



Report and recommendations of the Environmental Protection Authority



Ministerial Statements 805 and 806 - Karara Mining Ltd s46 condition changes

Karara Mining Ltd

Report 1436

March 2012



EPA R&R No: 1436

MINISTER FOR ENVIRONMENT

KARARA IRON ORE PROJECT AND MUNGADA IRON ORE PROJECT – PROPOSAL UNDER S46 OF THE EP ACT TO DELETE CONDITION 7 FROM STATEMENTS 805 AND 806

I refer to your letter of 8 September 2011 requesting the EPA to report to you on Karara Mining Limited's proposed changes to the environmental conditions for the Karara Iron Ore and Mungada Iron Ore Projects.

The following is the EPA's Report and Recommendations (No. 1436) to you pursuant to section 46(6) of the *Environmental Protection Act 1986*.

Introduction

The proponent, Karara Mining Limited (KML), obtained approval for the Karara and Mungada Iron Ore Projects in the Shire of Perenjori under the *Environmental Protection Act 1986* (EP Act) in September 2009, following assessment of the two project Public Environmental Reviews dated December 2007 and September 2008. The approval conditions are specified in Ministerial Statements 805 and 806.

Under Statement 805, KML has approval to construct and operate a magnetite iron ore mine, a processing plant with associated infrastructure, a linear infrastructure corridor that includes a raw water pipeline to the borefield near Mingenew and an access road to Morawa, in the Midwest region of Western Australia, as documented in schedule 1 of Statement 805.

Under Statement 806, KML has approval to mine hematite and magnetite iron ore from the Blue Hills North and Terapod deposits, to construct associated mine infrastructure and an access road to Morawa, Tilley Siding, with a power line corridor, in the Midwest region of Western Australia.

On 28 July 2011, KML provided an application to the Office of the Environmental Protection Authority (OEPA), to delete condition 7 from both Statement 805 and 806, which are almost identical. This application requested that this change be made under section 46C of the EP Act, however following initial review, it was the recommendation of the OEPA that this request was required to be progressed under section 46 (1). You agreed with this request on 16 September 2011.

Condition 7 of Statement 805 states:

7 *Groundwater dependant vegetation*

- 7-1 *The proponent shall ensure that groundwater abstraction does not adversely affect the groundwater regime which supports vegetation on the gilgai formation.*
- 7-2 *The proponent shall develop groundwater trigger levels for management and contingency actions prior to implementation of the proposal.*
- 7-3 *The proponent shall monitor groundwater levels within and near to the gilgai formation against the groundwater trigger levels referred to in condition 7-2 and implement management and contingency actions in the event that groundwater trigger levels are met. This monitoring is to be carried out to the satisfaction of the CEO.*
- 7-4 *The proponent shall monitor the health and condition of vegetation in the gilgai formation to demonstrate the requirements of condition 7-1 are being met. This monitoring is to be carried out to the satisfaction of the CEO.*
- 7-5 *In the event that the requirements of condition 7-1 are not being met or are not likely to be met, the proponent shall immediately provide and implement proposed management measures to the satisfaction of the CEO.*

Condition 7 of Statement 806 is almost identical to the above condition, with the only point of difference being a small grammatical variation to condition 7-3 (which refers to gilgai only and not 'gilgai formation').

Discussion

The EPA expressed concerns during the original assessments of these projects (in Bulletins 1321 and 1322) that drawdown from dewatering from the proposals may have the potential to impact on vegetation in an area located east-north east of the Karara pit. This area had previously been described as a Gilgai formation through information obtained from the Geological Survey of WA.

A Gilgai formation can be defined as a specific surface feature exhibited by clayey soils that have a high coefficient of expansion with changes in moisture content. The vegetation of such formations is generally considered to be potentially groundwater dependant. Subsequently, the EPA set groundwater trigger levels and monitoring for management of this area in Ministerial Conditions for mining on both projects (Condition 7).

In 2009, KML engaged the services of the company Soil Water Consultants (SWC) to complete an extensive investigation of the Gilgai formation, and a private drilling contractor to install groundwater monitoring bores. Investigations conducted then determined that the as-described Gilgai formation did not show the characteristics that meet the definition of a Gilgai, and therefore the area should be reclassified as a drainage depression. The construction of the water bores did not identify a groundwater table sufficiently shallow for vegetation dependency, and hence any changes to groundwater levels during mining should not have an impact on the vegetation. Based on the results of the studies, KML recommends that the Gilgai should be reclassified as a "drainage depression", and hence condition 7 of Ministerial Statements 805 and 806 should be removed.

Advice was sought from the Department of Environment and Conservation (DEC) and the DEC confirmed that the information provided by the proponent indicates the 'Gilgai formation' referred to in Condition 7 of Ministerial Statement 805 and 806 is not a groundwater dependent ecosystem. Considering this, the risk posed by any changes to groundwater level during mining are likely to be relatively low, and consequently impacts to the vegetation associated with the system are unlikely to be significant. As a result, the request to remove Condition 7 from Ministerial Statement 805 and 806 is supported.

EPA Recommendation

That Condition 7 is deleted from Statements 805 and 806.



Dr Paul Vogel
CHAIRMAN

20 March 2012

RECOMMENDED ENVIRONMENTAL CONDITIONS

**STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL
(PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

KARARA IRON ORE PROJECT, 215 KILOMETRES EAST-SOUTHEAST OF
GERALDTON AND 320 KILOMETRES NORTH-NORTHEAST OF PERTH, SHIRE OF
PERENJORI

Proposal: The proposal is to construct and operate a magnetite iron ore mine, processing plant and associated infrastructure, Linear Infrastructure Corridor accommodating the raw water pipeline to the borefield near Mingenew and access road to Morawa, in the Midwest region of Western Australia, as described in Schedule 1 of Statement 805;

Proponent: Karara Mining Limited

Proponent Address: 9 London House,
216 St Georges Terrace,
PERTH WA 6000

Assessment Number: 1890

Previous Assessment Numbers: 1651

Report of the Environmental Protection Authority: Report xxxx

Previous Reports of the Environmental Protection Authority: 1321

Previous Statement Numbers: Ministerial Statements 805

The implementation of the proposal to which the above report of the Environmental Protection Authority relates is subject to the conditions and procedures contained in Ministerial Statement 805, as amended by the following:

1. Condition 7 of Ministerial Statement 805 is deleted.

HON BILL MARMION MLA
MINISTER FOR ENVIRONMENT; WATER

RECOMMENDED ENVIRONMENTAL CONDITIONS

**STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL
(PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

MUNGADA IRON ORE PROJECT, 220 KILOMETRES EAST-SOUTHEAST OF
GERALDTON AND 320 KILOMETRES NORTH-NORTHEAST OF PERTH, SHIRE OF
PERENJORI

Proposal: The proposal is to mine hematite and magnetite iron ore from the Blue Hills North and Terapod deposits, and construction of associated mine infrastructure, upgraded access road to Morawa, Tilley Siding, and powerline corridor in the Midwest region of Western Australia, as described in Schedule 1 of Statement 806.

Proponent: Karara Mining Limited

Proponent Address: 9 London House,
216 St Georges Terrace,
PERTH WA 6000

Assessment Number: 1890

Previous Assessment Numbers: 1633

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

Previous Reports of the Environmental Protection Authority: 1322

Previous Statement Numbers: Ministerial Statement 806

The implementation of the proposal to which the above report of the Environmental Protection Authority relates is subject to the conditions and procedures contained in Ministerial Statement 806, as amended by the following:

1. Condition 7 of Ministerial Statement 806 is deleted.

HON BILL MARMION MLA
MINISTER FOR ENVIRONMENT; WATER