

Ms Annie Featherstone
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Our Ref: AC01-2014-0030: 2014-0000773842

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Dear Ms Featherstone

EPA PREPARED SCOPING GUIDELINE

PROPOSAL: Brockman Syncline 4 Iron Ore Project - Revised Proposal
LOCALITY: Shire of Ashburton
PROponent: Hamersley Iron Pty Ltd
DECISION: Assess: Assessment on Proponent Information (Assessment No. 2000)
PROCEDURE: Category A – EPA-prepared scoping guideline

The Environmental Protection Authority (EPA) has set the level of assessment on the above proposal as Assessment on Proponent Information (API) - Category A.

The procedure for an API - Category A is described in the *Environmental Impact Assessment - Administrative Procedures 2012*. The proponent should have regard to the Administrative Procedures when preparing the API document. This level of assessment provides for the assessment of a proposal where:

1. the proposal raises a limited number of preliminary key environmental factors that can be readily managed, and for which there is an established condition-setting framework, including:
 - a. Hydrological Processes;
 - b. Flora and Vegetation; and
 - c. Terrestrial Fauna.
2. the proposal is consistent with established environmental policy frameworks, guidelines and standards;
3. the proponent can demonstrate that it has conducted appropriate and effective stakeholder consultation; and
4. there is limited, or local, interest only in the proposal.

You are required to prepare an Environmental Review (ER) document in accordance with this scoping guideline.

Proposal

The Brockman Syncline 4 Iron Ore Project - Revised Proposal is a revision to the existing project (Ministerial Statement 717), consisting of the following changes:

- Surface discharge of surplus water of up to 6.4 GL/a into the Boolgeeda Creek.
- Additional clearing of up to 950 ha to support ongoing operations.
- Other changes to Schedule 1 of Ministerial Statement 717, including:
 - provision of a project boundary (development envelope);
 - waste dump optimisation; and
 - changes to the Key Characteristics table.

The existing Brockman Syncline 4 Iron Ore Project was referred to the EPA in October 2004 with the level of assessment set as Public Environmental Review (PER) with a public review period of 4 weeks. This level of assessment was based on the scale of mining, and both direct and indirect impacts to flora and fauna and potential impact on local hydrology.

The existing proposal is located approximately 60 km west-north-west of Tom Price in the Shire of Ashburton. The existing proposal involves the mining of a Brockman Iron Formation containing haematite/goethite ore body along a 14km ridge. The operation is expected to produce approximately 20 million tonnes per annum of ore. The proposal has an expected mine life of 30 years.

The existing approval allows for a maximum of 4.53 GL/a to be abstracted from the Orebody (dewatering) and Wittenoom Dolomite aquifers during mining operations, which was proposed to be used entirely to meet onsite demand. This has increased from the original approval of 2.37 GL/a through a number of revisions to the proposal's abstraction rate have been approved under section 45(C) of the *Environmental Protection Act 1986* (EP Act).

Due to an improved understanding of the hydrogeology of the area from monitoring and hydrogeological drilling, the predicted peak dewatering rate is 16.7 ML/day (6.1 GL/a). Subsequently, the proponent is seeking the approval for the dewatering, and potential discharge to Boolgeeda Creek, of a maximum of 6.4 GL/a.

The ER document needs to include a clear definition of the proposal and all its components. A key characteristics table and supporting figures will need to be developed in accordance with Environmental Assessment Guideline No. 1 - *Defining the Key Characteristics of a Proposal*. This includes re-evaluating the proposed mine development envelope boundary to minimise the area required.

Table 1 below shows the appropriate format of the key characteristics table. The proponent is responsible for populating the table with accurate, relevant information.

Table 1: Key Characteristics Table
Summary of the Proposal

Proposal Title	Brockman Syncline 4 Iron Ore Project - Revised Proposal
Proponent Name	Hamersley Iron Pty Ltd
Short Description	<p>The Brockman Syncline 4 Iron Ore Project is located approximately 60 km west-north-west of Tom Price in the Central Pilbara. Associated infrastructure includes:</p> <ul style="list-style-type: none"> • Three mining areas; • Dry processing plant; • Associated mine infrastructure and supporting utilities; and • A bitumen sealed access road from Brockman 2 to Brockman 4.

Physical Elements

Element	Location	Proposed Extent
Mine Area	Figure/s	Clearing no more than XX hectares within a XX ha development envelope
Infrastructure	Figure/s	Clearing no more than XX hectares within a XX ha development envelope
Backfilling of mine pits	Figure/s	Mine pits are to be backfilled at closure so that the final surface levels are at a higher elevation than the pre-mining groundwater level to prevent the formation of pit lakes

Operational Elements

Element	Location	Proposed Extent
Water abstraction	Figure X	Groundwater abstraction not more than XX GL/pa
Management of surplus dewater	Figure X	Dewater disposal through use on site and controlled surface discharge to Boolgeeda Creek of no more than 6.4 GL/a

All technical reports, modelling and referenced documents (not currently in the public domain) used in the preparation of the ER document should be included as appendices to the document.

Preliminary Key Environmental Factors

The EPA has identified the following preliminary key environmental factors as being relevant to the proposal to be reported to the EPA in the ER:

- Hydrological processes
- Flora and vegetation
- Terrestrial Fauna

Hydrological Processes

The proposal has the potential to impact hydrological processes through groundwater drawdown and altered surface water flow regimes.

The EPA's environmental objective for this factor is to:

- maintain the quantity and hydrological regimes of groundwater and surface water so that existing and potential uses, including ecosystem maintenance, are protected.

Work and output required

The EPA has reviewed the referral document and supporting studies and requires the following points to be addressed in the ER document:

- Clarify the water use requirements for the proposal, including justification for requesting up to 17.5 ML/day surplus dewater discharge as opposed to the predicted maximum dewatering rate of 16.7 ML/day.
- Clearly justify why the Beasley River was not considered to be a viable option for surplus water discharge. Provide further justification as to why reinjection to aquifers is not considered to be a viable option.
- Discuss scenarios, that may result in the requirement to discharge up to 17.5 ML/day dewater into the Boolgeeda Creek system including the likelihood of occurrence, frequency and duration.
- Present information regarding the alteration to Boolgeeda Creek flow regimes from surface water discharge.
- Identify and assess the values and significance of groundwater and surface water bodies that would be impacted by the revised proposal.
- Describe management and monitoring protocols, including the identification of water quality trigger levels, to be implemented during construction, operation and closure to ensure that the EPA's objective for this factor is met.

Flora and Vegetation

The proposal has the potential to impact flora and vegetation through clearing, groundwater drawdown and surface discharge of surplus mine dewater.

The EPA's environmental objective for this factor is to:

- maintain the representation, diversity, viability and ecological function at the species, population and community level.

Work and output required

The EPA has reviewed the referral document and supporting studies and requires the following points to be addressed in the ER document:

- Present flora and vegetation surveys for the entire development envelope and proposed disturbance area, including along creek line habitat of Boolgeeda Creek up to the extent of the wetting front that is delineated as a result of modelling for a maximum discharge of 17.5 ML/d.
- Identify and assess the values and significance of flora and vegetation communities within the revised mine development envelope, and define the extent of impact.
- Quantify the impacts (in hectares) to "good to excellent" condition flora and vegetation communities, including impacts to declared rare flora, threatened ecological communities and conservation significant flora and vegetation communities.
- Describe management and monitoring protocols to be implemented during construction, operation and closure to ensure the EPA's objectives are met.

Terrestrial Fauna

The proposal has the potential to impact conservation significant fauna species and their habitats through vegetation clearing and vehicle movements.

The EPA's environmental objective for this factor is to:

- maintain representation, diversity, viability and ecological function at the species, population and assemblage level.

Work and output required

The EPA has reviewed the referral document and supporting studies and requires the following points to be addressed in the ER document:

- Present terrestrial fauna surveys for the entire development envelope, including proposed disturbance areas.
- Identify and assess the values and significance of fauna and their habitats within the development envelope (including revised disturbance areas) and the Boolgeeda Creek system, and define the extent of impact.
- Quantify the impact (in hectares) to conservation significant fauna habitat, including denning, foraging and dispersal habitat.
- Describe management and monitoring protocols to be implemented during construction, operation and closure to ensure the EPA's objectives are met.

Offsets

The proposal potentially results in residual environmental impacts after all efforts to avoid and minimise environmental impacts have been made. Where significant environmental impacts still remain (residual impacts), then offsets should be considered. The proponent shall include a completed Environmental Offsets Reporting Form and discuss any offsets proposed in the ER document.

Cumulative Impacts

The ER document should address how the Brockman Syncline 4 Iron Ore Project - revised proposal contributes to the cumulative impacts of existing and potential projects on the flora/vegetation, terrestrial fauna, fauna habitats and hydrological processes in the region.

ER Document Content and Layout

The ER document will be made publically available when the EPA releases its report and recommendations, and must contain the following information:

- a. Description of the proposal and relevant information on the receiving environment and its conservation values in a regional and local setting. Figures should show the project regional location and disturbance envelopes. Describe any alternatives that have been considered. Provide proponent contact details.
- b. Description of the key characteristics as described in Table 1: Key Characteristics Table.
- c. A table that summarises all environmental studies undertaken and those committed to. The table should include who undertook the survey, when undertaken and the name of the report produced. Provide a separate table showing a timeline of when the studies were undertaken and completed.
- d. A table that lists the EPA Guidance Statements, Environmental Assessment Guidelines and/or Policies that were applicable to the proposal and how they were addressed.
- e. A brief summary of the key findings of each environmental factor. Include figures that help illustrate these findings and cross references to source information within the appendices.
- f. Details of the consultation process and outcomes. Identify how issues raised during the stakeholder consultation have been responded to, and any subsequent adjustments made to the proposal.

- g. Assessment of the key environmental factors to demonstrate, succinctly, that the proposed management, mitigation and offsets of the potential impacts of the proposal can meet the EPA's environmental objectives. This should be presented in a table which includes the following headings: Factor, EPA Objective, Existing Environment, Potential Impact (without mitigation), Management and Outcome. The findings of any surveys and investigations undertaken to support this assessment should be included, with the technical reports provided as appendices.
- h. Identification of other potential impacts or activities of the proposal that can be regulated by other government agencies, under other statutes and a commitment to complying with their requirements.
- i. A completed checklist for documents submitted for EIA on terrestrial biodiversity, as detailed on the EPA website www.epa.wa.gov.au.
- j. Spatial datasets, information products and databases required.

Once a satisfactory ER document is received, the EPA will proceed to assess the proposal and provide an assessment report and recommendations to the Minister for Environment in accordance with section 44 of the EP Act. The EPA recommends that the proponent meet with the Office of the Environmental Protection Authority to discuss the format of the ER document.

The EPA considers that as a minimum, the following stakeholders should be consulted during the preparation of the ER document:

- Department of Environment Regulation;
- Department of Parks and Wildlife;
- Department of Indigenous Affairs;
- Department of Mines and Petroleum;
- Department of Water;
- Main Roads Western Australia; and
- Shire of Ashburton.

Policy Frameworks, Guidelines and Standards

The EPA has identified the following policy framework, guidelines and standards that are likely to be relevant to your proposal and may provide guidance for preparation of the Environmental Review Document.

EPA Guidance Statements and Environmental Assessment Guidelines:

- Environmental Assessment Guideline No. 1 - Defining the Key Characteristics of a Proposal.

- Environmental Assessment Guideline No. 6 - Timelines for Environmental Impact Assessment of Proposal.
- Environmental Assessment Guideline No. 8 – Environmental Factors and Objectives.
- Environmental Assessment Guideline No. 9 – Application of a significance framework in the environmental impact assessment process.
- EPA Guidance Statement No. 51 - Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia (June 2004).
- EPA Guidance Statement No. 56 - Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia (June 2004).
- Technical guide - Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (September 2010).
- EPA Guidance Statement No. 6 - Rehabilitation of Terrestrial Ecosystems (June 2006).
- EPA Guidance Statement No. 19 – Environmental Offsets (September 2008).
- Environmental Protection Bulletin No. 1 - Environmental Offsets – Biodiversity (September 2008).

The EPA also brings to the proponent's attention the Department of Water's *Western Australian water in mining guideline* that is available at www.water.wa.gov.au.

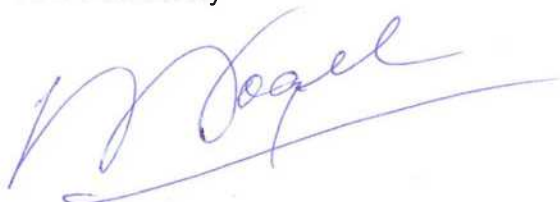
Target Timeframe for the Assessment

Level of Assessment set as API:	19 March 2014
API Scoping Guidelines issued:	14 May 2014
Proponent submits ER document and associated surveys:	30 May 2014
EPA considers draft report (within 7 weeks from receipt of <u>acceptable</u> ER document):	18 July 2014
Consultation on Draft Conditions (2 weeks):	1 August 2014
EPA Publishes the Report (2 weeks)*:	15 August 2014
Appeal period closes (2 weeks):	29 August 2014

* Should the EPA require additional information, the report would be published 4 weeks from receipt of that information.

Should you have any queries and wish to discuss this work further please contact Matt Spence on telephone number 6145 0819.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Dr Paul Vogel', with a long horizontal flourish extending to the right.

Dr Paul Vogel
CHAIRMAN

27 May 2014