



# Report and recommendations of the Environmental Protection Authority



## West Pilbara Iron Ore Project Stage 2 – Hardey Proposal – inquiry under section 46 of the *Environmental Protection Act 1986* to amend Ministerial Statement 944

API Management Pty Limited

Report 1666

January 2020

## **Inquiry under section 46 of the *Environmental Protection Act 1986***

The Minister for Environment has requested that the Environmental Protection Authority (EPA) inquire into and report on the matter of changing implementation conditions 3-1 and 3-2 (Time Limit for Proposal Implementation) in Ministerial Statement 944 relating to the West Pilbara Iron Ore Project Stage 2 – Hardey Proposal.

Section 46(6) of the *Environmental Protection Act 1986* requires the EPA Report to include:

1. a recommendation on whether or not the implementation conditions to which the inquiry relates, or any of them, should be changed
2. any other recommendations that it thinks appropriate.

The following is the EPA's Report and Recommendations to the Minister pursuant to s. 46(6) of the *Environmental Protection Act 1986*.



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Chairman

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# 1. The proposal

The West Pilbara Iron Ore Project Stage 2 – Hardey Proposal (the proposal) is located approximately 50 kilometres (km) west-northwest of Paraburdoo in the Shire of Ashburton. The proposal is to develop an iron ore mine and includes a 20 km gas pipeline corridor and a 150 km rail transport corridor that will connect the proposed mine to the West Pilbara Iron Ore Project Stage 1 – Mine and Rail Proposal infrastructure.

The Environmental Protection Authority (EPA) assessed the proposal at the level of Assessment on Proponent Information and released its assessment report in May 2013 (Report 1474). In this report, the EPA identified the following key environmental factors relevant to the proposal:

- Flora and Vegetation
- Hydrological Processes and Inland Waters Environmental Quality
- Terrestrial Fauna
- Offsets (Integrating Factor).

In applying the EPA's *Statement of Environmental Principles, Factors and Objectives* (EPA 2018a) these factors are now represented by:

- Flora and Vegetation
- Inland Waters
- Terrestrial Fauna.

The EPA concluded in Report 1474 that the proposal can be managed to meet the EPA's environmental objectives, provided there is satisfactory implementation by the proponent of the recommended conditions.

The then Minister for Environment approved the proposal for implementation, subject to the implementation conditions of Ministerial Statement 944 (21 August 2013).

## Previously approved changes to conditions

There have been no changes to the proposal or the implementation conditions under the *Environmental Protection Act 1986* (EP Act) since the publication of Ministerial Statement 944.

## 2. Requested changes to conditions

Condition 3-1 of Ministerial Statement 944 (MS 944) states that the proponent shall not commence implementation of the proposal after the expiration of five years from the date of this statement (being 21 August 2013), and any commencement, within this five-year period, must be substantial.

Condition 3-2 of MS 944 states that any commencement of implementation of the proposal, within five years from the date of this statement, must be demonstrated as substantial by providing the CEO with written evidence, on or before the expiration of five years from the date of this statement.

The proponent has not yet substantially commenced implementation of the proposal. In August 2018 the proponent requested a change to Time Limit for Proposal Implementation (condition 3) of MS 944 in order to extend the authorised timeframe for substantial commencement of the proposal by five years (to 21 August 2023). The proponent has not proposed any changes to the proposal, or a change to any other conditions of MS 944.

In response to the proponent's request, on 31 October 2018, the Minister for Environment requested that the EPA inquire into and report on the matter of changing the implementation conditions relating to the proposal. This report satisfies the requirements of the EPA's inquiry.

### 3. Inquiry into changing conditions

The EPA typically recommends the Minister sets conditions on significant proposals that require them to be substantially commenced within a specified timeframe. Extending this timeframe requires the Minister to change the relevant conditions under s. 46 of the EP Act, and provides for the EPA to review and consider the appropriateness of the implementation conditions relating to the proposal.

The EPA has discretion as to how it conducts its inquiry. This inquiry has considered the currency of the EPA's assessment (Report 1474) and issue of MS 944, as these documents are instructive in determining the extent and nature of the inquiry under s. 46.

In conducting this inquiry, the EPA reviewed the information provided by the proponent and considered the original EPA assessment of the proposal detailed in Report 1474. In considering whether it should recommend an extension of the authorised timeframe for substantial commencement of the proposal, the EPA considered whether there was any change to, or new information relating to, the key environmental factors relevant to the proposal. The EPA also considered if any new key environmental factors had arisen since its original assessment of the proposal.

In addition to the above, the EPA has also considered:

- any changes in environmental, scientific or technological knowledge that may have arisen since the initial assessment
- whether the proposal is being implemented using best practice and contemporary methods so that the EPA objectives for the key environmental factors are met.

#### **EPA policy and procedures**

In conducting this inquiry, the EPA followed the procedures in the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2016* (EPA 2016a) and the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual* (EPA 2018b).

## 4. Inquiry findings

The EPA considered that Flora and Vegetation and Terrestrial Fauna are the key environmental factors relevant to the change to conditions. This determination is based on the length of time since the original biological surveys were conducted and the likelihood that the conservation status of individual species may have changed in this period. The factor of Inland Waters is considered unlikely to have changed significantly.

### 4.1 Flora and Vegetation

The EPA's objective for this factor is *to protect flora and vegetation so that biological diversity and ecological integrity are maintained.*

#### EPA Report 1474

The proposal is situated within two bioregions, the Pilbara and Gascoyne. The mine area and approximately 90 per cent of the transport corridor occur within the Hamersley sub-region of the Pilbara bioregion.

The proposal requires the clearing of 3,470 hectares (ha) of vegetation that is mostly in 'Good' to 'Excellent' condition including:

- 650 ha within the mine area
- up to 2,800 ha along the 150 km rail corridor
- an additional 20 ha for the gas pipeline.

At the time of the assessment, no threatened ecological communities (TECs), priority ecological communities (PECs) or declared rare flora (DRF) had been recorded within the development envelope. One priority flora species, *Nicotiana umbratica* (Priority 3) was recorded in the mine area. Three priority flora species *Indigofera* sp. Bungaroo Creek (Priority 3), *Triodia* sp. Robe River (Priority 4) and *Rhynchosia bungarensis* (Priority 4) were recorded in the transport corridor.

Flora and vegetation surveys and groundwater modelling indicate that riparian vegetation associated with the Hardey River could potentially be impacted by groundwater drawdown from dewatering of the Brockman orebody. Modelling shows that there could be a reduction in the watertable of up to five metres at the Hardey River at the end of mining.

EPA Report 1474 stated that, having particular regard to:

- absence of TECs, PECs and DRF, and the limited amount of potentially groundwater dependent vegetation impacted by the proposal
- recommended condition 6 to ensure that there is no loss of groundwater dependent riparian vegetation within the specified management zone,

it was the EPA's opinion that the proposal could be managed to meet the EPA's environmental objective for this factor.

## Assessment of the proposed change to conditions

The EPA considers that the *Environmental Factor Guideline – Flora and Vegetation* (EPA 2016b) is the current environmental policy and guidance relevant to its assessment of this proposal.

No further flora and vegetation studies have been completed since the publication of MS 944. However the proponent is not proposing any changes to the proposal that would change the potential impacts to flora and vegetation, nor any changes to the conditions of MS 944 relating to the management of impacts to flora and vegetation.

The original surveys indicate that few priority flora have been recorded in the development envelope. The status of these priority species has not changed since the time of the original assessment. The proposal has the potential to impact riparian vegetation associated with the Hardey River which is dominated by *Eucalyptus camaldulensis*, *Eucalyptus victrix* and *Melaleuca glomerata*. These species are considered to be facultative phreatophytes meaning that they utilise groundwater but are not totally reliant on groundwater.

Condition 6-2 of MS 944 requires the proponent to develop and implement a Riparian Vegetation Monitoring and Management Plan to meet the requirements of condition 6-1. Condition 6-1 requires the proponent to ensure that groundwater dewatering and discharge of surplus dewater do not cause the loss of riparian vegetation located within the riparian management zone.

Furthermore, condition 7 requires the proponent to design the rail infrastructure to maintain the natural surface flows and flooding regimes of watercourses, to ensure the proposal does not adversely affect any significant vegetation communities associated with river and creek systems.

Noting the above information, the EPA is satisfied that its objectives for this factor can be met, and the potential impacts of the proposal can be managed through existing implementation condition 1 (Proposal Implementation), condition 6 (Riparian Vegetation) and condition 7 (Surface Water).

## Residual Impacts and Risk Management Measures (Offsets)

The proposal requires clearing of up to 3,189 ha of ‘Good’ to ‘Excellent’ vegetation within the Hamersley subregion of the Pilbara IBRA region. As stated in its advice to the Minister under s. 16(e) of the EP Act (August 2014), the EPA is concerned that, without intervention, the increasing cumulative impacts of development and landuse within the region will significantly impact on biodiversity and environmental values. Consistent with this advice, and the *WA Environmental Offsets Guidelines (2014)*, the EPA recommended a condition (condition 9 of MS 944) be set on the proposal requiring the proponent to contribute funds to ‘a government-established conservation offset fund or an alternative offset arrangement providing an equivalent outcome as determined by the Minister’.

Since the original assessment and the publication of MS 944, the Pilbara Environmental Offsets Fund has been established to receive funds from proponents, and standardised wording has been developed for conditions requiring offsets for



clearing of ‘Good’ to ‘Excellent’ vegetation within the Pilbara IBRA region. The contemporary wording clarifies the obligations of proponents and provides for a consistent approach between proposals for contributions to the fund. The EPA recommends condition 9 of MS 944 is updated to use the contemporary wording.

## 4.2 Terrestrial Fauna

The EPA’s objective for this factor is *to protect terrestrial fauna so that biological diversity and ecological integrity are maintained.*

### EPA Report 1474

The proposal requires the clearing of 3,470 ha of vegetation which has the potential to impact terrestrial fauna through the loss and fragmentation of habitat. Fauna could also become trapped in trenches during the construction of the gas pipeline.

Surveys undertaken for the original assessment indicate that there are eight broad habitat types in the development envelope that are all common and widespread throughout the Pilbara bioregion.

Eight vertebrate fauna species of conservation significance were recorded in the development envelope including three mammals and five birds, of which three are migratory. The conservation significant mammals include:

- Pilbara leaf-nosed bat
- Ghost bat
- Western pebble-mound mouse.

In Report 1474, the EPA considered that the proposal is unlikely to have a significant impact on the conservation significant fauna species as extensive habitat for these species is found in the surrounding areas. Furthermore, the EPA considered that given the quality and level of survey information on terrestrial fauna in the API document, the proposal will not have a significant impact on terrestrial fauna.

Having particular regard to:

- the recommended condition (condition 8) to ensure acceptable management practices are implemented to minimise impacts to fauna during the construction of the gas pipeline,

it was the EPA’s opinion that the proposal could be managed to meet the EPA’s environmental objective for this factor.

### Assessment of proposed change

The EPA considers that the *Environmental Factor Guideline – Terrestrial Fauna* (EPA 2016c) is the current environmental policy and guidance relevant to its assessment of this proposal.

No further terrestrial fauna studies have been completed since the publication of MS 944. However the proponent is not proposing any changes to the proposal that would change the potential impacts to terrestrial fauna, nor any changes to the conditions of MS 944 relating to the management of impacts to terrestrial fauna.

At the time of the original assessment, the ghost bat (*Macroderma gigas*) was listed as a priority species (Priority 4). The ghost bat now has elevated conservation status, being listed as Vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999* and Vulnerable under Schedule 3 of the *Biodiversity Conservation Act 2016*.

A habitat and activity assessment for the Pilbara leaf-nosed bat was undertaken for the original assessment, including an assessment of caves and multiple overhangs and shelters. A habitat assessment for the ghost bat was undertaken in parallel. Several caves were assessed in the resource area with no visible evidence of the Pilbara leaf-nosed bat or ghost bat with the exception of one cave which had aged scats indicating the cave is utilised as a possible night feeding roost.

Noting that no suitable maternity caves for the Pilbara leaf-nosed bat or ghost bat occur within the mine area or transport corridor, the EPA is satisfied that its objectives for this factor can be met, and the potential impacts of the proposal can be managed through existing implementation condition 1 (Proposal Implementation) and condition 8 (Trenching).

## 5. Conclusions and recommendations

### ***Change to condition 3***

The proponent has requested a change to condition 3 in order to extend the Time Limit for Proposal Implementation. The EPA considers it is appropriate to extend the Time Limit for Proposal Implementation by five years to 21 August 2023.

### ***Change to condition 9***

The EPA considers it is appropriate to update condition 9 (Residual Impacts and Risk Management Measures) to contemporary wording requiring the proponent to contribute funds to the Pilbara Environmental Offsets Fund.

### **Conclusions**

In relation to the environmental factors, and considering the information provided by the proponent and relevant EPA policies and guidelines, the EPA concludes that:

- There are no changes to the proposal.
- There is no significant new or additional information that changes the conclusions reached by the EPA under any of the relevant environmental factors since the proposal was assessed by the EPA in Report 1474 (May 2013).
- No new significant environmental factors have arisen since its assessment of the proposal.
- The impacts to the key environmental factors are considered manageable, based on the requirements of existing conditions, and the imposition of the attached recommended conditions.

### **Recommendations**

Having inquired into this matter, the EPA submits the following recommendations to the Minister for Environment under s. 46 of the EP Act:

1. While retaining the environmental requirements of the original conditions of Ministerial Statement 944, it is appropriate to change implementation conditions 3 and 9, and replace them with new implementation conditions.
2. After complying with s. 46(8) of the EP Act, the Minister may issue a statement of decision to change conditions 3 and 9 of Statement 944 in the manner provided for in the attached recommended Statement (Appendix 1).

## References

EPA 2013, West Pilbara Iron Ore Project Stage 2 – Hardey Proposal, report and recommendations of the Environmental Protection Authority, Environmental Protection Authority (Report 1474), Perth, WA.

EPA 2016a, *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2016*, Environmental Protection Authority, Perth, WA.

EPA 2016b, *Environmental Factor Guideline – Flora and Vegetation*, Environmental Protection Authority, Perth, WA.

EPA 2016c, *Environmental Factor Guideline – Terrestrial Fauna*, Environmental Protection Authority, Perth, WA.

EPA 2018a, *Statement of Environmental Principles, Factors and Objectives*, Environmental Protection Authority, Perth, WA.

EPA 2018b, *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual 2016*, Environmental Protection Authority, Perth, WA.

Government of Western Australia 2014, *WA Environmental Offsets Guidelines*, Western Australia 2014, Perth, WA.

# Appendix 1: Identified Decision-Making Authorities and recommended environmental conditions

## Identified Decision-making Authorities

The following decision-making authorities have been identified for the purposes of s. 45 as applied by s. 46(8) of the *Environmental Protection Act 1986*:

<b>Decision-making Authority</b>	<b>Approval</b>
1. Minister for Environment	<i>Biodiversity Conservation Act 2016</i> (taking of flora and fauna)
2. Minister for Water	<i>Rights in Water and Irrigation Act 1914</i> (water extraction licence)
3. Minister for Aboriginal Affairs	<i>Aboriginal Heritage Act 1972</i> (s. 18 approval)
4. Minister for Lands	<i>Land Administration Act 1997</i>
5. Minister for Mines and Petroleum	<i>Mining Act 1978</i> <i>Petroleum Pipelines Act 1969</i>
6. Minister for State Development	<i>State Agreement Act</i> (railway)
7. Department of Mines, Industry Regulation and Safety  Executive Director, Resource and Environmental Compliance Division  State Mining Engineer  Chief Dangerous Goods Officer	<i>Mining Act 1978</i> (mining proposal)  <i>Mines Safety and Inspections Act 1994</i> (mines safety; approval to commence mining)  <i>Dangerous Goods Safety Act 2004</i> (licence for the storage and handling of dangerous goods)
8. Chief Executive Officer, Department of Water and Environmental Regulation	<i>Environmental Protection Act 1986</i> (works approval and licence)

Note: In this instance, agreement is only required with DMA #1 to #6 since these DMAs are Ministers.

## RECOMMENDED ENVIRONMENTAL CONDITIONS

### STATEMENT TO CHANGE THE IMPLEMENTATION CONDITIONS APPLYING TO A PROPOSAL (Section 46 of the *Environmental Protection Act 1986*)

#### WEST PILBARA IRON ORE PROJECT STAGE 2 – HARDEY PROPOSAL

**Proposal:** The proposal is to develop and operate an iron ore mine approximately 50 kilometres west-northwest of Paraburdoo, Western Australia, a 20 kilometre long gas pipeline corridor, and a 150 kilometre long rail transport corridor that would connect the proposed mine to the West Pilbara Iron Ore Project Stage 1 infrastructure.

**Proponent:** API Management Pty Limited  
Australian Company Number 112 677 595

**Proponent Address:** Level 14  
225 St Georges Terrace  
PERTH WA 6000

**Report of the Environmental Protection Authority:** 1666

**Preceding Statement Relating to this Proposal:** 944

Pursuant to section 45 of the *Environmental Protection Act 1986*, as applied by section 46(8), it has been agreed that the implementation conditions set out in Ministerial Statement No. 944, be changed as specified in this Statement.

**Condition 3 of Ministerial Statement 944 is deleted and replaced with:**

#### **3 Time Limit for Proposal Implementation**

- 3-1 The proponent shall not commence implementation of the proposal after 21 August 2023, and any commencement, prior to this date, must be substantial.
- 3-2 Any commencement of implementation of the proposal, on or before 21 August 2023, must be demonstrated as substantial by providing the CEO with written evidence, on or before 21 August 2023.

**Condition 9 of Ministerial Statement 944 is deleted and replaced with:**

**9 Offsets**

- 9-1 In view of significant residual impacts and risks as a result of implementation of the proposal, the proponent shall contribute funds to the **Pilbara Environmental Offset Fund** calculated pursuant to condition 9-2.
- 9-2 The proponent’s contribution to the **Pilbara Environmental Offset Fund** shall be paid biennially, with the amount to be contributed calculated based on the clearing undertaken in each year of the biennial reporting period in accordance with the rates in condition 9-3. The first biennial reporting period shall commence from ground disturbing activities of the environmental values identified in condition 9-3.
- 9-3 Calculated on the 2018–2019 financial year, the contribution rates are:
- (1) \$816 AUD (excluding GST) per hectare of ‘Good’ to ‘Excellent’ condition native vegetation cleared within the mine area development envelope within the Hamersley **IBRA** subregion (delineated in Figure 1 in Schedule 1 of Ministerial Statement 944); and
  - (2) \$816 AUD (excluding GST) per hectare of ‘Good’ to ‘Excellent’ condition native vegetation cleared for “railway and related infrastructure” within the rail corridor and gas pipeline development envelope within the Hamersley **IBRA** subregion (delineated in Figure 2 in Schedule 1 of Ministerial Statement 944).
- 9-4 From the commencement of the 2018–2019 financial year, the rates in condition 9-3 will be adjusted annually each subsequent financial year in accordance with the percentage change in the **CPI** applicable to that financial year.
- 9-5 Prior to ground disturbing activities, the proponent shall prepare and submit an Impact Reconciliation Procedure to the CEO.
- 9-6 The Impact Reconciliation Procedure required pursuant to condition 9-5 shall:
- (1) state that clearing calculation for the first biennial reporting period will commence from ground disturbing activities in accordance with condition 9-2 and end on the second 30 June following commencement of ground disturbing activities;

- (2) state that clearing calculations for each subsequent biennial reporting period will commence on 1 July of the required reporting period, unless otherwise agreed by the CEO;
  - (3) include a methodology to calculate the amount of clearing undertaken during each year of the biennial reporting period for each of the environmental values identified in condition 9-3;
  - (4) indicate the timing and content of the Impact Reconciliation Reports; and
  - (5) be prepared in accordance with *Instructions on how to prepare Environmental Protection Act 1986 Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports* (or any subsequent revisions).
- 9-7 The proponent shall not commence ground disturbing activities for the proposal, unless otherwise agreed by the CEO, until the CEO has confirmed in writing that the Impact Reconciliation Procedure satisfies the requirements of condition 9-6.
- 9-8 The proponent shall submit an Impact Reconciliation Report in accordance with the Impact Reconciliation Procedure approved in condition 9-7.
- 9-9 The Impact Reconciliation Report required pursuant to condition 9-8 shall provide the location and spatial extent of the clearing undertaken within the development envelopes during each year of each biennial reporting period.

**The following definitions apply to condition 9**

<b>Acronym, Abbreviation or Term</b>	<b>Definition or Term</b>
CPI	The All Groups Consumer Price Index numbers for Perth compiled and published by the Australian Bureau of Statistics.
IBRA	Interim Biogeographic Regionalisation for Australia
Pilbara Environmental Offset Fund	The special purpose account called the Pilbara Environmental Offsets Fund Account that has been created pursuant to section 16(1)(d) of the <i>Financial Management Act 2006</i> by the Department of Water and Environmental Regulation.