone. These  
endangered species, they are Taonga to the Maori people.  
35 We can't just say, oh, another bit of risk that we can

ignore, and we have the international obligations, and we just have to look after them.

The other thing is we don't really understand why they are dying, why they are washed ashore. I don't think the onus should be on our side to prove that industrial activities are unsafe to the species. I think it should be on the other side, the proponents to say that it really is safe, and if they cannot prove it then we have to take the Precautionary Principle.

And this is the baseline. The baseline has already been shifting. The baseline now is we have terribly endangered species, our environment is so threatened. That is the baseline, that is where we start when we assess a new application for the impacts on them.

And these maps, they demonstrate the amount of activities. The left-hand side, petroleum drilling across, and exploration and drilling and discharge across the nation. And, marine species don't have boundaries. So, they're threatened here, they're threatened elsewhere. Where do they go when we give them even more threats?

We have seabed mining that's coming, and we hope not but there are permits allowing for seabed mining to occur right in prime feeding and foraging and breeding habitats of Maui dolphins and other whales that have been covered before.

We are deeply concerned about the disjoint processing of applications under the EEZ. These quotes are from the Impact Assessment that Tamarind provided in the beginning.

Tamarind already has a marine discharge for produced water and there is a likelihood that they might use the same drilling rig to conduct exploratory drilling which will be under a different application, and we are saying, oh, we are only looking at this and I don't

think that is quite right and I don't see how possibly  
could you look at the cumulative effects by saying we  
only look at what's on the table, when we know that  
there could be exploratory drilling and along with that  
5 would be discharge of harmful substances, which again is  
a separate consent. The EEZ Act allows for them to be  
processed together.

We went through the OMV applications, the discharge  
consent applications under OMV's exploratory and  
10 development drilling programme a few months ago and we  
asked for consideration of joint processing, in fact  
even before the hearing. And then at the hearing we  
highlighted that. We asked again, please. And at the  
time of the hearing the Commissioner asked OMV's legal  
15 advisor to comment. But that's not exactly what we are  
after. What we are after is independent legal advice,  
not the proponent's legal advice.

Anyhow, after the decision of granting the discharge  
consents was made, 4th of October, we wrote to EPA the  
20 next day and said, so was there any independent legal  
advice and may we have a look at it if there is, and we  
were denied our request. And, what is the reason? In  
order to maintain legal professional privilege, is the  
term. I don't totally understand what that means, I  
25 wish I had a Law Degree. But anyhow, it doesn't sit  
right to me and I think that could be a natural justice  
issue here, and we think the process is not transparent  
or democratic how it is happening.

We know the exploratory drilling and various other  
30 discharges are non-notified. We won't have a say on it.  
We've asked that hearings be provided, even though under  
the law we can't speak but the law does allow hearing of  
non-notified consents. We asked at the hearing. We  
were told to ask the executive of EPA, the Executive  
35 Director maybe, and he wrote back eventually and said

that the decision will go to the Decision Making Committee, whom we don't know, we have no names. And anyway, enough ranting of that.

Decommissioning costs was touched upon by  
5 Dr Devantier. I put it in because we've read the various economic evidence from the different applications, and over and over again they would overstate or emphasise the economic benefits. But there's not a complete analysis until you look at the  
10 actual costs, and they don't seem to mention costs. Like, decommissioning is at the end of the life of a production field which means that will be incurred at the time when the company is possibly the least, well, they're not making a lot of money at the end of the  
15 field life. So, are they really going to fund these activities? And anyhow, the law requires the Government to put in almost half of it. This is a known cost, real cost, and are they in the economic analysis that the proponents made? I'm not so sure.

20 Then there are also the risks and the costs of the plugged and abandoned wells once the companies are gone. This is a call for tender that MBIE put out in July last year asking for technical service to assess the plugged wells, the old wells. These are onshore wells, 960 of  
25 them. And some of them, there's no record of whether they are plugged or abandoned. We don't know whether they have been plugged properly, abandoned properly, decommissioned properly, and what sort of risk. And the way that they're calling for technical service suggests  
30 that we don't have the capability to deal with that. MBIE doesn't know how risky. And that's happening onshore. I imagine offshore it would be harder to assess the risk, and who knows what happens out there. When the companies are gone, the liability rests on the  
35 Government or the landowner if it is onshore.

So, there are costs and risk involved after the companies have gone and should they be looked at also in the economics? I think they should.

5 Climate disruption costs. The left-hand picture is a story about insurance. The insurance companies are saying that, we are going to be spending a whole load, heaps more on extreme disaster, natural disaster, extreme weather, and the estimate is annually \$1.6 billion will be needed every year. And what does that mean? That means people have to spend more money on  
10 insuring their properties. It means some properties will not get insurance at all, their companies will find it too risky and uneconomical to be giving insurance to some properties. So, this is a social cost on us that is never mentioned in any economic analysis that  
15 proponents put forward.

And the cost of climate inaction, a new paper, this is only a month ago, maybe in Nature, quoting \$400 in social cost. Social cost, I guess it means people,  
20 normal people. \$400 per person for every tonne of CO2 that we're emitting. Globally that means \$16 trillion because of climate change, and we are not acting on it and New Zealand is not prepared for the rising costs.

The IPCC's latest report, 1.5 degrees is really  
25 sobering. We have only 12 years to act, we don't have decades. The door is closing and from our point of view, being a social justice and environmental group, we are really looking at intergenerational equity. Climate rise, climate change, is an intergenerational issue and we really need to be thinking about the future  
30 generations when we make decisions now. Some of them commit ourselves to emissions or environmental damage for decades. Should we go there? Do we have time to go there? I don't think so.

Economics. More on economics. Diversement. A New Zealand Super Fund only last year has decided to move away from industrial investments that are heavy on emissions. They say it's a material risk and it is economically, the money is not going to pollution or polluting industries, we are moving on to bright, better, smarter investments. So, from the Chair of the New Zealand Super Fund, this is a material reason we are going invest smarter. It is not an ethical decision, he said, but that's a different issue. Ethical or not, stranded issue, we're seeing companies leaving maybe partly because of public opinion, I'm not sure, and partly because of economics. They are moving away because it is a dying industry, it is not a smart way to be investing decades of resources in environmental destruction on such activities.

Transition in the industry. Even the Government, even our mayor is saying that we need gas because we need gas to transition and, really, there are lots and lots of studies that have clearly demonstrated, gas is not a transition. It is terribly polluting, it is only that we can't see the methane, and I encourage you to go to those links with really impacting video using infrared cameras that shows the methane and other volatile organic compounds that are greenhouse gases.

The picture of the Umuroa vessel at the Tui well sites, you can see the flare there but there are a whole lot more emissions that we can't see. I also recommend you to read Dr Terrence Loomis' paper on why natural gas is not a bridge fuel to transition. And, in America it has been shown that gas, okay, it might replace a few coal plants but it also suppressed renewable energy because it could, it did for a while. And, so a lot of people are talking about just transition now and we are

really glad that the union themselves are calling for it.

5 Last year we had Etu, from the Taranaki base, representatives calling, saying we need to move away, we can't put all our eggs into the fossil fuel industry. And this year with have the Council, the Council of all the Trade Unions are coming out to say, we need to act now, we can't wait.

10 And, I guess that's the message, is we can't wait any longer and we don't want more fossil fuels, and we need to look to the future and we need to look more connectively. We can't just turn a blind eye on so-called other issues and other applications. Everything is so connected. As the world we live in, we're all connected. Thank you.

15 **CHAIR:** Thank you, Ms Cheung, appreciate that. And, yes, we certainly are all connected. The question we have to do is to try and join some dots up to make those connections, and you're well aware that that's a task that is constrained quite severely by the legislation that we're operating under, but we will do our best. (Board Committee Members confer).

20 So, thank you very much, appreciate the effort you've put into this and other submissions and, I'm not sure, are you making a personal submission as well?

25 **MS CHEUNG:** Well, have we used up our 30 minutes?

**CHAIR:** Yes, you have, but if you need another 5 minutes to just summarise, that's fine. Quite relaxed about that.

30 **MS CHEUNG:** We can try and answer some questions, if you like.

**CHAIR:** Do you wish some additional time for your personal submission?

**MS CHEUNG:** No. If we have 5 minutes then we can try to answer questions, if there are.

35 **CHAIR:** There are no questions, thank you very much.

**MS CHEUNG:** No questions, okay.

**MR DEVANTIER:** Thank you.

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5

**PRESENTATION BY URS SIGNER**

**Submission Number 27**

**MR SIGNER:** [Waiata]. This has become my go-to waiata for  
10 these kind of hearings because my 3 year-old daughter  
sings it at her kohanga reo, and it describes the  
animals, the inhabitants of the sea, it describes my  
daughter and my son establishing that relationship with  
their moana, with the takutai moana, and it describes  
15 the sustainable way of managing that Taonga. And what  
this company is to my left, I mihi'd to them although I  
don't support any of their mahi. The company has come  
to fund the resources to destroy communities and to  
destroy the ocean, and I'm sick and tired of this.

20 I've submitted on TTR-1, TTR-2, Chatham Rock  
Phosphate rise, AWE, OMV, Shell. We've been here  
before. We've done this a hundred times. We see Gen  
about every few months when she comes up with her team  
to Taranaki, and I get more emails from Gen than I get  
25 from my mother.

**CHAIR:** You're not alone in that.

**MR SIGNER:** Well, probably. So, kia ora, Gen. But that's  
our reality as a community group, as people who care  
about this place, who care about the future. And,  
30 Mr Chair, with all due respect, your hands aren't tied.  
I don't see no handcuffs around your hands, I don't see  
no string tying your hands together. You're free,  
you're free to make good decisions for future  
generations.

35 **CHAIR:** Well, you may not be looking in the right place.

**MR SIGNER:** That's the kind of rhetoric, with all due respect, that people have used as excuses over generations to make mistake after mistake. We've got to stop saying that, we've got to stop saying that.

5 **CHAIR:** Show us where in actual fact we can go where you want to go, then that will be very helpful.

**MR SIGNER:** So, I'm saying listen to my dear colleague, Lyndon, who talked to you about Cumulative Effects at length before. Find the holes in the legislation that  
10 are there. The name of your organisation is EPA. It's a protection authority.

**CHAIR:** That's not our organisation, we're an independent Board of Inquiry. So, that's not an appropriate comment.

15 **MR SIGNER:** Yes, it's also not appropriate to destroy the climate and destroy the one and only atmosphere we have for our future generations. It's totally inappropriate, Tamarind. It's totally inappropriate to come here and do this kind of mahi. And I'm saddened, I'm saddened to  
20 know that this company is still in this business to make a quick buck.

And I use this time, and I know you'll tell me in the end that none of my korero fits into your legislative framework, and so be it. We're at the frontline to  
25 climate change, that's our reality, that's the reality of this generation.

You heard Ms Cheung talking about the 12 years that the IPCC came up with in their latest report. 12 years. Had we done something 30-40 years ago we might have, you  
30 know, been in a better place, and in 12 years we go, oh stink, we had that EPA hearing about Tamarind, we had that EPA hearing about AWE, and everyone said their hands were tied and we couldn't find solutions to this growing problem.

It's a hoha. It's a hoha that I have to keep coming back into town for these hearings with my precious time that I prefer spending with my son doing something cool, doing something positive, building community instead of  
5 dealing with these companies destroying community.

So, I want to talk about the social impacts of fossil fuel drilling in our coastal communities. You know, the impacts that this industry brings with it is destroying the farming sector out at the coast. The social impacts  
10 of our addiction to fossil fuels in terms of chucking urea at paddocks by the tonne, by the truckload, means less than these people living in South Taranaki, for example.

South Taranaki has a projected population decline,  
15 one of the very few regions in this country. A projected population decline because of our addiction to fossil fuels. So, where are the studies that show me that they can talk about the economic benefits they bring? This industry is bringing economic decline to  
20 our communities. Within a 20km radius of where I live in Pungarehu, there are four closed primary schools. That is because more and more farms are amalgamating, becoming super dairy farms, which of course are disastrous for the climate, as you are well aware of,  
25 but it's also disastrous for the social impacts that it brings on communities. That is our reality in living in a gas field.

You know, these guys are keeping us addicted to their toxic stuff and it's got to stop, and it's got to stop  
30 here with us now. It's got to stop today.

So, I'm inviting Emily to come up for her part. We'll do this together.

**PRESENTATION BY EMILY BAILEY****Submission Number 32**

5

**MS BAILEY:** Kia ora koutou. I'm standing here today not as a lawyer, because that's not my field, but I'm a scientist, I'm a gardener, I'm a mother and a community educator, and frankly we know we've been fighting this industry for years. The generations before me were fighting this industry for years, and we know when they reach these Courts that the law has already failed to protect the environment. So, we're not here to actually talk about that because it's not working. But, on the outside the people are rising.

10

15

Yesterday a ban came through, as you all know, that is stopping new offshore oil and gas drilling, and there are new laws changing on the land as well, and times are changing. The companies are leaving. We've lost, we've said goodbye to Statoil, we've said goodbye to Anadarko, to Shell and now TAG Oil.

20

So, we just wanted to actually toast the millions of refugees around the world who have been pushed from their homes and suffered because of these companies who fight over resources that are not theirs to take; we have a toast to these communities who pushed for this ban for years to stop criminal companies like this from wrecking our planet; and we're here to toast Tamarind and their really bad investment in what is soon to be stranded assets, because the world is changing. [Music played].

25

30

**MR SIGNER:** Who wants a drink? Here's a toast to new legislation, here's a toast to TAG Oil leaving. Would you guys like a drink?

35

**CHAIR:** Not at the moment, thank you very much.

**MR SIGNER:** Here's a toast to our climate's justice, here's a toast to a clean future, to sustainable communities, here's a toast that TAG Oil left us yesterday. Thank you, we're winning, we're rising up.

5 **MS BAILEY:** [Singing]. "It's the end of the world as we know it, it's the end of the world as we know it, and we feel fine". Thank you.

**CHAIR:** Thank you very much.

**MR SIGNER:** Even though the whole world has gone  
10 crazy - that's what Te Whiti o Rongomai said. Even though the whole world has gone crazy or gone drunk, we remain and hold fast to the tikanga put in place by Te Toko and Te Whiti. Tena koutou, tena koutou, tena koutou katoa.

15 **MS PAINE:** Kia ora.

**CHAIR:** All right, I think we're now Skyping in Michelle Ducat from Oil Free Wellington. We'll take a ten minute recess while you get hold of her.

20 **(Adjourned from 11.23 a.m. until 11.35 a.m.)**

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25

**PRESENTATION BY MICHELLE DUCAT (via Skype)**  
**ON BEHALF OF OIL FREE WELLINGTON**  
**Submission Number 156**

5 **CHAIR:** I understand that we have Ms Ducat on the line?

**MS DUCAT:** Kia ora.

**CHAIR:** Kia ora, Ms Ducat. David Hill here, Chair of the Board of Inquiry. We don't have you visually. I don't know whether you can see us, can you?

10 **MS DUCAT:** I can see you, thank you.

**CHAIR:** This is one of those situations where you can see us but we can't see you. Well, you have an allotted 15 minutes, Ms Ducat, so if you want to address your submission, please do so.

15 **MS DUCAT:** Thank you for this opportunity. So, I'm Michelle Ducat from Oil Free Wellington, I'm submitting on behalf of this group.

We're submitting in support of Climate Justice Taranaki and other groups opposing drilling by Tamarind in the Tui Field. Both of our groups are part of a wider climate justice movement in Aotearoa that has grown over the last decade. In particular, people have organised to oppose new oil and gas in all the places permits have been granted, which is almost everywhere, so from Te Tai Tokerau, Te Tai Rawhiti all the way to Murihiku, and of course Taranaki. So, we would also like to acknowledge all those people who have come before, here and around the country, who have been speaking out for decades out of concern for this.

20  
25  
30 **CHAIR:** Okay, thank you.

**MS DUCAT:** So, our submission today is brief and it will be about what is not allowed to be considered in this hearing.

**CHAIR:** Yes, I figured that would be the case.

**MS DUCAT:** It just feels that the absurdity of this must be obvious. So, there is no doubt that if hydrocarbons were to be found, the discharge of CO2 would cumulatively contribute to climate change which is a significant adverse event, and any economic argument for continuing to seek profit from oil and gas is in complete denial of the scale and urgency of the climate crisis.

If we were to measure things by money alone, Treasury makes a conservative estimate that climate change through drought and severe weather events has already cost \$840 million in the last ten years. So, that's more than the total royalties from the Tui Field.

You probably all know the key messages from the recent IPCC report released last month. So, it makes it clear that we have to make rapid cuts, 50% by 2030 to all greenhouse gas emissions, to have a chance of staying below 2 degrees of warming and reduce ocean acidification; that this will make a material difference to millions of people if we can make that change. There will be reduced risks of flooding, reduced food insecurity, reduced climate stress, including for Pacific peoples. And it could mean reduced sea level rise here, 10 centimetres less, which is significant.

At 2 degrees around 400,000 species could go extinct. At 1.5 this could be reduced by one-third or a half. But we are currently not even on track to cap warming to 2 degrees. We are looking at 3 to 4 degrees by century's end. So, we're re-stating what is now well-known and yet business as usual continues.

So, we just urge you as the Board of Inquiry to confront this huge contradiction that the EEZ Act gives us. On the one hand to promote the sustainable management of the natural resources of the Exclusive Economic Zone and the Continental Shelf in order to

safeguard the life supporting capacity of the environment, while on the other to disregard climate change.

5 So, we know that the oil and gas industry will continue to seek and to search for oil and gas for profit unless we stop them, and we know we cannot burn the oil and gas that we already know about, let alone look for more. So, we would just like you to find some way to acknowledge this contradiction in this process.

10 **CHAIR:** Thank you for that, Ms Ducat. I think, as we already had presented to us this morning, the contradiction that you talk about is very evident to us and certainly is on the table. Whether we can do anything about it, as you foreshadowed earlier in your comment of course, is the  
15 moot point, but we will see if we can address the issue and if we can, then we will. So, thank you very much for your submission.

**MS DUCAT:** Good luck. Thank you.

20 **CHAIR:** Thank you very much. No more submitters so that's the close of the session with the submitters. We did have a session forecast for after lunch which was on conditions. Do we need a session on conditions now? I mean there was only one I think material difference as of yesterday.

25 **MS WALLACE:** Sir, as I understand it Dr Lane and Mr Faithful have now reached agreement on all conditions. There is a clean version of the document with all of the conditions agreed on prepared.

30 **CHAIR:** Come forward and let's have a look at what arm-wrestled compromise has been reached, thank you, and probably more importantly why, I suppose. (Copies distributed).

**DISCUSSION ON CONDITIONS**

**CHAIR:** Well, condition 10 hasn't been revised so do we have the right copy here? That was the anchors one which was  
5 to be revised either in terms of location or in numbers.

**DR LANE:** It has been revised, sir. It originally said "at any one time".

**MS WALLACE:** And also, sir, you'll see there, "and no more than four additional anchors on the seabed" have been  
10 added. I hope you've got the right version.

**CHAIR:** "And no more than four additional anchors at any other location". All right, we'll think about that. Right, so the other revised condition was, which one are we looking at? Oh, this is the marine consent. Weren't  
15 you also not quite aligned on the discharge one with respect to - oh, there it is.

**MR FAITHFUL:** It will be in there further on.

**CHAIR:** Okay, thank you. This is condition 8.

**MR FAITHFUL:** So would you just like us to go to the -

**CHAIR:** If you would that would be helpful.  
20

**MR FAITHFUL:** So, in the event that the panel considers it appropriate to grant the application before them, we think that these conditions will -

**CHAIR:** Of course we do have the technical option of granting  
25 one and refusing the other, which is would be a curious state to be in wouldn't it.

**MR FAITHFUL:** We think that these conditions would be appropriate in addressing the adverse effects of the activity. There's some other minor wording corrections  
30 that have been changed through the document that don't have any substantive change to the intent of the conditions as they were previously provided. They just tidy up the wording, so we won't go through that.

So, you've picked up in terms of condition 10 in the  
35 Marine Consent, which is around the clarification that

the anchoring points is to the one location. Some additional wording has being added there for clarification, that while there may be the four other anchors placed in another well location in preparation for the drill rigs to come through. So, that's just some additional wording that has been provided for clarification, that while there's 12 at one point there is also likely to be four at another location in advance of the rig being moved.

10 **CHAIR:** Okay.

**MR FAITHFUL:** There was nothing else in the Marine Consent.

Then the key ones - sorry, there was condition 17 which we've changed the structure of, which just relates to the nocturnal, the lighting on the vessels. We've just simplified that condition somewhat to improve the way it reads. So again, it doesn't have any substantive change to what the condition was looking to capture previously. It just clarifies the - uses less words to say the same thing. Then into the Marine Discharge Consent.

15  
20 **CHAIR:** I'm just thinking it over. I can't see a reason why we would need to specify when nighttime commences and ceases. I can't imagine anybody is going to be worried too much about that, I think that's okay.

**MR FAITHFUL:** Yes. So, the next one in the Marine Discharge Consent was condition number 7, which was the condition that identified that essentially -

25  
30 **CHAIR:** No, let me just follow that thought for a second. Is Dr Thompson still here? No, he's gone. I mean, you could have a situation where you have powerful lights on and it's not quite dusk I suppose when birds are flying around, but I think this is so far out to sea I don't think that's going to be an issue. It was an issue, I seem to recall, in Chatham rock phosphate because it is a different bird population obviously, and many more of

them. So, I think that's all right. Just leave that open for a moment.

**MR FAITHFUL:** I'm sure Lauren could get Dr Thompson to respond if necessary.

5 **CHAIR:** I think it's okay, I think it's a pragmatic. So, 7.

**MR FAITHFUL:** 7 in the Marine Discharge Consent, which was the condition that was intended to basically set the performance parameters for the drill rig. So, you will previously recall there were Roman numerals there so  
10 we've just changed it to (a), (b), (c), and (d) to reflect the rest of the conditions.

**CHAIR:** Just in case I break out in Latin, is it?

**MR FAITHFUL:** That's right. We've removed the previous condition, Roman numeral (v) which was the requirement  
15 for the rig to constantly monitor the discharges for the oil and water content. As was heard through the evidence of the Tamarind experts, the intention was that in the event that there was a discharge from the deck drainage, that there would be sampling before that.

20 So, as I explained yesterday, there was an issue whether or not, how that would be incorporated as a performance standard, so Alison and I agreed that (d) with the addition of "that achieves a discharge with an oil content of no more than 15 parts per million" would  
25 be an appropriate way it set essentially a performance standard for the deck drainage run-off and the oils in water separator system.

30 So then that's resulted in the removal of the Roman numeral (v) which would have been (e), if that's clear.

**CHAIR:** And in terms of 8, which I think you were still not entirely - so that's now resolved, is it?

**MR FAITHFUL:** Yes, so there's been some additional wording in there to clarify.

35 **CHAIR:** And additional product too, isn't there?

**MR FAITHFUL:** So when we expanded the columns of the table, of a chart which took out the comments from myself and Tamarind, there were these other columns of the table. They were always there, they were always intended to be  
5 there.

**CHAIR:** These are hidden materials.

**MR FAITHFUL:** These were just simply hidden. So, they were in the original conditions that were provided in the Conditions Report. They just, for whatever formatting  
10 reasons sometimes we have with these computers -

**CHAIR:** But they're not harmful substances as defined?

**MR FAITHFUL:** No, they're not additional. They're just further, they're the HSNO classification and the constituents of the products themselves. So, it doesn't  
15 actually provide any additional information that wasn't previously there.

So, the additional wording, I'll just clarify what we have here. It says:

"The Consent Holder shall, to the greatest extent  
20 practicable, ensure that the harmful substances contained within the drilling fluids and cement that have feasible" - so the additional wording is "within the drilling fluids and cement". So that clarifies the harmful substances in those products, which are those  
25 that are listed in the table.

**CHAIR:** What does "feasible potential" mean? Whose call is that?

**MR FAITHFUL:** It's just picking up that - you could remove the word "feasible" and I don't think it's actually  
30 going to -

**CHAIR:** It just seems to me to introduce an element which is arguable, so.

**MS WALLACE:** Mmm mmm, that's fine.

**MR FAITHFUL:** And then in the second paragraph, the first  
35 sentence, "In the event that the products above are not

used", the addition is, "and with respect to any other harmful substances that may potentially be discharged into the hazardous deck drains on the drill rig".

5 So, that's the addition there and then the rest of the condition is the same as what was previously provided, except that the reporting aspect of that has been removed.

10 So, Dr Lane and I had some further discussions around the reporting aspects and spoke further about the requirements of the emergency spill response plan and the reporting aspect of that. My initial concern was around the spill response plan essentially being governed by limits, so a 20 litre limit and a 100 litre limit, but Dr Lane addressed my concerns, that there  
15 wouldn't be other products of smaller volumes that would have the hazardous substances that would not be identified within the plan. So, that plan would essentially identify all hazardous substances that would be on the drill rig.

20 **CHAIR:** What happens when you can't use a substance and you have to substitute but it's not in that list, what's the process then for actually getting that approved?

**DR LANE:** So, essentially, if the chemicals that are on the spill response plan list need to be changed, the EPA  
25 needs to be notified of that change and provided with all of the information about whatever that substitution is and that applies also to oils.

**CHAIR:** You're saying you couldn't do a substitution in 24 hours, say, if you had to, because there's a  
30 bureaucratic process that needs to be gone through?

**DR LANE:** There's a bureaucratic process.

**CHAIR:** And you're comfortable with that being an option?

**DR LANE:** Yes, it's something that we have to work with normally, so.

**CHAIR:** I mean, that's what will be triggered obviously if we just leave it as it is. Right, okay, thank you.

**MR FAITHFUL:** So, that addressed the concern with regards to the reporting within the condition. And then that  
5 essentially rounded out the matters that were still in contention and, as you've said, there's been some other minor changes that haven't had any change to the intent of the conditions, they're just to clean up the wording.

**CHAIR:** So, I'm just trying to recall the conversation that  
10 was had yesterday with respect to synthetics and water-based, is that sorted?

**MR FAITHFUL:** That is the one, yes, sorry. We did breeze over that, didn't we. So, yes, that has been addressed.

It's condition 12 of the Marine Consent. So, we now  
15 have "all drill cuttings from the drilling process". So, if you can just delete "from the drilling process" because the drill cuttings is self-explanatory there, "that have the potential to discharge to the seabed. Now the addition comes here, "other than trace amounts  
20 of metal fragments, cementing products and elastomers that cannot be practicably separated the water-based drilling fluids".

Now, the description from the technical parties is that the synthetic-based drill mud cuttings would all be  
25 removed to the rig and then discharged to land. There were elements of the water-based fluids, correct me if I'm wrong here Alison, is that for the different stages of the process where the water-based fluids are being used, there will be some slight sort of release during  
30 that process that can't be completely extracted. These are going to be minute amounts that probably aren't even quantifiable. So, then the clarification around those trace amounts within the condition was appropriate because it needed to be acknowledged that there may be

some element there that cannot be removed in totality.

Excuse me if I missed some technical aspects of that.

**DR LANE:** No, that's correct. We were just aiming to reflect the content of the original application which did allow

5 for the elastomers and metal fragments.

**CHAIR:** All right, so that does allow them, that grants permission for those to be discharged to the seabed, does it, by implication of 12? It's not direct but it's by implication, I think, isn't it?

10 **MR FAITHFUL:** Yes.

**CHAIR:** Because they don't have to be returned to the surface, by implication they're allowed to be on the seabed.

**MR FAITHFUL:** Yes.

15 **CHAIR:** All right. I think that's all right, isn't it?

**DR LANE:** Mmm mmm.

**MR FAITHFUL:** I think if you're trying to set a limit on those, it would be impractical, because how could you monitor, record and quantify that.

20 **CHAIR:** I wouldn't worry about that, that's their problem.

**MR FAITHFUL:** The conditions have to be achievable though, don't they?

**CHAIR:** Yes, understood. Thank you.

**MS PAINE:** Mr Faithful, for me, can you just revisit number  
25 10 again in the consents.

**MR FAITHFUL:** Sure. Is this in the Marine Consent relating to the drill, the anchoring?

**MS PAINE:** Yes. Can you just tell me again the rationale for placements rather than location?

30 **MR FAITHFUL:** In terms of the wording for the first part of the condition there, being the maximum of four drill rig placements?

**MS PAINE:** Mmm mmm.

**MR FAITHFUL:** So, that was just terminology that was  
35 reflected from in the application. If Tamarind has a

preferred terminology they use for a drill rig location or placement, I don't have any issue with them changing that wording.

**MS PAINE:** No, just that when I read it I didn't read it as  
5 one thing, I read it as several things, so I just wanted to - as long as that's clear to everybody.

**MR FAITHFUL:** I think with the clarification around the end  
of the condition there, that "at any one location",  
alternatively you could change it to "each location",  
10 "at any one to each location" which might -

**MS PAINE:** I'm happy for it to remain the same if everyone is  
of that same understanding, yes.

**MS WALLACE:** I mean, I guess the one alternative to that  
would be that the Marine Consent authorises the drill  
15 rig to be placed at a maximum of four locations, if that helps clarify that.

**MS PAINE:** I'm happy with it, thank you.

**CHAIR:** Good, and presumably somewhere is a requirement to  
actually advise the EPA of what those placements are, is  
20 there? Is there anywhere that actually requires EPA to be advised that those are the - I mean, I know you've got to alert Maritime NZ about that for that purpose, but do you have to advise EPA at any point?

**MR FAITHFUL:** So, you've got condition 9 which talks about  
25 the notification to the EPA, so the intended date of the drilling works, the date the drilling rig is anchored, and its final location at each position.

**CHAIR:** Including latitude and longitude. Yes, okay, that's  
fine. (Board Committee Members confer). All right,  
30 thank you very much and thank you for your work on that, that's very helpful.

I didn't actually thank submitters generally for coming, did I? They disappeared. I thought they might stay around for that one but never mind.

Right, well, that's it for the moment I think, unless I'm wrong. Did I miss something? I mean, unless you want to do a quick oral reply that you will then subsequently write in long hand?

5 **MS WALLACE:** No, no, my preference is still to provide a written reply, and if I could have a week that would be appreciated.

**CHAIR:** Yes, that's fine.

10 **MS WALLACE:** I will endeavour to get it to you by Tuesday but in case I can't I would just like the option.

**CHAIR:** So, yes, 4 o'clock next Thursday, 15 November.

15 All right, it just remains for me then to say thank you to everybody for your participation. Thank you, Mr Allen, for your assistance, and thank you to Tamarind and its team. We appreciate the way in which the evidence has been given and answers have been given, it's certainly been very helpful to us and for staff. Thank you for your diligence, and to Tuf for telling us when we've got 5 minutes to go and we better actually  
20 start thinking about what we're doing, that's very good of you every time.

We'll close, and there are people pointing all over the place to Haydn just in case he thinks he might get away but he won't. We're adjourned now, so Haydn, if  
25 you wouldn't mind coming forward and closing us. Thank you very much.

**(Hearing concluded at 12.00 p.m. and closed by  
Haydn Te Ruki (Ngati Te Whiti))**

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