

2 December 2021

An Open Letter to

The South African President Cyril Ramaphosa

Minister Gwede Mantashe - Minister of Mineral Resources and Energy, and

Minister Barbara Creecy - Minister of Forestry, Fisheries and the Environment

Regarding seismic surveys off the South African coastline

Dear President Ramaphosa, Honourable Ministers

South Africa's marine ecosystems, and the coastal community's sustainable blue economies, that depend on their health, are being threatened by the deployment of offshore seismic surveying.

Seismic surveying, which employs large arrays of air guns that produce high amplitude, low frequency pulses (of over 200 dB re 1 μ pa at 1 m) every ten seconds, 24 hours a day and for months on end - over extensive areas of ocean, is fundamentally damaging to marine ecosystems. There is a growing body of evidence pointing to the immediate and long-term, and largely unmitigatable, negative impacts of this invasive method on marine creatures, from large (including acoustically sensitive whales and dolphins) to small (e.g. plankton, upon which all ocean trophic systems depend), that make up our valuable marine ecosystems, and upon which our coastal communities and economies depend. Furthermore, bathymetric sonar surveys often associated with seismic surveys have been identified to result in further acoustic impacts.

We point out that much of this evidence, and a growing global opposition to this method of surveying (it has been stopped in some country's Exclusive Economic Zones (EEZ)), has only come to light after the granting of current permits, notwithstanding their questionable legal status. For example, the Environmental Management Programme (EMPr), which underpins the granting of the permit for Shell Oil to commence surveying off the Transkei Coast (one of our richest and most sensitive stretches of our coast, with four Marine Protected Areas (MPAs)) was completed over eight years ago in June 2013 for Impact Africa. We note that the subsequent 2020 Environmental Compliance Audit is an audit of the compliance status of the EMPr and not an environmental or social impact audit. This study, completed by the same firm as the EMPr (i.e. lacks independence), and by consultants with no formal marine biological training, did not take any new marine ecological and social impact evidence into account. Of particular concern is the inadequacy of the proposed mitigation measures given the full scale and range of potential impacts to marine life and coastal communities arising from more recent studies. For example, the acoustic buffers proposed around MPAs; and the avoidance of times and places when sensitive species are most likely to experience the impacts, are inadequate in the light of new scientific research which has come to light since the EMPr was compiled. Both reports are therefore out of date and lack validity.

From an ocean governance perspective, we are unaware of any legislation that manages acoustic impacts in the marine environment in South Africa. From a legal point of view, we wish to highlight that there is an underlying deficiency in the current Environmental Impact Regulations enacted under the National Environmental Management Act (NEMA) that allows speculative seismic surveys to bypass full environmental impact assessment (EIA) processes. This omission must be rectified before any further permits are considered. Secondly, the precautionary principle, enshrined in NEMA principle, Section 2(4)(a)(vii) in the following terms: "that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions", is applicable in this case. We point out that section 2(1) of NEMA stipulates that, "The principles set out in this section apply throughout the Republic to the actions of all organs of state that may significantly affect the environment." (Our underlining).

Finally, we would also like to highlight that the approval of these surveys clearly contradicts South Africa's agreement at the COP26 in October this year, to move away from hydro-carbon-based energy towards renewables.

In the light of the above, we, the undersigned leading South African marine scientists, marine legal and coastal zone management experts, are imploring the South African Government to:

1. Halt all planned seismic surveys (including the survey due to commence on 1 December) until South Africa has a clear policy position on oil and gas exploration that is aligned with its climate change commitments; and,
2. If 1 above allows for any further exploration, then:
 - a. Review and amend the EIA regulations to include seismic surveys, and ensure that EMPs are current and based on the most recent available scientific information;
 - b. Establish appropriate regulations to account for the mitigation of acoustic impacts to species and systems in the marine environment;
 - c. Review the One Environment System that allows the Minister of Mineral Resources and Energy to authorise environmental applications for seismic surveys;
 - d. Review and consider the use of alternate, less harmful, survey technologies (e.g. marine vibroseis).
3. Commission a Strategic Environmental Assessment of all current and future seismic surveys for the South African EEZ, to determine key environmental and social constraints and sensitivities to inform a and b above.

Yours sincerely,

Emeritus Professor George Branch - Dept. of Biological Sciences, University of Cape Town (UCT)

Dr Jean Harris - Executive Director, WildOceans, Durban

Dr Larry Oellermann - CEO, South African Association for Marine Biological Research (SAAMBR)

Professor Kenneth Findlay - Research Chair: Oceans Economy, Centre for Sustainable Oceans, Cape Peninsula University of Technology

Professor Isabelle Anson - Head of Dept. Oceanography, UCT

Dr Judy Mann - Conservation Strategist, South African Association for Marine Biological Research (SAAMBR)

Professor William Froneman - Acting Director: SARChI Chair: Marine Ecology - Rhodes University

Dr Els Vermeulen - Research Manager, Mammal Research Institute Whale Unit, University of Pretoria

Emeritus Professor Jan Glazewski - Institute of Marine and Environmental Law, UCT

Professor Merle Sowman - Dept. Environmental and Geographical Science, UCT

Adjunct Professor Lorien Pichegru - Acting Director, Institute for Coastal and Marine Research Institute, Nelson Mandela University

Assoc. Professor Niall Vine - Department of Zoology & Entomology, University of Fort Hare

Professor Astrid Jarre - SA Research Chair in Marine Ecology and Fisheries, Dept. of Biological Sciences, UCT

Professor Lorien Pichegru – Director: Institute for Coastal and Marine Research, Nelson Mandela University

Dr Bruce Mann - Senior Scientist, Oceanographic Research Institute

Dr Sean Porter - Coral reef scientist, SAAMBR

Dr Gwenith Penry - Cetacean scientist, Institute for Coastal and Marine Research, Nelson Mandela University

Emeritus Professor Christopher McQuaid - Marine Biology, Rhodes University

Professor Amanda Lombard – NRF SARChI Chair: Marine Spatial Planning, Nelson Mandela University

Professor Rachel Wynberg - SARChi Chair: Environmental and Social Dimensions of the Bio-economy, Dept. Environmental and Geographical Science, UCT

Dr Simon Elwen - Cetacean and acoustic scientist, Director: Sea Search Research & Conservation, and Hons Assoc. Stellenbosch University

Assoc. Professor AJ Smit - Dept. of Biodiversity and Conservation Biology, University of Western Cape

To be confirmed before 11am release:

Assoc. Professor Cliff Jones - Head of Dept. Ichthyology and Fisheries Science, Rhodes University

Dr Tess Gridley - Director, Sea Search

Dr Vic Cockcroft - Centre for Dolphin Studies, Plettenberg Bay