

**From:** TTRLApplication  
**Sent:** [REDACTED]  
**Subject:** FW: Submission: Trans-Tasman Resources Limited iron sand extraction and processing application

-----Original Message-----

**From:** [REDACTED]  
**Sent:** Tuesday, 4 October 2016 12:14 p.m.  
**To:** TTRLApplication <TTRL.Application@epa.govt.nz>  
**Subject:** Submission: Trans-Tasman Resources Limited iron sand extraction and processing application

Submission: Mike Davis, Trans-Tasman Resources Limited iron sand extraction and processing application

The application does not satisfy the requirements of the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (EEZ/CZ Act), it fails to provide active protection under the treaty of Waitangi and is in breach of key international law principles such as the precautionary principle. This is a repeat of the application made in 2013 that was rejected. The application has once again failed to undertake the required studies and have failed to undertake adequate consultation with the public and affected parties. To cite only one example, no full marine mammal surveys were undertaken, despite the Taranaki Bight being an important marine mammal habitat.

The seafloor supports a wide variety of organisms which in turn support a healthy fishery through a complex food web. The suction dredging crawler will suck up to 8000 tonnes per hour and remove the entire top surface of the seabed to a depth of up to 11 metres. It is certain that any plants or animals living in the sediment from the 65 km<sup>2</sup> excavation hole will be destroyed during the mining and sorting process, turning the mined area plus a significant area around the mining sites into a dead zone.

The downstream consequences of the seabed mining activity from the plume or huge underwater cloud that will remain suspended in the water column are unacceptable. The sediment plume will reduce the ability for life to exist in the surrounding area of the mining site. The plume will impact phytoplankton and zooplankton (affecting the food web), fisheries in the area, corals, and rocky reefs. The discharged material is also chemically altered and there is a possibility that the plume includes heavy metals such as mercury and copper, toxic to marine life and human health.

Marine mammal species such as blue whales and southern right whales, (which are nationally endangered) have a high potential to be impacted along with orca whales plus the highly at risk Maui and Hector's dolphins. The area is an important blue whale foraging area, and any adverse impacts to the migratory and resident mammal species could be devastating and must be avoided.

The size of the activity is unprecedented and there are various things that could go wrong such as spills, oil leaks or collisions. Waves in excess of 4 metres are routinely measured in the area and have been in excess of 7 metres. These are extreme conditions for vessel management and a safety plan needs to be provided.

I oppose the application in full as it will devastate the marine environment within the mining area and have significant and unacceptable negative impacts on the surrounding marine area. The economics of the project simply will not pay for the environmental risk that New Zealanders will be covering. As kaitiakitanga or stewards of the ocean we must protect our marine environment from such destructive activities.

Yours faithfully,

Mike Davis

