



### Full Response

#### ***The Namibian Newspaper Spotlight Supplement (“Spotlight”) on Phosphate Mining and Fishing... can they Co-Exist?***

#### **Chamber of Mines (“CoM”) comment on Inaccurate, Factually Incorrect and Misleading Statements in the Spotlight Supplement’s Articles**

On 26<sup>th</sup> March 2021, The Namibian’s Spotlight was published intending to provide perspectives on whether the fishing industry and proposed marine phosphate mining industry could co-exist in Namibia.

The author of the articles endeavoured to provide a fair representation and a balanced perspective. However, a number of the statements attributed to the representative for the Confederation of Namibian Fishing Associations (“CNFA”) and the NGO Swakopmund Matters (“SM”) are misleading, scientifically unsubstantiated, and/or carry unqualified allegations relating to the legitimacy of seabed mining under the Namibian legislative framework and compliance with international law.

CoM believes that the statements cast unwarranted aspersions not only on the integrity of the seabed mining proponents, but also, by association, the mining industry as a whole and the Government of Namibia. Currently a major socio-economic contributor to the Namibian economy, seabed mining is well established and plans are underway to expand the seabed diamond mining fleet operated by Debmarine Namibia.

In the interests of ensuring that these comments are not incorrectly interpreted or accepted as fact by journalists, the public and relevant stakeholders, **the CoM has extracted and provided specific responses to the relevant inaccurate and misleading statements:**

#### **1) Imagery used to depict the proposed Marine Phosphate Mining operations.**

##### **Spotlight:**

The cover image (Fig 1) depicts a dredger discharging slurry from the bow using a rainbowing technique.

##### **CoM Response:**

Fig 1 below (used on the cover page of the Spotlight Supplement) is factually inaccurate and grossly misleading. Fig 2 below accurately shows the Fixed Pipeline for controlled slurry discharge to be used for the proposed phosphate projects (source: Jan De Nul).



Fig 1: Misleading



Fig 2: Factual Image

This same method (fixed and/or floating sealed pipelines) for controlled slurry discharge from the dredger to shore-based processing facilities was used in Namdeb trials (2006) at the Oranjemund Mine.

## 2) Comments by CNFA (Matti Amukwa)

### Spotlight - CNFA:

“He [Amukwa] said the industry believes a thorough environmental assessment must first be carried out to investigate the cumulative impacts of seabed mining on the Namibian marine environment.”

### CoM Response:

Since February 2012, in accordance with the provisions of the Environmental Management Act 2007 (“EMA2007”), all mining or exploration projects have complied with the requirement for a thorough environmental impact assessment (“EIA”). Commercial fishing, on the other hand, is currently not listed as a designated activity under EMA2007 and therefore is not required to comply with the same environmental impact assessment regulations as the Mining Industry.

### Spotlight - CNFA:

“... it is universally accepted that the type of damage caused by seabed mining is unlikely to recover for decades if not centuries, he [Amukwa] said.”

### CoM Response:

Comprehensive studies on the cumulative and long-term impacts of seabed mining on the continental shelf have been carried out both internationally and in Namibia, providing evidence that the seabed does recover from the impacts of seabed mining (Newall & Woodcock 2013, Penney et al 2008 as examples). Specific to the Benguela waters, an independent 2008 BCMLE study on the cumulative impacts of the effects of Marine Diamond Mining provides evidence, from repeated monitoring studies over a 10-year period, that the seabed does recover within a period of 2-15 years after seabed mining.<sup>i</sup>

### Spotlight - CNFA:

“Amukwa called claims by the phosphate industry that more seabed damage is caused by fish trawling annually (18,600 km<sup>2</sup>) as opposed to the damage from phosphate mining (6 km<sup>2</sup>) as ‘nonsense’ and not substantiated scientifically.”

### CoM Response:

The estimate of 18,600 km<sup>2</sup> is substantiated by estimates in published scientific literature on the area impacted by seabed trawling in Namibia. Furthermore, the BCLME 2008 report notes: “In terms of seabed area affected, hake-targeted bottom trawling has the greatest impact on the Benguela region continental shelf...”.

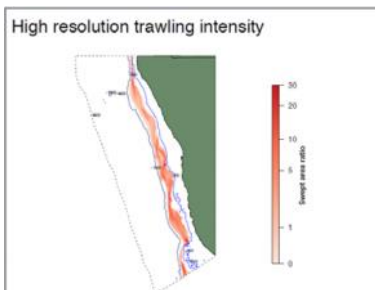


Fig 3: Spatial Data

A 2018 publication co-authored by 2 members of the Ministry of Fisheries and Marine Resources<sup>ii</sup> presents estimates of the bottom trawling footprint (seabed area impacted by trawling) on the seabed at depths of 200 – 1,000m in the Northern Benguela to be 110,938 km<sup>2</sup> (Fig 3). This calculation is derived from tow-by-tow data provided by MFMR for the period 2008 – 2013.

Spatial data (Fig 3) showing the footprint of bottom trawling off the Namibian coast is also available on the Spatial Data Portal of the Marine

Spatial Management and Governance Programme (“**MARISMA**”) of the BCLME, hosted on the website of the [Benguela Current Convention](#).

**Spotlight - CNFA:**

“He [Amukwa] said trawling, at worst, disturbs the bottom to a maximum sediment depth of 30cm into soft sediment, and that ‘heavy trawling’ at a site in Namibia is described as happening for a maximum 48 hours per year. This gives ample time for the sediment and underwater life to settle before the next trawl event.”

**CoM Response:**

The negative impacts of bottom trawling on seabed benthic communities and ecosystems are undeniable as reported in numerous international scientific publications.

A global study on the recovery of seabed biota after bottom trawling reports that otter trawl gear removed up to 6% of faunal biomass per pass. The same study noted that recovery times after bottom trawling ranged from 1.9 – 6.4 years where an area was trawled only once; for areas trawled repeatedly, the recovery times are longer.<sup>iii iv</sup> Recent studies also suggest that bottom trawling disturbance can negatively impact the seabed’s natural functioning as a carbon sink.<sup>v</sup>

In the Namibian context, Mafwila’s study in 2011 is reportedly the first to quantify bottom trawling intensity and how bottom-trawling affects the fish communities in areas that are heavily and lightly trawled in the Benguela system.<sup>vi vii</sup> Clearly, there is much still unknown about the cumulative impacts of sustained seabed trawling on the Namibian marine environment and the Benguela ecosystem.

**Spotlight - CNFA:**

Amukwa further said that harmful effects from fishing, such as nets, gear and overfishing are strictly regulated through the Marine Resources Act, while harmful effects of mining, such as noise, light and pollution, are not regulated by the Minerals Act. ‘A legal framework for seabed mining is necessary but non-existent. Self-regulation by an industry does not work,’ he argued.”

**CoM Response:**

CoM strongly rejects these insinuations as it implies that the Namibian Minerals (Exploration and Mining) Act 1992 (“**Minerals Act 1992**”), the Environmental Management Act (2007), and the Namibian Territorial Sea and Exclusive Economic Zone of Namibia Act 3 1990 are deficient in their legislative function and that seabed mining is currently being conducted illegally as a self-regulated industry, being without a proper legal regulatory framework. The truth is that these Acts are well constructed and gazetted with very stringent contractual obligations placed on the proponents.

Furthermore, noise light and pollution are common to both mining and fishing vessels, of which the latter are substantially greater in number.<sup>viii ix</sup>

**Spotlight - CNFA:**

“He [Amukwa] said Namibia is signatory to multiple international conventions that protect the ocean’s health as enshrined in Namibian law. ‘Mining of phosphates in the 200 nautical mile exclusive economic zone of Namibia cannot possibly comply with the provisions of many of these conventions. So legally Namibia must first demonstrate that mining of phosphorites will not compromise its living resources: this has not yet been done,’

Amukwa said, adding that environmental impact assessments and verification studies do not address many of the key issues that have been raised, and are directly pertinent to fisheries.

‘Namibian fisheries are not being stubborn; they are waiting for the necessary scientific and experimental work to be carried out and independently assessed by experts. Only then can conditions of coexistence be discussed’... he said.”

**CoM Response:**

Namibia’s Minerals Act 1992 and Environmental Management Act 2007 effectively stipulate that no mining or exploration operations can be conducted within any issued mineral licence without first obtaining an Environmental Clearance Certificate (“**ECC**”), which is issued only once all potential environmental impacts of the proposed mining or exploration operations have been fully assessed in accordance with the requirements of the EMA2007.

In accordance with the EMA2007, all EIAs completed by the seabed mining proponents are publicly available and the EIA completed by Namibian Marine Phosphate (Pty) Ltd (“**NMP**”) is considered by independent experts to be “one of the most extensive EIAs ever undertaken in Namibia.”<sup>x</sup> The scope and quality of the EIA process completed for NMP’s proposed marine phosphate mining operation have been fully endorsed by the Namibian Chamber of Environment (“**NCE**”) following the completion of its own independent review of the study and its findings. Furthermore, the fishing industry has been part of the entire EIA process as a registered stakeholder.

Regarding the process, under the management of an independent Environmental Assessment Practitioner (“**EAP**”), this EIA Report was submitted by the EAP to the Environmental Commissioner (“**EC**”). The EAP also manages the public consultation processes as well as scoping of the required specialist studies and appointment of the appropriate independent experts. The EC has the authority to appoint and conduct an independent external expert to review the EIA Report and the recommendations of the EAP before awarding an ECC. The EMA2007 requires that the proponent pay for all related costs.

Any mining or exploration vessels operating in the Namibian marine environment are subject to the same relevant national and international laws that apply to fishing vessels.

In addition as already noted, the fishing industry is not required to meet the same stringent requirements under EMA2007.

Seabed mining in Namibia is fully regulated in strict compliance with the provisions of the Minerals Act 1992, the EMA2007, and all other relevant national and international laws. This legal framework has enabled the development of seabed mining in Namibia and the growth of the marine diamond mining industry to its current position as the major source of Namibia’s diamond production. The same legal and regulatory framework will be applied to any new seabed mining projects in Namibia.

**3) Comments by SM**

**Spotlight – SM**

“The group claims that the mining industry, in order to promote its intention to mine phosphate from the ocean floor, is still using previous seabed-mining environmental contracts, of which most are a

repetition of selected sections from their own verification study that has yet to be publicly scrutinised by independent internationally renowned and competent marine scientists.”

**CoM Response:**

The studies SM refers to above (EIA and EIA Verification Report) were both submitted for independent external review by specialist consultants selected and appointed by the EC. In addition, in 2018, a further 3-month public consultation process was conducted by the EC during which the studies were again made available for public review and comment by both the EC and the proponent. Thereafter the EC appointed, for the 3<sup>rd</sup> time, one international and one local Independent expert to review the public comments submitted and the studies completed by the proponent. That independent review report was completed in December 2018 and submitted to the EC. It is also noted that SM participated in this process and made a submission.

**Spotlight – SM**

Referencing the report titled, ‘Ocean Solutions That Benefit People, Nature and the Economy’, SM states that: “Until the need for and potential consequences of deep-sea mining are better understood, the concept is conceptually difficult to align with the definition of a sustainable ocean economy, and raises various environmental, legal and governance challenges, as well as possible conflicts with the UN Sustainable Development Goals.”

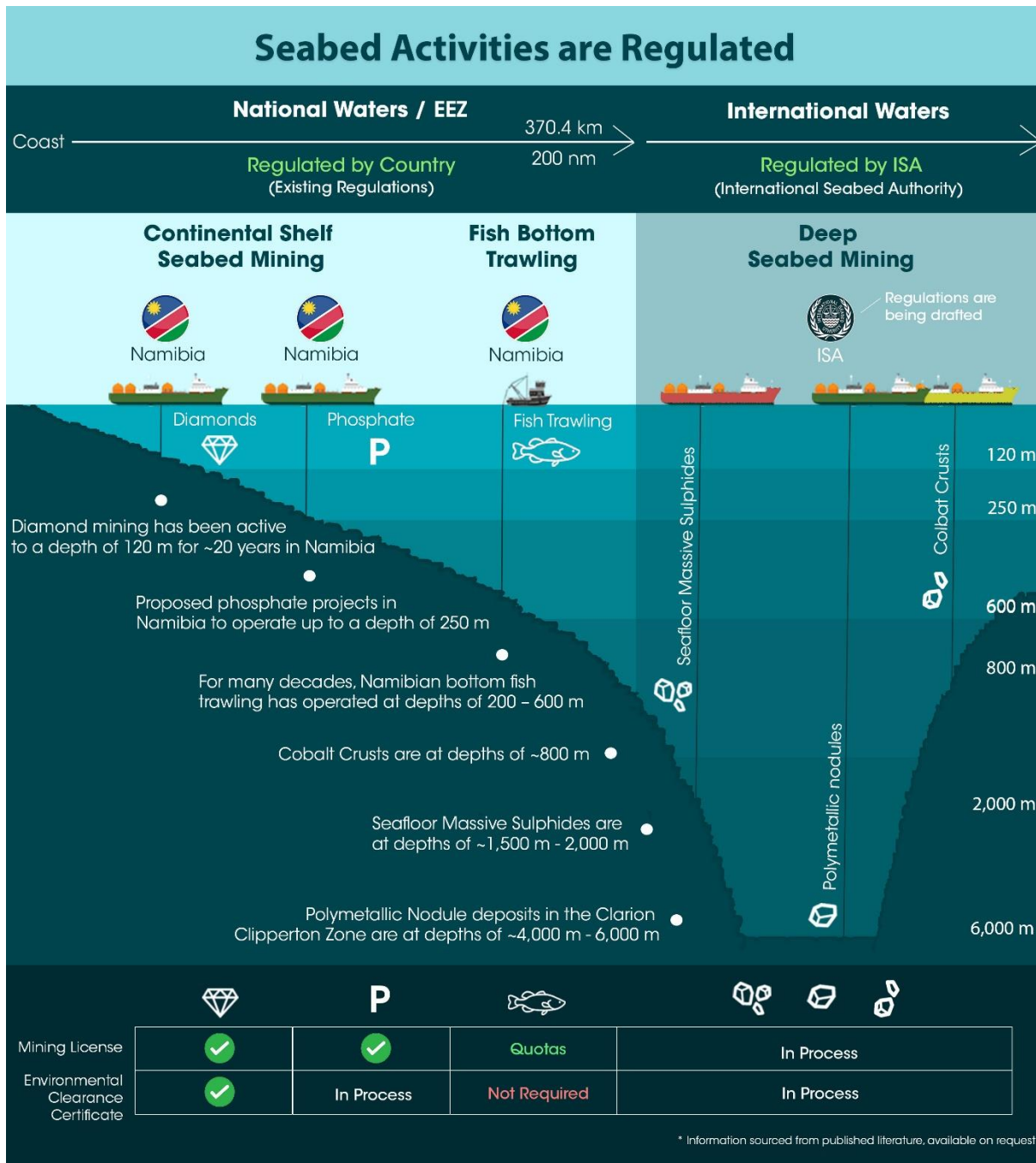
**CoM Response:**

This comparison is factually inaccurate as current (diamonds) and proposed (phosphate) Namibian seabed mining operate up to 250m within Namibian National Waters, whereas the seabed mining referred to by SM is proposed in International Waters at much deeper depths of 800m to about 6,000m.

These mining projects in International Waters fall under the jurisdiction of the International Seabed Authority (“ISA”) and are typically looking to mine minerals such as polymetallic nodules, cobalt crusts, and massive sulphides, see Figure 4 below. The ISA is currently formulating its Seabed Mining and Environmental Management regulations, after which all the seabed mining proponents (in International Waters) will undertake the required impact assessments before mining and environmental approvals are permitted by the ISA.

Unlike the proposed seabed mining in International Waters, **seabed mining in Namibia’s National Waters is an established industry that has been comprehensively regulated and studied for several decades.** Significant information on the seabed and marine resources off the Namibian coast and continental shelf are currently held by the MFMR as well as other agencies including the Benguela Current Commission and other government agencies.

Figure 4: Seabed industries, their activities, water depths and regulatory bodies.



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<sup>i</sup> Penney et al 2008: Completed for the Benguela Current Large Marine Ecosystem (BCLME) Programme in 2008.

<sup>ii</sup> Amoroso RO et al 2018; Bottom trawl fishing footprints on the world's continental shelves. *Proc Natl Acad Sci U S A*. 2018 Oct 23;115(43): E10275-E10282. doi: 10.1073/pnas.1802379115. Epub 2018 Oct 8. PMID: 30297399; PMCID: PMC6205437.

<sup>iii</sup> Hiddink, J. et al. (2017) Global analysis of depletion and recovery of seabed biota after bottom trawling disturbance. *Proceedings of the National Academy of Sciences* 114(31):201618858.

<sup>iv</sup> Hiddink JG, Jennings S, Kaiser MJ (2006) Indicators of the ecological impact of bottom-trawl disturbance on seabed communities. *Ecosystems* 9:1190–1199.

<sup>v</sup> Sala, E., Mayorga, J., Bradley, D. et al. (2021) Protecting the global ocean for biodiversity, food and climate. *Nature* 592, 397–402. <https://doi.org/10.1038/s41586-021-03371-z>

<sup>vi</sup> Mafwila, S, 2011: Ecosystem Effects of Bottom Trawling in The Benguela Current System: Experimental and Retrospective Data Analyses, PhD Thesis, University of Cape Town, South Africa.

<sup>vii</sup> Newell, R.C., Woodcock, T.A. (2013). *Aggregate Dredging and the Marine Environment: an overview of recent research and current industry practice*. The Crown Estate, pp. 165.

<sup>viii</sup> Chiripanura, B & Teweldemedhin, M. (2016); “An Analysis of the Fishing Industry in Namibia: The Structure, Performance, Challenges, and Prospects for Growth and Diversification”, AGRODEP Working Paper 0021, African Growth and Development Policy modelling Consortium, International Food Policy Research Institute.

<sup>ix</sup> Mafwila, S, 2011: Ecosystem Effects of Bottom Trawling in The Benguela Current System: Experimental and Retrospective Data Analyses, PhD Thesis, University of Cape Town, South Africa.

<sup>x</sup> Dr. Chris Brown, environmentalist and CEO of Namibia’s Chamber of Environment. Source: Brown, Dr. Chris. Personal interview. 20 October 2020 < <https://chamberofmines.org.na/phosphate-mining-marine-environment-highlights-chris-brown/#marine-phosphate-mining-EIA> >.