STATEMENT OF REASONS

for a Declaration of Prohibited Action: Subsea Mining

under section 38 of the Environment Protection Act 2019

BACKGROUND

- 1. 'Seabed mining' refers to the exploration and extraction of sub-sea minerals and extractive minerals for commercial gain. It is a relatively new and evolving industry. Worldwide there are very few seabed mining projects, and limited information available to identify and inform 'best practice' environmental management and rehabilitation in the marine environment.
- 2. On 6 March 2012, in response to strong community concerns regarding the limited knowledge and information about the environmental impacts of seabed mining and management, the Northern Territory Government introduced a moratorium on exploration and mining in the Northern Territory (NT) coastal waters, until a review of the actual or potential impacts of seabed mining was undertaken to provide a basis for the assessment of possible future development and sustainability of the industry. The Northern Territory Environment Protection Authority (NT EPA) and the Aboriginal Areas Protection Authority (AAPA) were requested to provide advice to inform the review.
- 3. In December 2020, the NT EPA provided its 'Review of Seabed Mining in the Northern Territory Environmental Impacts and Management' Final Report (the NT EPA Report) and a Consultation Report which provides an overview and summary of the feedback received during the NT EPA's public consultation process on its draft report. In January 2021, AAPA provided its 'Review of Seabed Mining in the Coastal Waters of the Northern Territory: Report of the Aboriginal Areas Protection Authority' (the AAPA Report).
- 4. The terms 'seabed mining' and 'subsea mining' have the same meaning and are interchangeable terms. 'Subsea mining' is the emerging preferred term for seabed mining and therefore used in the declaration and this statement of reasons.

DECISION TO DECLARE A PROHIBITED ACTION

- 5. As the Minister for Environment, I declare a prohibition on subsea mining using my powers under section 38 of the *Environment Protection Act 2019* (EP Act). This prohibition will apply to all activities associated with the exploration for and mining of mineral resources in NT coastal and intertidal waters; including, from the surface of, or below the seabed.
- 6. In making my decision, I have considered and applied the principles of ecologically sustainable development (ESD) and the objects expressed in the EP Act, together with the advice contained in the reports from the NT EPA and the AAPA (collectively the subsea mining reports).
- 7. My decision is based on:
 - the important values of the coastal and marine environment

- the potential impacts on the coastal and marine environment and sacred sites
- the limited information available and significant uncertainty about how to effectively and appropriately manage these impacts or to rehabilitate the seabed once mining is complete
- the potential impacts on the NT's existing marine resource based industries, such as fishing, aquaculture, pearling, and tourism
- the complexities of managing a new and emerging industry in a highly dynamic environment.
- 8. I am satisfied that the coastal and marine environment of the NT should be protected and that a declaration prohibiting subsea mining is necessary to further the objects of the EP Act.
- 9. My reasons are explained further below.

REASONS

10. I have had regard to the definition of 'environment' under section 6 of the EP Act that encompasses physical, biological, economic, cultural and social aspects.

Value of the coastal and marine environment

- 11. NT waters are shallow, relatively clear and highly dynamic. Territory coastal and marine areas are largely intact and unspoiled, encompassing several seas and major estuaries, rich in natural resources, biodiversity, cultural heritage and supporting a range of regional and local economies and livelihoods.
- 12. NT coastal and marine environments contain values that are of national and international significance, and include a rich marine fauna (such as dolphins, whales, dugongs, birds, reptiles, and fishes), extensive coastal and benthic habitats (such as seagrass beds, mangrove communities) and complex processes that drive these systems.
- 13. Cultural and social integrity is of paramount importance to protect Aboriginal connections, songlines, dreamings, sacred sites and the traditional values of Aboriginals.
- 14. Community and social values associated with tourism, fishing and recreational activities is also integral to Territorian's livelihoods and lifestyle.
- 15. NT marine and coastal waters also contain underwater cultural heritage such as submerged Aboriginal cultural landscapes, Aboriginal and Macassan archaeological sites and shipwrecks, historic aircraft wrecks and shipwrecks, and maritime infrastructure.
- 16. The values of the coastal marine environment are highly treasured by Territorians for their natural, environmental, cultural (Aboriginal and non-Aboriginal origin), and recreational importance.

- 17. I am satisfied there are physical and biological, social and cultural features of the coastal and marine environment that should be protected to further the objects of the EP Act.
- 18. The coastal and marine environment also provides important economic value from natural resource and marine-based industries such as fishing, aquaculture, pearling and tourism. The Final Report of the Territory Economic Reconstruction Commission (TERC Report) identifies that tourism has the highest job creation potential of all the sectors across all regions in the NT.
- 19. I recognise that there are potential economic benefits for the Territory associated with subsea mining, including for example, direct and indirect job creation, government revenue through royalties and taxes, and contribution to local community benefit programs.
- 20. Economic, social, cultural and biological values are inherently connected with each other and the environment.
- 21. I am satisfied there are economic features of the environment that are worthy of protection. I am satisfied that the existing economic values of the environment should be given greater protection and weight than the potential economic benefits of an untested industry.

Knowledge of potential impacts

- 22. There are a wide range of potential direct and indirect impacts to the marine environment and environmental values that can occur through the extraction of mineral resources from the seafloor.
- 23. The NT EPA Report identifies the risks and potential impacts on coastal and marine environmental values of the NT. Whilst the NT EPA's Report did not explicitly discuss mining in intertidal areas, it noted that impacts and management approaches would be similar to those associated with subsea mining more broadly.
- 24. The AAPA report identifies the risks and potential impacts on sacred sites within coastal waters of the NT.
- 25. Subsea mining has the potential to directly impact coastal processes, marine environmental quality, marine ecosystems and habitats, marine flora and fauna, Aboriginal sacred sites and areas of cultural significance (for example, songlines and underwater cultural heritage) and other potential impacts such as creating safety issues for marine traffic and other users coming into contact with mining activities.
- 26. Subsea mining also has the potential to indirectly impact all of these matters due to the interconnectedness of the marine environment, including processes, habitats and ecosystems of coastal waters and the intertidal zone. For this reason I consider it is appropriate to extend the prohibition to the intertidal zone. Intertidal areas are essential to the existence of many marine and coastal environmental values.
- 27. I am satisfied that there is the potential for wide-ranging impacts on the environment from subsea mining.

Information and uncertainty

- 28. The subsea mining reports identify a lack of adequate environmental information and knowledge about the existing condition of environmental values and the potential impacts from subsea mining, as a major constraint on management and mitigation of risks from subsea mining.
- 29. Baseline information on sacred sites, underwater heritage and on the distribution and abundance of many marine species and their habitats is lacking, as is an understanding of the processes that drive these populations and how disturbance from extraction, processing and transportation would impact them.
- 30. Having an adequate knowledge base is critical in predicting and assessing environmental impacts and developing appropriate mitigation measures. The lack of adequate information contributes to the uncertainty regarding the effectiveness of management and mitigation measures.
- 31. Significant investment in scientific research and information gathering would be required prior to authorising activities to extract mineral resources from the NT coastal and marine waters.
- 32. There remains considerable uncertainty about the nature and extent of potential impacts from subsea mining. I am satisfied that the level of uncertainty and lack of information requires substantial investment in research and knowledge building to address the gaps and reduce uncertainties, thereby warranting the application of the precautionary principle.

Regulatory environment

- 33. Legislation specifically aimed at managing subsea mining rights and activities does not exist in the NT. Subsea mining activities would be managed under existing legal frameworks the same way as mining activities conducted on land.
- 34. I consider that the NT's mineral titling system may be well able to manage the grant of titles over NT coastal waters. I have concerns, however, about the ability for mining operators to limit their environmental impacts to within the boundaries of the mineral title given the interconnectedness of the coastal and marine environment.
- 35. The subsea mining reports identify matters and the challenges that would need to be addressed in order to ensure the regulatory framework is capable of managing a subsea mining industry and to enable the industry to obtain the necessary social licence to operate.
- 36. Such work ranges from requirements to reform legislation, and develop policy and technical guidelines, to ensuring government, the NT EPA and regulators have the appropriate regulatory framework, resources and expertise to deliver policy and technical guidance, rigorous environmental impact assessment and regulatory oversight of a new and complex industry.
- 37. At this time, I am satisfied that substantial work will be required to ensure an appropriate and adequate regulatory framework is developed to manage subsea mining activities to meet the objectives of the EP Act.

Ecologically sustainable development

- 38. I have taken account of the meaning of ESD and the principles of ESD set out in Part 2, Division 1 of the EP Act. I consider that all the principles of ESD are relevant to my decision. I have considered and weighed each of the principles in making my decision, however I have had particular regard to the application of the precautionary principle and its relationship to the other principles of ESD as they apply to proposals to conduct subsea mining. The precautionary principle is directed towards the prevention of serious or irreversible harm to the environment in situations of scientific uncertainty.
- 39. I am satisfied there is an extensive scientific knowledge gap on the impacts of subsea mining and scientific uncertainty as to the extent of the potential damage to the environment. At this point in time, scientific knowledge and information is incomplete or lacking and unavailable.
- 40. I am satisfied that a prohibition on subsea mining is consistent with the principles of ecologically sustainable development.

Draft declaration and public submissions

- 41. In making my decision to commence this declaration process, I had regard to the views in the submissions to the NT EPA including those that supported subsea mining and those that did not. Consideration of those stakeholder and community views informed my draft declaration.
- 42. On 5 February 2021 I announced my decision to commence the process to declare 'seabed mining' a prohibited action. In accordance with the Environment Protection Regulations 2020, I prepared a draft declaration prohibiting subsea mining (the "draft declaration").
- 43. The draft declaration identified that a mining activity as defined under section 4 of the *Mining Management Act 2001* within the NT coastal waters and intertidal zone is prohibited.
- 44. The area subject to the draft declaration included the high water mark, due to the nature of tides and river systems in the NT which can be subject to the ebb and flow of the tide, but will not extend further inland than the high water mark. This will capture flows seawards but not inwards. The draft declaration included this area due to the high connectivity between terrestrial environments, intertidal areas and the marine environments of the NT.
- 45. The draft declaration identified that the prohibition would not include certain activities associated with mining that are for minerals mined outside of the NT coastal waters or intertidal zone. The reasons these matters were excluded was to ensure that there is no unintended consequence of inhibiting existing activities that are not in connection to subsea mining activities including but not limited to:
 - dredging
 - works in connection with tunnels, wells, pipelines, conduits or cables
 - petroleum exploration and production

- bioprospecting and removal of subsea living or organic matter
- carbon sequestration and subsea gas storage
- · activities for the purpose of facilitating shipping and navigation, and
- transportation and the construction and maintenance of transport infrastructure such as ports, barges, railways, marinas, and bridges.
- 46. On 10 May 2021, I sought feedback on the draft declaration.
- 47. I received 285 submissions. 271 of these submissions were public form submissions based on a campaign response (all Territory based submissions) and 14 public submissions were received from organisations and individuals. This Statement of Reasons does not detail individual submissions, however, copies of all submissions received (with the author's approval) will be made available online via the Department of Environment, Parks and Water Security website.
- 48. The majority of the submissions focused on the decision to ban subsea mining (with most reiterating their support for the ban) rather than the contents of the draft declaration itself.
- 49. Submissions of support for the draft declaration to prohibit subsea mining were largely from the public, environmental organisations, land councils and Aboriginal representatives, as well as the NT Seafood Council, the Minerals Council of Australia (MCA) and the NT EPA. The MCA and the NT EPA raised minor concerns about the wording of the draft declaration, and provided recommendations to improve the declaration's clarity.
- 50. With the exception of the MCA, submissions from the mining industry generally argued against any ban on subsea mining, expressing objection to the draft declaration and my Statement of Reasons for the draft declaration.
- 51. These submissions included recommendations that I consider alternative options to proceeding with a prohibited action declaration under section 38 of the EP Act. I have considered the appropriateness of declarations under section 36 (protected environmental area) and section 30 (referral triggers) of the EP Act. I am of the view that a declaration under section 38 of the EP Act is the most appropriate manner by which to ensure the protection of the NT coastal and marine environment from the impacts of subsea mining.
- 52. Nothing in the submissions has led me to consider that I should not proceed with making a declaration to prohibit subsea mining.

- 53. However, pursuant to regulation 32(2)(b), I have determined to make the following amendments to the draft declaration:
 - a. Part 2, clause 3 to clarify that horizontal drilling 'for the purposes of a mining activity' is a prohibited action and provide greater certainty. The new clause 3 will read:
 - "3. To avoid doubt, horizontal drilling for the purposes of a mining activity from outside an area specified in Part 3 into an area specified in Part 3 is a prohibited action."
 - b. Part 4, clause 7(b) to amend the wording to focus on risk and uncertainty which recognises that subsea mining at this time is not appropriate and without a reliable body of scientific evidence cannot be effectively regulated. The new clause 7(b) will read:
 - "7(b) the mining activity in the areas specified in Part 3 poses real risks of significant impacts that are adverse to the value of this environment and due to the risks and uncertainty, subsea mining activity at this time is unable to be adequately assessed and regulated appropriately in the areas specified in Part 3 in a manner consistent with the objects of the Act; and"

Objects of the Environment Protection Act 2019

- 54. The statutory purpose of the EP Act is to "provide for the protection of the environment and for related purposes". This purpose is further entrenched in the objects of the EP Act.
- 55. As part of my decision to declare a prohibition on subsea mining, I have considered the purpose and the objects of the EP Act, recognising however, that sections 3(c) and (d) relate to the environmental impact assessment process and are not relevant to my decision.
- 56. Having regard to all of the above, I am satisfied that the decision to declare subsea mining as a prohibited action is necessary and consistent with furthering the objects of the EP Act.
- 57. The terms of my final declaration are contained in the 'Declaration of Prohibited Action: Subsea Mining'.

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MINISTER FOR ENVIRONMENT

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