



Environmental Protection Act 1986

**Hon Amber-Jade Sanderson MLA**  
**Minister for Environment; Climate Action**

## **MINISTER'S APPEAL DETERMINATION**

### **APPEALS AGAINST REPORT AND RECOMMENDATIONS OF EPA REPORT 1704 – MARDIE PROJECT**

#### **Purpose of this document**

This document sets out the Minister's decision on appeals lodged under section 100(1)(d) of the *Environmental Protection Act 1986* in objection to the above report. This document is produced by the Office of the Appeals Convenor for the Minister but is not the Appeals Convenor's own report, which can be downloaded from the Appeals Convenor's website at [www.appealsconvenor.wa.gov.au](http://www.appealsconvenor.wa.gov.au).

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| <b>Appellants:</b>           | MG Kailis Group<br>Western Australian Fishing Industry Council Inc<br>Protect Ningaloo  |
| <b>Proponent:</b>            | Mardie Minerals Pty Ltd   |
| <b>Proposal description:</b> | The proposal is to use seawater to produce raw salts as a feedstock for processing high purity salt, fertiliser grade sulphate of potash, and other commercial by-products. The proposal includes a seawater intake, concentrator and crystalliser ponds, processing plant, bitterns disposal to the marine environment, and a trestle jetty export facility. |
| <b>Minister's Decision:</b>  | The Minister allowed the appeals in part  |
| <b>Date of Decision:</b>     | 10 November 2021  |

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#### **REASONS FOR MINISTER'S DECISION**

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The Minister received three appeals in objection to the report and recommendations of the Environmental Protection Authority (EPA) in respect to the proposal.

Mardie Minerals Pty Ltd proposes to use seawater to produce high purity salt, sulphate of potash, and other commercial by-products at the Mardie Project area located about 80 kilometres south-west of Karratha, in the Pilbara region of Western Australia.

Salt, fertiliser grade sulphate of potash, and potentially other commercial by-products will be transported by truck from the stockpile areas to the barge-loading facility on a trestle jetty. From here, transshipment barges will travel offshore to dock with ocean-going vessels and transfer product from the barge into the bulk carrier vessels for overseas export.

The concerns raised by the appellants are set out in detail in the Appeals Convenor's report. In summary, appellants expressed concern about the EPA recommending approval of a proposal that will have significant impacts to habitat values on a regional scale and the appropriateness and ability of research offsets to counterbalance these impacts.

### **Minister's decision**

On the basis of the information available, the Minister considered the EPA's recommendations were consistent with relevant guidelines and that no further assessment or reassessment was required.

The Minister however varied the EPA's recommended conditions to better reflect the intended outcomes of the EPA's assessment and to improve transparency and confidence in the research offset conditions.

Key aspects of the Minister's decision include a new outcome to be added to condition 6-1 specifying that the proposal is to have no project attributable direct or indirect impacts to subtidal habitat (including subtidal macroalgae habitat). The Minister also required the proponent to prepare a summary offset plan that is to be made publicly available and allow for broader government oversight in the design of the offset projects to ensure they contribute towards conservation outcomes.

It follows that the Minister allowed the appeals in part, by varying the EPA's recommended conditions. The full reasons for the Minister's decision are set out below.

### **Structure of decision**

Having considered the information before her, the Minister agreed with the Appeals Convenor's characterisation of the appeals as comprising two elements:

1. whether the EPA's assessment adequately considered impacts to habitat values; and
2. whether the conditions recommended by the EPA are sufficient to ensure the impacts of the proposal are acceptable.

### **Need and value of the proposal**

One appellant submitted that the proponent, EPA and government should assess and demonstrate the wider need and value of this project in a regional and state context and how that value outweighs the significant environmental impacts.

The Minister noted that the role of the EPA in assessing a referred proposal is not to make a final decision on whether the proposal should be implemented. Rather, the EPA is required to prepare an assessment report, which identifies key environmental factors and makes a recommendation as to whether or not the proposal may be implemented. In making its recommendation, the EPA is confined to a consideration of environmental factors and to the impact of the proposal on the environment.

A final decision on whether or not the proposal may be implemented is made by the decision-making authorities under section 45 of the *Environmental Protection Act 1986* (the Act). That agreement or decision is not restricted to environmental factors: it is for the decision-makers to determine the weight to be given to environmental factors, and the balancing of those factors with economic, social, cultural and other considerations.

The Minister's decision on appeal is limited to the consideration of the adequacy of the EPA's report and recommended conditions and is not a final decision on the acceptability of the proposal. Broader concerns about the need and value of the proposal are a matter for the

process set out in section 45. These matters were therefore not further explored in the Minister's decision.

### **Did the EPA adequately assess impacts to habitat?**

The Minister was advised that the EPA considered project-related impacts from the proposal against its objective that 'biological diversity and ecological integrity are maintained' for the key environmental factors Flora and Vegetation, Benthic Communities and Habitat, Terrestrial Fauna and Marine Fauna.

In Report 1704, the EPA identified that the implementation of the proposal will result in 'significant residual impacts' to 11 environmental values. This includes, for example, clearing 2,319 hectares of good to excellent condition native vegetation and clearing up to 880 hectares of algal mat (up to 14 per cent of the regional extent).

The EPA concluded that the proposal could be implemented consistently with Environmental Factor Guideline objectives, subject to strict outcomes-based conditions, management plan requirements and offsets. Subject to the Minister's decision below in respect to marine species, she accepted the EPA's advice that its assessment considered the habitat values present within a regional framework and accepted its conclusion that the proposal is consistent with its environmental factor objectives.

#### Impacts to marine species and productivity

Appellants submitted that the EPA inadequately considered the intertidal and subtidal marine habitats in the project area, which were taken to be critical habitat for commercial and significant marine juvenile species, in particular green sawfish, prawns and bluespotted emperor. Appellants also submitted that the EPA's assessment failed to properly apply the Environmental Factor Guideline for Benthic Communities and Habitats.

In relation to impacts to the marine fauna species identified in the appeals, the EPA advised that it primarily assessed impacts to critical habitat for marine fauna through its assessment of benthic communities and habitat.

The Appeals Convenor concluded that the EPA's approach to assessing the impacts on benthic communities and habitats, particularly in relation to intertidal habitats and subtidal habitats impacted by dredging and bitterns disposal is consistent with the stated objective for the EPA's Environmental Factor Guideline – Benthic Communities and Habitats, in that it focussed on the maintenance of biological diversity and ecological integrity. The Minister accepted the Appeals Convenor's advice that the risks to adjacent subtidal habitat were implicitly addressed through the EPA's conclusion that the proposal will not interfere with critical benthic communities and habitats.

In relation to the green sawfish, the EPA found that the species is expected to be present in the mouths of the tidal creeks and rivers of the Mardie coastline but unlikely to be found within the upstream tidal reaches where minor works will occur (up to 9 hectares). It was on this basis that the EPA concluded that there was a low risk of the green sawfish being present and unlikely that there would be a significant residual impact to this species.

In relation to the various species of prawns raised in the appeals, the Minister noted that the proponent provided updated information during the appeal investigation that confirmed the high value of subtidal habitat for the Onslow Prawn Managed Fishery.

In relation to bluespotted emperor, the Minister was advised that the available information indicated that juveniles of the species are exclusively associated with subtidal macroalgae

habitat and that the presence of juveniles and their macroalgae habitat have been confirmed within the subtidal area adjacent to the Mardie Project.

As a result of the above, the Appeals Convenor indicated that the value of the subtidal habitat near the Mardie Project area, including macroalgae habitat, is high. This finding is consistent with the EPA's general conclusions about marine environmental quality that establishes that the waters adjacent to the proposal area require maximum ecological protection.

On balance, the Minister was satisfied that the EPA's assessment considered impacts to the subtidal habitats adjacent to the Mardie Project area and that that remittal to the EPA was not required in respect to these values.

### **Can conditions be applied to the proposal to ensure outcomes meet objectives?**

This element of the appeal was considered to raise two issues:

1. whether the recommended conditions are adequate to ensure ecological impacts to the habitat of the species raised by appellants are consistent with relevant objectives; and
2. whether the offsets recommended by the EPA are adequate to counterbalance significant residual impacts to marine habitat values of concern raised by appellants.

#### Conditions limiting impacts

The Appeals Convenor recommended that the conditions be amended to ensure that the impacts to subtidal nearshore habitat adjacent to the Mardie Project area are not greater than assessed.

The Minister agreed with this view and determined to amend condition 6-1 to include an outcome to clarify that the proposal is to have no project attributable direct or indirect impacts to subtidal habitat, with consequential amendments to the balance of condition 6 as required to ensure these values are the subject of appropriate monitoring and management actions to identify and address any impacts. In the event that project-related impacts on the subtidal habitat of these species are identified, these changes will ensure that the contingency fund specified in condition 14-1(4) includes provision for further financial contributions for research.

#### Marine and intertidal research offset

While the changes to condition 6 above are directed at ensuring the proposal has no impact on the habitat for the identified species outside authorised areas, the appeals raised concerns about the EPA's reliance on a research offset to address the significant residual impacts identified to mangroves, algal mat and coastal samphire.

During the appeal investigation, appellants submitted that research activities of the kind contemplated by the EPA are inadequate to offset the significant residual impacts to marine conservation values, given the length of coast.

On the information before her, and noting the changes to condition 6 above, the Minister agreed with the Appeals Convenor that the EPA correctly applied policy in considering the application of offsets. Specifically, the Minister considered that it was open to the EPA to recommend a 'research only' offset.

However, the Minister agreed with the Appeals Convenor that the offset condition should be amended to improve transparency and provide for broader government oversight in the design of the offset projects to ensure they contribute towards conservation outcomes and/or State government initiatives or policies.

In this regard, the Minister determined that a new requirement should be included in condition 14 for the preparation of a Summary Offset Plan, that includes the details about the design of the proposed research and management programs and completion criteria for each project to meet the specified outcomes. This plan will be required to be to the satisfaction of the Chief Executive Officer of the Department of Water and Environmental Regulation on advice from the Department of Primary Industries and Regional Development (DPIRD) and the Department of Biodiversity, Conservation and Attractions and be made publicly available within a reasonable timeframe.

The Minister further agreed that conditions are added to ensure more flexible funding arrangements for the research projects and an increase by 10 per cent to support delivery. The full details of the Appeals Convenor's recommendations (which the Minister adopted) are set out in her report.

### **Next steps**

As noted above, a final decision on whether or not the proposal may be implemented, and if so, the conditions to which it may be subject, is a matter for determination under section 45 of the Act.

It is the Minister's expectation that the proponent will continue its engagement with the Western Australian Marine Science Institute, which has governance systems and experience in conducting research. Additionally, the Minister noted that DPIRD is actively conducting baseline monitoring for commercial fishing species identified in these appeals on the Pilbara coastline and the Minister encourages the proponent to liaise with DPIRD to identify if there are any opportunities to partner in this work.

The Minister agreed with the EPA's comments that this proposal does not set a precedent for any future salt proposals on the West Pilbara Coast which will be considered on their respective merits. The Minister expected this would include consideration of potential regional and cumulative impacts on benthic communities and habitats.

As part of its recent strategic advice under section 16(e) of the Act relating to the Exmouth Gulf, the EPA has recommended a review and update of the "*EPA Advice – Protection of Tropical Arid Zone Mangroves along the Pilbara Coastline*" (2001). While the State government is continuing to consider the EPA's advice, the Minister confirmed the government's support for a review and update of this guidance. Updated guidance will support cumulative impact assessments and strategic management of key ecological values on the Pilbara coastline.

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Note: this decision is published pursuant to the terms of section 110 of the *Environmental Protection Act 1986* and regulation 8 of the *Environmental Protection Regulations 1987*.

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