

Eastern Ridge Revised Proposal



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A large, circular piece of mining equipment, possibly a conveyor or a large wheel, is shown in a desert landscape under a clear blue sky. The equipment is illuminated by warm, golden light, suggesting a sunset or sunrise. The ground is a reddish-brown color, and the sky is a deep blue.

Environmental Referral Document

January 2016

Document tracking

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Abbreviations, Acronyms and Definitions

Abbreviation/Acronym	Full Title
AER	Annual Environmental Report
AMD	Acid and Metalliferous Drainage
API-A	Assessment on Proponent Information category A
BAM Act	<i>Biosecurity and Agriculture Management Act 2007</i>
dB (A)	A-weighted decibels
DER	Department of Environment Regulation
Development Envelope	The boundary of the Proposal
DMP	Department of Mines and Petroleum
DoW	Department of Water
DPaW	Department of Parks and Wildlife
EAG	Environmental Assessment Guideline
EIA	Environmental Impact Assessment
EP Act	<i>Environmental Protection Act 1986</i>
EPA	Environmental Protection Authority
GL/a	Gigalitres per annum
GWL	Groundwater well licence
ha	Hectares
Indicative Disturbance Boundary or Maximum Disturbance Boundary	Historic reference to a disturbance area used by BHP Billiton Iron Ore in all Part IV projects prior to the release of EAG No. 1 (EPA 2012a). It is also the terminology used to carry out environmental impact assessment studies prior to determining a final Proposal Development Envelope.
km	kilometre
km ²	square kilometre
m	metres
mbgl	metres below ground level
mg/L	milligrams per Litre
Mt	Million tonnes
Mtpa	Million tonnes per annum
NVCP	Native Vegetation Clearing Permit
OEPA	Office of the Environmental Protection Authority
OSA	Overburden Storage Area
PAF	Potentially acid forming
PEAHR	Project Environment and Aboriginal Heritage Review
PEC	Priority Ecological Community
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i>
TEC	Threatened Ecological Community

1. Proponent and Key Proposal Characteristics

1.1 Proposal Overview

The Eastern Ridge Revised Proposal (the Proposal) is comprised of existing approved mining operations at Orebody 24 (Ministerial Statement 834), Orebody 25 (Ministerial Statement 712) and Orebody 32 (Ministerial Statement 1018) and a proposed new satellite iron ore deposit at Orebody 25 West. The Proposal is located approximately three kilometres (km) north-east of Newman within Mineral Lease 244SA (Figures 1 and 2).

BHP Billiton Iron Ore Pty Ltd (BHP Billiton Iron Ore) is seeking environmental approval under Part IV of the *Environmental Protection Act 1986* (EP Act) to manage Orebody 24, Orebody 25, Orebody 32 and Orebody 25 West under a single Ministerial Statement and Development Envelope. Orebody 23 (Ministerial Statement 478) is an adjacent orebody which is not within scope for this Proposal (Figure 2).

Mining will be undertaken above the water table at Orebody 32 and below the water table at Orebody 24, Orebody 25 and Orebody 25 West. An indicative general arrangement is represented in Figure 3. Mining operations will utilise conventional drill and blast techniques for open pit mining. Extracted ore will be crushed at ore handling plants and transported via rail to either Newman Hub or directly to Port Hedland, based on business requirements.

This document provides supporting information to the Environmental Protection Authority (EPA) in order to undertake an Environmental Impact Assessment of the Proposal and to determine the Level of Assessment. A Referral Form (Appendix A) has been prepared for the Proposal in accordance with Section 38(1) of the EP Act.

1.2 The Proponent

The Proponent for the Proposal is:

BHP Billiton Iron Ore Pty Ltd
ABN: 46 008 700 981
125 St Georges Terrace
Perth WA 6000

BHP Billiton Iron Ore is authorised as the manager and agent of the Mount Newman Joint Venture to submit this Proposal and execute the works as approved. The joint venture partners include:

- BHP Billiton Minerals Pty Ltd 85%
- Itochu Minerals & Energy Australia Pty Ltd 5%
- Mitsui-Itochu Iron Pty Ltd 10%

The key contact for this Proposal is:

Mark Garrahy
Manager Environmental Approvals
Phone: 6321 2183
Email: mark.garrahy@bhpbilliton.com

1.3 Key Proposal Characteristics

BHP Billiton Iron Ore proposes to amalgamate the existing Ministerial Statements 712, 834 and 1018 under one new Ministerial Statement which will also include the new satellite iron ore deposit at Orebody 25 West. A summary of the Proposal and the proposed key characteristics (Tables 1 and 2) have been prepared in accordance with Environmental Assessment Guideline (EAG) No. 1 *Environmental Assessment Guideline for Defining the Key Characteristics of a Proposal* (EPA 2012a). The physical and operational elements of the Proposal are summarised in Table 3.

Existing key characteristics for Ministerial Statements 712, 834 and 1018 are documented in Appendix B to demonstrate BHP Billiton Iron Ore's justification and alignment with the Proposal and the revised key characteristics.

Table 1: Proposal Summary

Proposal Title	Eastern Ridge Revised Proposal
Proponent Name	BHP Billiton Iron Ore Pty Ltd
Short Description	<p>The Proposal is comprised of existing exploration and mining operations at Orebody 24, Orebody 25 and Orebody 32 and a proposed new satellite iron ore deposit at Orebody 25 West within a single Development Envelope, located approximately 3 km north-east of Newman.</p> <p>Mining will be undertaken above the water table at Orebody 32 and below the water table at Orebody 24, Orebody 25 and Orebody 25 West. Mining operations will include open pits, overburden storage areas and the construction of associated mine infrastructure.</p>

Table 2: Proposed Key Characteristics

Element	Proposed Extent
Mine and associated infrastructure	Clearing of up to 3,820 ha within a 4,267 ha Development Envelope.

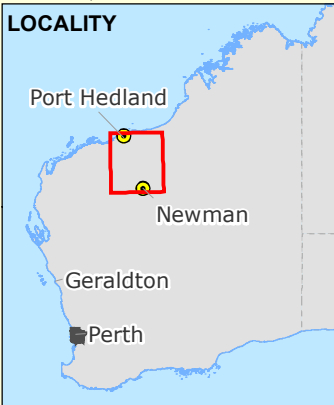
Table 3: Physical and Operational Elements of the Proposal

Element	Location	Proposed Extent
Mine pits	Development Envelope	Clearing of up to 1,670 ha within a 4,267 ha Development Envelope.
Overburden storage areas	Development Envelope	Clearing of up to 1,205 ha within a 4,267 ha Development Envelope.
Other disturbance (exploration and ancillary infrastructure)	Development Envelope	Clearing of up to 945 ha within a 4,267 ha Development Envelope.
Dewatering	Orebody 24, Orebody 25 and Orebody 25 West	Licensed dewatering undertaken in accordance with Department of Water "Licence to Take Water" approvals. Current licence volume is 9.42 Giga litres per annum (GL/a).
Surplus water discharge	Ophthalmia Dam	Discharge of up to 13.9 GL/a of surplus water to Ophthalmia Dam. Surplus water will be preferentially used in existing or adjacent operations prior to discharge being considered.
Ore processing	Development Envelope	Up to 45 Million tonnes per annum (Mtpa).



LEGEND

- BHP Billiton Operation
- Highway
- Rail



Health Safety and Environment
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REGIONAL OVERVIEW

Not to scale	Prepared: P. Gant	Project No: A766/001
Date: 30/11/2015	Checked: E. Drain	1
Datum: GDA 94, Projection: MGA Zone 50	Revision: Final	