



ECONOMIC & SOCIAL JUSTICE TRUST

The Environmental Commissioner

Mr Teofilus Nghitila

Windhoek

Namibia

teofilus.nghitila@met.gov.na

17 September 2018

Dear Mr Nghitila

Re: Environmental Clearance for Marine Phosphate Mining

Following the decision by the Hon. Minister of Environment and Tourism to set the environmental clearance certificate aside to allow for further consultations, we wish to appeal to you to permanently cancel this environmental clearance certificate and to prevent Namibia Marine Phosphate (Pty) Ltd. from resuming operations in our country.

Our objections are based on the following grounds:

1. The need to be cautious and to follow the precautionary principle

It is no coincidence that marine phosphate mining has not been conducted anywhere in the world, despite large deposits of marine phosphates being available in many areas. The reason is simply that risks are far too great and Namibia must not allow itself to be abused for an experiment that can have long-lasting devastating consequences. Namibia would do itself a great disservice to accept this world-first: it would be a dubious distinction and not to our credit.

Namibia's marine environment is unique, and recognized as one of the most biologically productive open coastal upwelling regions in the world. It is a complex, highly variable ecosystem, but vulnerable to external and internal stresses. Consequently, the delicately balanced environment necessitates careful and responsible management to maintain its productivity and sustainability for the future.

NMP has admitted that it has been forced to "rush" the project through. (See page 9 of the document "NMP EIA Comments and Responses – 30 March 2012") We are concerned that hasty and incremental marine mining will degrade this ecosystem, which will cause damage to Namibia's oceanic waters and which will become apparent only when it is too late to recover, and that our children will be robbed of vital and valuable seafood resource. Consequently, adequate national protection of the marine environment requires urgent, sound ecosystem baseline research. Strict

environmental monitoring procedures must be officially formulated and maintained, to specifically monitor mining activities and their impact on the marine ecosystem. We are concerned that Namibia does not have the capacity to do this, as is evident with Angolan fishing vessels being filmed traversing our waters, with Namibia's patrol vessels apparently unable to do anything about it.

It is against this background that the **United Nations supports the precautionary principle** when dealing with ventures such as marine phosphate mining. The Benguela ecosystem is a fragile though highly productive, large marine ecosystem. It is based on the nutrients in the seabed which provide the basis for phytoplankton which in turn forms the base of the food web of the entire marine ecosystem. Marine phosphate mining would involve a large scale destruction of the top layer of the seabed, and such disturbances of the seabed will present a severe threat to the ecosystem as a whole and all living mechanisms that it supports.

Fisheries scientists are concerned about the foundational building blocks of the ecosystem, because micro-organisms play a major part in keeping the ecosystem in balance, and keeping dangerous substances safely buried in the sediments. Different marine microbes control most processes in the deep sediments and water column, and the balance will be changed if mining excavates different proportions of heavy metals, nutrients, and oxygen demanding compounds. The liquid environments of these micro-organisms will change – which is something our renowned Namibian Constitution absolutely forbids us to ever allow.

Environmental research at sea has been undertaken by scientists employed by Namibia Marine Phosphates (NMP) in its bid to get environmental clearance. Such research, the results and the way these are interpreted and presented, whether intentional or not, cannot be considered objective. This is a common problem with EIAs (Environmental Impact Assessments). Notably the EIA submitted by NMP does not list mitigating measures as necessary for many of the concerns raised. The EIA also admits that for some risks, no mitigation would be possible. (See page 10 of the "NMP EIA Comments and Responses – 30 March 2012). This is a very dangerous situation, as impacts could then go ahead undetected.

We have seen that even marine diamond mining has an ecological impact and is only allowed in a few countries. In Namibia, this industry is known to have destroyed the vibrant crayfish industry Namibia used to have off Luderitz. We need to keep in mind, though, that marine diamond mining does not involve the whole-scale removal of the seabed, while marine phosphate mining will remove the entire seabed over a large area, with likely resultant severe ecological impacts. The seabed presents many unknown factors in terms of the ecological balance and once this balance is disrupted it could take millions of years if ever, to be restored. Thus the seabed with all its nutrients which support the ecosystem as a whole, must be considered a vital and non-renewable resource. It has to be protected against ventures that are merely concerned with short term profits and are willing to sacrifice the long-term survival of the ecosystem.

In essence, marine phosphate mining will mean that nutrients from the seabed will be removed in large quantities, which will affect the entire ecosystem. There is a

danger of suffocating the living organisms and there is currently no technology available to reclaim the seabed.

Also – as not much is known about the geology of the seabed - it is not known whether there may be any vents in the Namibian seabed. If they should exist and are hit by seabed trenching, there could be eruptions which would further distort the ecosystem for many generations to come. It is precisely for this reason that the precautionary principle must be applied in the case of phosphate marine mining.

New Zealand, also an important fishing nation, turned down a request for marine phosphate mining by Chatham Rock Phosphates (which is also now interested in Namibia). New Zealand is also a major farming country, using fertilisers – yet, they did not see any benefit in adding phosphate mining from the seabed. In rejecting the request, the NZ Environmental Protection Agency Decision Making Committee (DMC) found that it was “left with a lack of certainty about the receiving environment and the adverse effects of the proposal on the environment and existing interests. In these circumstances the DMC was required by legislation to ‘favour caution and environmental protection’ when making its decision”. It added that the sea mining project was “...unlikely to generate more than a modest economic benefit to New Zealand and that the quantum and distribution of that benefit were uncertain.

2. Great dangers for the fishing industry

Fish is a renewable resource, provided the breeding grounds are healthy and the fishing industry is sustainably managed. The key argument is that as long as there is a reasonable level of uncertainty regarding possible damage to the ecosystem and thus also the fishing industry, marine mining cannot be allowed in Namibia.

Some of the main concerns of the fishing sector with regard to proposed marine phosphate mining activities include:

- **Effects on breeding of major commercial fish species.** Fish have specific breeding areas, which risk being permanently destroyed.
- **Effects on ecosystem:** microbial processes, bottom-living animals, food web and diet species of commercial fish.
- **Change in sea bottom habitat** (as mining will be total removal of seabed to a sediment depth of 1-3 metres).
- Effects of suspended sediment cloud (**plumes**), potentially including clogging of fish gills, poisoning, oxygen depletion and smothering of young fish in their breeding and nursery grounds.
- **Effects on fishing activities:** fishing grounds stretch across the length of the coast.
- **Water quality** from both mining (deep water) and processing (shallow water): e.g. suspended heavy metals and other contaminants, nutrient imbalance, reduced oxygen, possibly release of methane and hydrogen sulphide.
- Possibly **unsafe radiation** levels associated with the uranium content of marine phosphates, both at mining sites and from processing effluents.

- **Effluent and waste from marine phosphate land based processing** affecting all near-shore marine biota.
- Impact on quality of fishery and marine products, affecting **food-safety levels** for human consumption.

Current research by Dr. Jean-Paul Roux of the Ministry of Fisheries and Marine Resources, including analysis of seal faeces, has shown that the main nursery areas for young hake covers the inshore areas south of Walvis Bay all the way to Luderitz, meaning that these valuable fish are concentrated in the same areas as the mining licenses (between 24°S and 26°S). These young hake are between 5 and 20 centimetres in length and are found in mid-water. Since the 2 mining licences so far issued are exactly in this area.

Namibian Marine Phosphates proposes mining in an area south of Walvis Bay and the areas likely to be mined are close to the 200 metre depth restriction, there is potential direct overlap with marine mining impacting on valuable juvenile fish.

Impact on critical ecosystem areas such as fish breeding and nursery grounds is a serious concern that would not immediately be apparent, because young fish, by fisheries law, are not allowed to be caught, so that only when the adult fish populations decrease, would the effect become obvious. Hake are caught when they are several years old, therefore it is obvious that it takes years and decades before such mining impacts would be revealed. Marine food webs are complicated. By then it will likely be too late to reverse the damage. When the impact becomes apparent, harm to fishing grounds and fish stocks may have become irreversible.

3. No proper procedures were followed

The Hon Minister of Fisheries and Marine Resources has stated clearly that the Ministry is opposed to marine phosphate mining in Namibia due to the great risks and many unanswered questions about its likely impact. It is important to note that the Ministry of Fisheries and Marine Resources did not receive an application from Namibia Marine Phosphate (Pty) LTD for an environmental clearance certificate as required in terms of the Environmental Management Act (No 7 of 2007).

Furthermore, the Minister did not prescribe conservation measures as outlined in the Act.

It is worth mentioning that the Environmental Commissioners Office was seemingly provided with a report by Dr. Peter Tarr from the SAIEA in which he alluded that stakeholders did not have enough time to engage meaningfully. He stated that the most affected stakeholders were the Ministry of Fisheries and Marine Resources as well as fishing industry. He further acknowledged that the ocean is a “public resource” and justified public interest in the matter on this basis. The significance of the public having a fundamental interest and right in this matter has further been cemented by a judgement delivered through Judge Uitele when Michael Gaweseb’s appeal was challenged on the basis of legal standing. The judge confirming that he as member of the public had standing. It is thus clear that there has been inadequate opportunities for the public to engage the Environmental Commissioner and to

participate in the proceedings leading to the granting of the environmental certificate for NMP.

We can recall that you expressed reservations in the studies provided to your office and that you called for a study by an oceanographer as indicated in your letter of 09 November 2015 addressed to NMP. The letter stated that you wanted a “verification report to be reviewed by an experienced Oceanographer in the region with an understanding of the Benguela current system”. Since there has been no evidence that the marine component as identified by your good office was studied it is clear that there is still a high risk of consequences for the marine life as a consequence of marine phosphate mining. Based on these procedural shortcomings alone, we trust that you will withdraw the environmental clearance certificate to be withdrawn with immediate effect.

4. Labour concerns

The Namibian fishing industry, from latest available employment figures, in 2016 directly employed 16,800 people - many of them women, and nearly all of them Namibians. The number of indirect jobs is around 60,000. In 2015, according to the Namibian Statistics Agency, it exported Namibia N\$ 7.03 billion in seafood exports, valuable foreign exchange for the country. Few industry sectors in Namibia can match these figures.

It needs to be said that international prices for mined minerals are widely known to be fluctuating and generally offer dubious investments. Marine phosphate mining is only one potential sector in Namibia's mining industry. It would rely on massive dredgers, rather than people, to do most of the work, and many of those to be employed will require skills not currently available in Namibia. While there is talk of creating a phosphoric acid/fertilizer processing plant in Luderitz, those currently employed by fish processing plants in Luderitz and indirectly through the ports authority, Namport, where the fish are landed, are already key contributors to the Luderitz economy. It would make no sense for a marine phosphate industry to be established in Luderitz, with unproven prospects, threatening to replace the fishing industry as it slowly fades away due to environmental degradation. Namibia cannot seriously consider replacing its valuable fishing grounds with doubtful mine pits in the ocean.

5. The Phosphate mining moratorium

The Namibian government imposed a phosphate mining moratorium in an attempt to solicit independent research, with mining companies now arguing that the moratorium timeline has expired and that they should be allowed to start mining.

So far during the moratorium period, an independent Norwegian organization, SINTEF, linked to the Norwegian Institute of Marine Research (IMR), has done a scoping study for a Strategic Environmental Assessment (SEA) and identified the need for further research to fill knowledge and regulatory gaps. This needs to be urgently followed by a Strategic Environmental Assessment to address the significant degree of unknown environmental impacts and assumptions associated with marine phosphate mining. The SEA will establish a way to compare the environment before and after the impact of multiple mines. This is strategically

essential for safeguarding the future of the Namibian fishing industry and the ongoing health of the Benguela Current Ecosystem.

NMP started an EIA land-based scoping study for their planned Walvis Bay onshore operations in 2012, but did not complete it. Should NMP be given environmental clearance again, the company still has to do a convincing environmental impact assessment, including giving concrete measures to mitigate onshore environmental impacts from millions of tonnes of waste from the seabed, separated on land.

The dredging of major quantities of marine phosphates each year will result in massive amounts of solid and liquid waste – how and where will this potentially harmful waste be disposed of? The Namibian public has a right to be assured that effluent run-off from onshore processing will not impact fisheries resources, the mariculture industry, or marine protected areas – and that potential radiation waste material will not blow over the towns of Walvis Bay and Luderitz, making people sick.

Practical steps and monitoring mechanisms to guarantee this currently do not exist, pointing to the need to shelf or bury the prospect of phosphate mining in Namibia

6. International lessons

There is broad global consensus that marine-origin phosphates have a higher radioactivity content than igneous phosphates. Namibia's marine phosphates have either not been tested, or the results have not been made public. Much of the US Florida phosphate wastes from fertilizer production exceeded permissible radioactivity levels, and have had to be stored in specially restricted areas in the USA.

On the other hand, there would be significant and permanent adverse effects to the marine environment and other potential environmental adverse effects. The DMC found that the economic benefits of the proposal to New Zealand to be insubstantial, relative to potential adverse environmental effects of the proposal”.

Togo is one country that has allowed on-land phosphate mining, without enforcing safety regulations. The result has been that waste produced from the phosphate mining has flowed into the sea, causing serious problems of contaminated seafood to coastal communities.

New Zealand rejected marine phosphate mining in view of concerns for the environment, in favour of 'caution and environmental protection', and in view of the doubtful economic prospects of the venture.

Without proper independent and transparent environmental research by internationally recognised marine scientists with adequate knowledge and experience, the likely potential environmental risks of proposed marine phosphate mining in the Benguela Marine Ecosystem cannot be highlighted strongly enough. This is why there has to be a research-led Strategic Environmental Assessment (SEA) on the expected cumulative impacts from marine phosphate mining. This SEA needs to be carried out in order to understand the environmental cumulative and long-term implications before any decision is taken on government level. Any decision made without the required strategic environmental assessment research, is a dangerous “gamble” and would constitute recklessness.

Mining of phosphate from the sea will be costly while phosphate is a low value item. Making it economically viable for Namibia will require mining the seabed on a large scale. Presently, however, land-mined phosphate reserves in the world are predicted to be already sufficient for global demand for at least the next 60-80 years. At the same time, recycling of organic wastes to recover phosphates is fast coming to the fore as a more environmentally-sustainable source or fertilizer. Therefore, the future demand for marine-mined phosphate is uncertain, whereas the future demand for fish as a human food source is assured, obvious and vital.

7. The State's duty to protect the environment

Namibia is a signatory of the Rio Convention, and by adopting the international convention it endorses them directly as domestic law even without a further Act of Parliament. Article 144 of the Namibian Constitution states that unless otherwise provided by the Constitution or an Act of Parliament, the general rules of Public International Law and international agreements are binding upon Namibia under this Constitution and shall form part of the law of Namibia.

Namibia's own Environmental Management Act of 2007 and the Environmental Impact Assessment Regulations of 2012 are consistent with the principles espoused in the Rio Convention. We would like to draw your attention to the relevant principles of the Rio Convention for the purposes of considering the NMP proposal which are principles 15 and 17 respectively. Principle 15 is the precautionary principle and principle 17 relates to the necessity of performing Environmental Impact Assessments (EIA).

The precautionary principle mentioned above can be characterised as requiring prudence. It was designed to provide guidance in the development and application of international environmental law, where there exists scientific uncertainty, such as in the case of deep sea dredging proposed in Namibia. The precautionary principle's core tenet is that the absence of scientific uncertainty regarding the existence or extent of a risk should not delay the adoption of measures of environmental protection. The Commission on Sustainable Development considered that at a general level the principle is understood to mean that States should act carefully and with foresight when taking decisions which concerned activities that may have an adverse impact on the environment (Commission on Sustainable Development, Report of the Expert Group Meeting on Identification of Principles of International Law for Sustainable Development, Geneva, Switzerland, 26 September 1995).

The precautionary principle has been entrenched in the Environmental Management Act, section 3(2)(k): "Where there is sufficient evidence which establishes that there are threats of serious or irreversible damage to the environment, lack of full scientific certainty may not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

Furthermore, Article 95.1 of the Namibian Constitution requires the Government to actively promote the welfare of the people, stating that the Government of Namibia is obligated to:

“..maintain ecosystems, essential ecological processes and biological diversity of Namibia and utilisation of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future.”

Much of Namibia’s good reputation is currently based on its clean environment. Government officials have repeatedly stated the need for environmental protection and allowing marine phosphate mining to proceed, would undermine Namibia’s commitment and seriously tarnish its image both at home and internationally.

Taking our Constitution seriously will require of government to permanently withhold an environmental clearance certificate for marine phosphate mining and to terminate such initiatives just like Namibia has declined to become a dumping ground for global nuclear waste. It is time once more to show that the State takes its constitutional commitments seriously.

Furthermore, Namibia is a signatory to:

The United Nations Convention on the Law of the Sea (UNCLOS) which obliges signatory countries to preserve and protect the marine environment;

The Reykjavik Declaration which promotes an ecosystem- based fisheries management programme;

The Southern African Development Community (SADC) Fisheries Protocol which is accepted as customary international law;

Food and Agriculture (FAO) Code of Conduct for Responsible Fisheries which urges to follow the “Precautionary Approach.”

Other International Guidelines that apply are the **UN Sustainable Development Goals**. Among the 17 UN SDGs to end poverty, promote prosperity and well-being for all and protect the planet, the following 11 can be drawn to the need to reject marine phosphate mining.

In light of the above, we urge you to place Namibia’s long-term development prospects above the short-term promises and enormous risks associated with marine phosphate mining. We therefore call on you to cancel the environmental clearance certificate for NMP.

We thank you.

Yours sincerely

Herbert Jauch
Chairperson

CC: Hon. Minister of Environment and Tourism, Pohamba Shifeta
pohamba.shifeta@met.gov.na

P.O. Box 96179, Windhoek, Namibia Email: esitrust@gmail.com; vivaworkers@gmail.com Tel: +264-811243438
(chairperson). Trustees: Adeline Black, Bience Gawanas, Michael Gaweseb, Herbert Jauch, John Nakuta, Doufi Namalambo and Rinaani Musutua.