

Environmental Protection Act 1986

Section 38E

STATEMENT OF REASONS

REQUEST TO DECLARE A PROPOSAL A DERIVED PROPOSAL

Proposal: Orebody 32 Below Water Table

Proponent: BHP Iron Ore Pty Ltd

Strategic proposal: Pilbara Expansion Strategic Proposal

Decision

For the reasons outlined below, the Environmental Protection Authority (EPA) has determined to declare the referred proposal a derived proposal.

Background

On 6 July 2012, BHP Iron Ore Pty Ltd (BHP) referred the Pilbara Expansion Strategic Proposal to the EPA under s. 38 of the *Environmental Protection Act 1986* (EP Act). The proposal included developing iron ore mining and associated mining infrastructure in the Pilbara through existing and future mining operations.

The EPA assessed the proposal as a strategic proposal at the level of Public Environmental Review, and published its report in July 2018 ([Report 1619](#)). The expansion of existing mining operations at the Newman Hub was identified as a future derived proposal in the EPA report.

On 11 July 2019, the Minister for Environment, after consulting relevant decision-making authorities, published Ministerial Statement (MS) 1105, stating that the future derived proposals identified in EPA Report 1619 may be implemented subject to the conditions set out in the statement. The EPA's consideration of Orebody 32 Below Water Table proposal, alongside the Newman Hub (Western Ridge) proposal, are the first two derived proposals since the publication of the MS 1105.

On 28 October 2022, BHP referred the proposal Orebody 32 Below Water Table to the EPA under s. 38 of the EP Act, requesting that the proposal be declared a derived proposal. Details of Orebody 32 Below Water Table proposal are attached to the EPA's s. 38E notice accompanying this Statement of Reasons.

The referral and the request that it be declared a derived proposal were advertised on the EPA Consultation Hub from 11 July to 17 July 2023. Comments related to

potential impacts to groundwater, drinking water quality for Aboriginal communities and impacts to terrestrial fauna habitat through the construction of a pipeline from the mine to Ophthalmia Dam.

Relevant statutory and administrative provisions

On receipt of a request that a referred proposal be declared a derived proposal, the EPA's consideration of the request is subject to the provisions of s. 38E of the EP Act.

After considering public comment and the proposal documentation, the EPA then considers whether or not to declare the referred proposal to be a derived proposal.

To do so, s. 38E(4) of the EP Act requires that:

- the proposal was identified in the strategic proposal, and
- the strategic proposal MS provides that the referred proposal may be implemented, subject to any conditions.

The EPA may refuse to declare the referred proposal to be a derived proposal under s. 38E(5) of the EP Act if it considers that:

- the environmental issues raised by the referred proposal were not adequately assessed when the strategic proposal was assessed,
- there is significant new or additional information that justifies the reassessment of the issues raised by the referred proposal, or
- there has been a significant change in the relevant environmental factors since the strategic proposal was assessed.

Sections 38E (4) and (5) provide the requirements for the EPA's consideration of a request to declare a referred proposal to be a derived proposal.

Materials considered in making this decision

In determining whether to declare the referred proposal a derived proposal, the EPA has considered the following:

- the information provided by the proponent
- further information sought from the proponent, received 7 July 2023
- further information sought from Department of Mines, Industry Regulation and Safety, and Department of Biodiversity, Conservation and Attractions
- information obtained from conducting its own inquiries and investigations.

Consideration of the Five Aspects

Section 38E subsections (4) and (5) can be considered as providing five aspects to the EPA's consideration of a request for the declaration of a derived proposal.

1. Was the referred proposal identified in a strategic proposal that was assessed by the EPA?

Yes. This proposal is for the expansion of mining operations at BHP's Orebody 32 (as part of the Newman Hub) to mine below the water table, which was identified as a future proposal in the strategic assessment. The specifications and characteristics of the future proposals are identified in Schedule 1 of MS 1105. The proposal referred to the EPA is generally consistent with these requirements, which is outlined below.

Element	Description and Authorised Extent (From the MS 1105)	Orebody 32 Below Water Table Characteristics
<p>Iron ore mines and associated activities and operations, being new mining operations at:</p> <ul style="list-style-type: none"> • Caramulla • Coondiner • Gurinbidy • Jinidi • Marillana • Mindy • Ministers North • Mudlark • Munjina/Upper Marillana • Ophthalmia/Prairie Down • Rocklea 	<p>1. Clearing (as defined in s. 51A of the EP Act), caused by or likely to be caused by all future proposals identified in Column 1 of Table 2, shall not exceed 98,500 hectares (ha).</p>	<p>The expansion of existing mining operations within Orebody 32, Eastern Ridge (previously authorised by MS 1037). Orebody 32 currently mines for iron ore above the water table, and BHP proposes to expand mining operations below water table.</p> <p>The clearing of 224 ha of vegetation, as the first derived proposal under the Strategic Proposal referred to the EPA, is within the clearing limit of 98,500 ha.</p> <p>The proposal is entirely located within the Authorised extent, Figure 1.</p>

<ul style="list-style-type: none"> • Roy Hill • Tandanya <p>and future expansions to new mining operations listed above and existing mining operations at:</p> <ul style="list-style-type: none"> • Jumblebar • Mining Area C • Newman • Yandi. 	<p>2. Planned, designed and managed (demonstrated in the referral of future proposal and draft management plans submitted at the time of referral of future proposals) to ensure:</p> <p>a. Cumulative impacts to key environmental factors are minimised through use, where practicable, of existing mine infrastructure, rail, road and associated developments and do not exceed cumulative impact limit of 98,500 ha specified above.</p>	<p>Cumulative impacts to key environmental factors are proposed to be minimised through use, where practicable, of existing mine infrastructure, rail, road and associated developments of Eastern Ridge.</p> <p>Some draft Environmental Management Plans (EMPs) have been submitted at time of referral, and all relevant plans will be required to be submitted to the CEO before ground disturbing activities commence, as outlined in Condition 6 of MS 1105.</p> <p>Cumulative impacts are not proposed to exceed the cumulative impact limit of 95,500 ha.</p>
	<p>b. The environmental objectives specified in the relevant conditions will be met.</p>	<p>The EPA considers that the following conditions of MS 1105 are relevant. These conditions will require EMPs to be implemented for this proposal to ensure that relevant environmental objectives are met:</p> <ul style="list-style-type: none"> • Condition 7 Flora and Vegetation EMP • Condition 8 Terrestrial Fauna EMP • Condition 9 Subterranean Fauna EMP • Condition 10 Water EMP • Condition 12 Greenhouse Gas Emissions • Condition 13 Cultural Heritage EMP

		<ul style="list-style-type: none"> • Condition 15 Rehabilitation and decommissioning • Condition 16 Offsets <p>The EPA's expectation is for the environmental outcomes, including those outlined in Other Advice (below), are set in these EMPs to ensure the EMP objectives are met.</p>
	<p>c. Scientifically verifiable estimates of the likely success of future rehabilitation have been made.</p>	<p>BHP has provided rehabilitation information in the <i>BHP Rehabilitation Report FY2021</i>. BHP considers that future rehabilitation activities are likely to be successful for the Orebody 32 proposal due to the following:</p> <ul style="list-style-type: none"> • early planning as part of closure processes, • implementation of the latest techniques and, • incorporation of learnings from the performances of existing rehabilitation. <p>The EPA considers it has sufficient information to declare this a derived proposal. Residual uncertainty about rehabilitation outcomes is considered in Other Advice (below).</p>

2. Was an agreement reached or a decision made that the referred proposal could be implemented or could be implemented subject to conditions and procedures?

Yes. The Minister for Environment issued MS 1105 on 11 July 2019. The Statement states that future proposals identified in EPA Report 1619 and described in Schedule 1 may be implemented subject to the conditions set out in the statement. As outlined above, the referred proposal by BHP satisfies these requirements.

3. Does the referred proposal raise environmental issues that were not adequately assessed when the strategic proposal was assessed?

No. The EPA assessed the key environmental factors Hydrological Process and Inland Waters Environmental Quality during the preparation and assessment of the Strategic Proposal and EPA Report 1619. These two key environmental factors were amalgamated in June 2018 into Inland Waters. Notwithstanding this difference in naming of factors, the environmental issues relevant to these factors were adequately assessed.

The EPA assessed the following key environmental factors alongside Inland Waters; Flora and Vegetation, Terrestrial Fauna, Subterranean Fauna, Social Surroundings, and Greenhouse Gas Emissions. These remain the relevant key environmental factors of the assessment. The referred proposal does not raise environmental issues that were not adequately assessed when the strategic proposal was assessed.

4. Is there significant new or additional information that justifies reassessment of the issues raised by the referred proposal?

No. The EPA considers that there is no new or additional information that justifies reassessment of the Pilbara Expansion Strategic Proposal.

The EPA notes that the proposal is situated within an area with broader regional environmental issues such as contamination of per- and polyfluoroalkyl substances (PFAS) within the Newman catchment area, cumulative impacts from other industries upon the Ethel Gorge aquifer stygobiont Threatened Ecological Community, cumulative impacts to native flora and fauna species through invasive species and vegetation fragmentation, and impacts to the Newman airshed from dust generation. The EPA considers its assessment of contaminants and other cumulative impacts as part of the Pilbara Expansion Strategic Proposal and the conditions of MS 1105 remain appropriate to adequately manage potential impacts from PFAS contamination and other contaminant related cumulative impacts.

Clarification on matters related to key environmental factors was sought from the proponent in a Request for Further Information (Attachment 5). The proponent responded on 7 July 2023, with the supply of additional information and documentation to fill and clarify knowledge gaps.

The request that the proposal be declared a derived proposal was advertised on the EPA's Consultation Hub from 11 July to 17 July 2023. No new information was submitted through the call for public comments on the referred proposal.

5. Has there been a significant change in the relevant environmental factors since the strategic proposal was assessed?

No. The EPA does not consider there has been a significant change in relevant environmental factors since the strategic proposal was assessed.

Other Advice

EPA's expectations of environmental protection outcomes and other matters in EMPs

The EPA advises that conditions 7, 8, 9, 10, 12, 13, 15 and 16 in MS 1105 will apply to the derived proposal requiring the preparation and submission of EMPs to the Department of Water and Environmental Regulation (DWER) for approval by the Chief Executive Officer (CEO), or delegate. These conditions will apply alongside administrative conditions 1, 2, 3, 4, 5 and 6.

The EPA reviewed some of BHP's draft EMPs through consideration of the derived proposal. All EMPs are now required to be submitted for the confirmation of the CEO within six months, and before ground disturbing works (unless otherwise agreed by the CEO).

The EPA provides the following advice to the CEO about its expectations of the level and type of information in the EMPs to ensure the MS 1105 objectives are met:

- clear, measurable environmental outcomes
- scientifically robust monitoring capable of detecting and substantiating whether the environmental outcomes are achieved, and robust management and response actions to mitigate impacts that are not meeting criteria, ensuring that environmental outcomes are achieved
- confirmation of avoidance areas for high-quality vegetation communities and terrestrial fauna habitat
- targeted biological surveys for terrestrial fauna including short-range endemic invertebrate species, flora and vegetation, subterranean fauna, and hydrogeological modelling, to the extent necessary to ensure environmental outcomes of conditions 7, 8, 9, and 10 are clearly defined and can be robustly monitored
- adaptive management processes to review EMPs and a process to change proposal activities, in the event that environmental outcomes are not achieved
- in relation to condition 15: Rehabilitation and decommissioning, scientifically verifiable estimates of the likely success of future rehabilitation have been made, completion criteria (are site specific and culturally appropriate), and an adaptive management program is provided, to ensure that the proposal is decommissioned, and the site rehabilitated to a safe, stable and non-polluting in an ecologically appropriate and sustainable manner.

Regional environmental protection outcomes

The EPA notes that the proposal is situated within an area with broader regional environmental issues such as contamination of PFAS within the Newman catchment area, impacts to the Ethel Gorge aquifer stygobiont Threatened Ecological Community, impacts to native flora and fauna species through invasive species and vegetation fragmentation, and cumulative emissions impacting upon air quality in the Newman regional airshed.

The EPA considers that the broader environmental issues are not contributable to one individual proponent or proposal and therefore an overall planning framework for the region is likely required. The EPA identified the need for regional environmental protection framework and guidance as part of its [Strategic Plan 2023-2026](#) and the Eastern Pilbara is one such location where the framework could deliver regional environmental protection outcomes.

EPA's recommended s. 46 inquiry into conditions

The EPA advises that the framework of MS 1105 is not contemporary; however it is still likely to achieve the objectives of the Statement and does not need to be generally contemporised.

The EPA does not consider any conditions need to be inquired into as part of its decision about the derived proposal.

There are however some conditions which the EPA recommends be subject to a section 46 inquiry related to the whole strategic proposal. These include:

- Condition 12: Greenhouse Gas Management Plan. The EPA considers an inquiry into this condition could consider the ability to remove the Greenhouse Gas Management Plan requirement for any relevant period of time that the Commonwealth Safeguard Mechanism can achieve both the EPA factor and the condition 12 objectives.

The EPA also considers an inquiry could examine expected reduction in emissions intensity of emissions from the strategic proposal over time, noting that the emissions intensity of the individual derived proposal is higher than comparable benchmarks at this stage. However, emissions intensity over the life of the plan is expected to reduce and align with emissions intensity requirements set out in the Commonwealth Safeguard Mechanism.

- Condition 13: Cultural Heritage Management Plan: The EPA considers an inquiry into this condition could consider whether its scope is likely to remain appropriate for future derived proposals given significant changes in Aboriginal cultural heritage (ACH) legislation since the strategic assessment, and the ability of any such legislation to mitigate potential impacts on ACH.

The EPA also notes this inquiry could examine whether ACH values associated with the environment could be better protected under the relevant environmental factor EMPs. For example, native vegetation can be identified as an ACH value and potential impacts can also be managed under condition 7 Flora and Vegetation EMP.

- Condition 15: Rehabilitation and Decommissioning. The EPA considers an inquiry into this condition could consider whether its scope is likely to remain appropriate for future derived proposals given:
 - potential changes to the Mine Closure Plans guidelines to include environmental outcomes
 - evidence about the success of rehabilitation and key risks to future success
 - ongoing research outcomes
 - scientifically verifiable estimates of the likely success of future rehabilitation which are made
 - outcomes of regional protection frameworks.

Aboriginal cultural heritage

The EPA advises that condition 13: Cultural Heritage Management Plan as provided in MS 1105 was created in 2019 when the *Aboriginal Heritage Act 1972* was in effect. The Social Cultural Heritage Management Plan (SCHMP) developed by the proponent to fulfill condition 13 was prepared with the expectation of the *Aboriginal Cultural Heritage Management Act 2021* being in force and dealing with direct impacts from the proposal.

The EPA considers that the scope and nature of the Heritage Management Plan required under condition 13 will depend on the final state of any legislation that protects Aboriginal cultural heritage. The EPA considers as far as practicable however there should be one statutory process for traditional owners and the proponents to engage in for derived proposals, including in relation to environmental protection on country affected by the proposal.