Published on 8 September 2009 Statement No 805

STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS 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.

The proposal is further documented in schedule 1 of this statement.

Proponent: Karara Mining Limited (ACN 070 871 831)

Proponent Address: Level 9, London House,
216 St George's Terrace,
PERTH WA 6000

Assessment Number: 1651

Report of the Environmental Protection Authority: Report 1321

The proposal referred to in the above report of the Environmental Protection Authority may be implemented. The implementation of that proposal is subject to the following conditions and procedures:

1 Proposal Implementation

1-1 The proponent shall implement the proposal as documented and described in schedule 1 of this statement subject to the conditions and procedures of this statement. In implementing the proposal, the proponent shall not increase the mine pit footprint beyond that delineated by MGA coordinates listed in schedule 2 (attached).

2 Proponent Nomination and Contact Details

2-1 The proponent for the time being nominated by the Minister for Environment under sections 38(6) or 38(7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal.

2-2 The proponent shall notify the Chief Executive Officer of the Department of Environment and Conservation (CEO) of any change of the name and address of the proponent for the serving of notices or other correspondence within 30 days of such change.

3 Time Limit of Authorisation

3-1 The authorisation to implement the proposal provided for in this statement shall lapse and be void five years after the date of this statement if the proposal to which this statement relates is not substantially commenced.

3-2 The proponent shall provide the CEO with written evidence which demonstrates that the proposal has substantially commenced on or before the expiration of five years from the date of this statement.

4 Compliance Reporting

4-1 The proponent shall prepare and maintain a compliance assessment plan to the satisfaction of the CEO.

4-2 The proponent shall submit to the CEO, the compliance assessment plan required by condition 4-1 prior to implementation of the proposal.

The compliance assessment plan shall indicate:

1 the frequency of compliance reporting;

2 the approach and timing of compliance assessments;

3 the retention of compliance assessments;

4 reporting of non-compliances and corrective actions taken;

5 the table of contents of compliance assessment reports; and

6 public availability of compliance assessment reports.

4-3 The proponent shall assess compliance with conditions in accordance with the compliance assessment plan required by condition 4-1.

4-4 The proponent shall retain reports of all compliance assessments described in the compliance assessment plan required by condition 4-1 and shall make those reports available when requested by the CEO.

4-5 The proponent shall advise the CEO of any non-compliance as soon as practicable.

4-6 The proponent shall submit a compliance assessment report annually from the date of issue of this Implementation Statement addressing the previous twelve month period or other period as agreed by the CEO.

The compliance assessment report shall:

1 be endorsed by the proponent's Managing Director or a person, approved in writing by the CEO, delegated to sign on the Managing Director's behalf;

2 include a statement as to whether the proponent has complied with the conditions;

3 identify all non-compliances and describe corrective and preventative actions taken;

4 be made publicly available in accordance with the approved compliance assessment plan; and

5 indicate any proposed changes to the compliance assessment plan required by condition 4-1.

5 Performance Review and Reporting

5-1 The proponent shall submit to the CEO a Performance Review Report at the conclusion of the first, second, fourth, sixth, eighth and tenth years after the start of implementation and then, at such intervals as the CEO may regard as reasonable, which addresses:

1 the major environmental risks and impacts; the performance objectives, standards and criteria related to these; the success of risk reduction/impact mitigation measures and results of monitoring related to management of the major risks and impacts;

2 the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best available technology where practicable; and

3 significant improvements gained in environmental management which could be applied to this and other similar projects.

5-2 The proponent shall make the Performance Review Reports required by condition 5-1 publicly available in a manner approved by the CEO.

6 Priority Ecological Community

6-1 During construction the proponent shall ensure that there is a system to delineate the area of works in order to meet the outcome of minimising the disturbance to, or loss of, the Blue Hills vegetation complex Priority Ecological Community.

6-2 During operations, the proponent shall conduct mining and mining related activities in a manner which ensures that land clearing is kept to a minimum and adverse impacts from mining and mining related activities is managed and controlled.

6-3 At all times the proponent shall ensure that adverse impacts from other threatening processes such as fire, weeds, disease and feral animals arising from its operations is managed and controlled.

6-4 The proponent shall develop and implement procedures and measures to restrict access to areas under its control that support the Blue Hills vegetation complex Priority Ecological Community to authorised personnel only.

6-5 The proponent shall monitor impacts from mining and mining related activities due to:

1 dust;
2 saline water application for dust control;
3 fire; and
4 feral species

on the Blue Hills vegetation complex Priority Ecological Community referred to in condition 6-1. This monitoring is to be carried out to the satisfaction of the CEO.

6-6 In the event that the outcome of condition 6-1 is 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 of the Department of Environment and Conservation.

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.

8 Fauna protection from trenches

8-1 The proponent shall limit the length of any continuous open trench for pipelines to a maximum length of two and a half kilometres at any time.

8-2 Fauna refuges and/or ramps are to be placed in the trench at intervals not exceeding 50 metres.

8-3 The proponent shall employ at least two qualified "fauna handlers" to remove fauna from the trench. The "fauna handlers" shall be able to demonstrate suitable experience to obtain a fauna handling licence from the Department of Environment and Conservation.

8-4 Inspection and removal of fauna from trenches by fauna handlers shall occur twice daily and within half an hour prior to the backfilling of trenches, with the first daily inspection and removal to be undertaken no later than 3.5 hours after sunrise, and the second inspection and removal to be undertaken daily between the hours of 3:00 pm and 6:00 pm.

8-5 In the event of significant rainfall, the proponent shall, following the removal of fauna from the trench, pump out pooled water in the open trench (with the exception of groundwater) and discharge it via a mesh (to dissipate energy) to adjacent areas.

8-6 Within 14 days following completion of the construction of each pipeline, the proponent shall provide a report on removed fauna and fauna deaths, within the pipeline corridor to the CEO.

9 Spider monitoring

9-1 Prior to the commencement of ground disturbing activities, the proponent shall implement its monitoring program for the Shield-backed Trapdoor Spider (*Idiosoma nigrum*) dated May 2009, or its updates, for the population within the proposed pit area, and in control areas free of disturbance from the proposal area.

9-2 The objective of the monitoring program required by condition 9-1 is to:

(1) demonstrate that the persistence of the population of *Idiosoma nigrum* in the Blue Hills area will not be impacted as a result of the proposal; and

(2) improve knowledge of the ecology and impacts of the proposal on *Idiosoma nigrum.*

9-3 The proponent shall monitor changes in the population in terms of:

1 number and size of area(s) inhabited by spiders;

2 number, size and distribution of burrows in occupied areas; and

3 number of burrows occupied by spiders.

9-4 The proponent shall submit the results of the monitoring program required by condition 9-1 to the CEO annually, as required.

9-5 In the event that condition 9-2(1) cannot be met, the proponent shall develop and implement management measures and contingency actions to the satisfaction of the CEO.

10 Fauna mortality register

10-1 The proponent shall prepare and implement strategies to avoid fauna deaths in areas of mining or mining related activities.

10-2 Prior to ground disturbing activity the proponent shall prepare and implement a Fauna Mortality Register for conservation significant species in the proposal area.

10-3 The proponent shall submit the strategies required by condition 10-1 to the CEO of the Department of Environment and Conservation.

10-4 The proponent shall review and revise the strategies required by condition 10-1 as required by the CEO of the Department of Environment and Conservation.

11 Conservation significant reptiles

11-1 Prior to ground disturbing activities the proponent shall carry out field surveys for conservation significant reptile species.

11-2 Subject to condition 11-3, should any conservation significant reptile species be located, the proponent shall to the extent practicable conduct mining and mining related activities in a manner which avoids impacts on those areas where conservation significant reptile species have been found.

11-3 In the event that condition 11-2 cannot be achieved, conservation significant reptile species shall be re-located into areas of suitable habitat in an area safe from disturbance from mining and associated operations

11-4 Relocation of conservation significant reptile species as required by condition 11-3 shall be carried out to the requirements of the CEO.

12 Mine Closure and Rehabilitation

12-1 As mining progresses, the proponent shall commence progressive rehabilitation of the mine site area in accordance with the following:

1 Re-establishment of vegetation in the rehabilitation area to be comparable with that of the pre-mining vegetation such that the following criteria are met within five years following the cessation of productive mining:

(a) flora and vegetation are re-established with not less than 70 percent species composition (not including weed species); and

(b) weed coverage consistent with recorded baseline levels or 10 percent, whichever is less.

2 A schedule of the rate of rehabilitation acceptable to the CEO of the Department of Environment and Conservation, and the Director Environment of the Department of Mines and Petroleum.

12-2 Within six months following the cessation of mining, the proponent shall:

1. take measures, as agreed with the CEO of the Department of Environment and Conservation and Director Environment of the Department of Mines and Petroleum, to ensure that permanent standing water within the pit void does not result in an increase in feral fauna to a level that may have a measurable impact on native fauna or native flora on the Blue Hills Range in the vicinity of the project area as compared to monitoring results obtained during mining;
2. monitor and record feral animal populations on the Blue Hills Range in the vicinity of the project area at least once each calendar year for seven years;
3. monitor and record Declared Rare Flora and Priority Flora species and vegetation condition as defined by Keighery (1994) on the Blue Hills Range in the vicinity of the project area at least once each calendar year during spring for seven years; and
4. report the results of the monitoring to the CEO of the Department of Environment and Conservation, and the Director Environment of the Department of Mines and Petroleum, as part of the annual compliance reporting under condition 4.

12-3 Within five years of the cessation of mining, the proponent shall determine and provide a report on the long term management of the pit lake to the satisfaction of the Minister for Environment and Minister for Mines and Petroleum in liaison with the Department of Environment and Conservation and the Department of Mines and Petroleum.

12-4 In liaison with the Department of Environment and Conservation and the Department of Mines and Petroleum, the proponent shall monitor progressively the performance of rehabilitation required by condition 12-1 based on annual reporting.

12-5 The proponent shall submit annually a report of the rehabilitation performance monitoring required by condition 12-4 to the CEO of the Department of Environment and Conservation and the Director Environment of the Department of Mines and Petroleum.

12-6 The proponent shall make the reports required by condition 12-2 and 12-5 publicly available in a manner approved by the CEO of the Department of Environment and Conservation.

Donna Faragher JP MLC
MINISTER FOR ENVIRONMENT; YOUTH

Schedule 1

The Proposal (Assessment No. 1651)

The proposal is to construct and operate:

- an iron ore mine to extract approximately 1426 Mt of magnetite ore;
- associated mining infrastructure (i.e. processing plant, tailings storage facility, waste dumps, workshops etc); and
- a Linear Infrastructure Corridor to contain the raw water pipeline to the borefield near Mingenew borefield and an access road to Morawa.

The location of the various project components is shown in Figures 1, 2 and 3.

The main characteristics of the proposal are summarised in Table 1 below. A detailed description of the proposal is provided in sections 6 to 8 of the project referral document: KML (2008), Karara Iron Ore Project – Public Environmental Review, *Volume 1 Main Report*, September 2008.

Table 1: Summary of key proposal characteristics

Element	Description
General	
Project life	Greater than 40 years
Area of disturbance	Estimated 2,330 ha comprising: • Mine – 1,723 ha; • LIC – 405 ha; and • Access Road – 200 ha.
Production rate	Approx. 12 Mtpa of concentrate
Ore reserve	• Estimated 497 Mt magnetite reserve; • Estimated 929 Mt of magnetite resource; (a total of 1426 Mt) • Approx. 0.83 Mt direct shipping ore
Mining	
Pit	Single open cut pit: • Approx. 3,400 m long; • Approx. 1,300 m wide; and • Approx. 300 m deep.
Total mining rate	Average of approx. 45 Mtpa
Waste rock	Approx. 15 Mtpa
Waste dump	Single waste dump located next to the pit, approx. 325 ha
Potentially Acid Forming (PAF) Material	Approx. 20% (3 Mtpa) of the waste rock is classified as PAF and would be contained inside isolation cells in the waste dump.

Element	Description
Tailings	Single dry-stack tailings storage facility approx. 18 Mtpa (max. 90 m high)
Dewatering	The groundwater table is predicted to be intersected by the pit in year 3 which would require pit dewatering of approx 600 kL/d: • Increasing to approx 1,300 kL/d in year 16; and • Decreasing to approx 830 kL/d in year 23.
Infrastructure	
Water supply	• Construction – 2.3 GL of water piped from disused pits at the Silverstone area and bores at the minesite; and • Operation – 6.6 GLpa of process water piped from the borefield near Mingenew down the LIC to the minesite and onsite bores and pit dewatering.
Power supply	• Construction – on-site diesel generators; and • Operation – proposed from the SWIS via a 330/132 kV connecting line from the Koola Metering Station on the Golden Grove high voltage transmission line to the minesite and back-up generators.
Product transportation	Load products onto trains at the minesite. Transport via separately proposed new rail spur line to Morawa, and the existing rail network to the Port of Geraldton.
Site access	Upgrading a number of existing roads, part of which would run parallel to the LIC. Borrow material for road base (approx. 200,000m^3) would be sourced from five pits located within 1.5 km.
Supporting mine infrastructure	• Processing plant; • ROM pad; • Workshop and hard stand areas; • Internal access roads; • Bulk fuel storage and re-fuelling pads; • Explosives compound and magazine; • Administrative buildings; • Laboratory; • Wastewater treatment facility;

Element	Description
	• Reverse osmosis plant; • Landfill; • Accommodation village; and • Air strip.

Abbreviations

approx.	approximately	kV	kilovolt
d/wk	days per week	m	metre
GL	gigalitre	m^3	cubic metres
GLpa	gigalitres per annum	max.	maximum
ha	hectare	Mt	million tonnes
hrs/d	hours per day	Mtpa	million tonnes per annum
kL/d	kilolitres per day	LIC	Linear infrastructure corridor

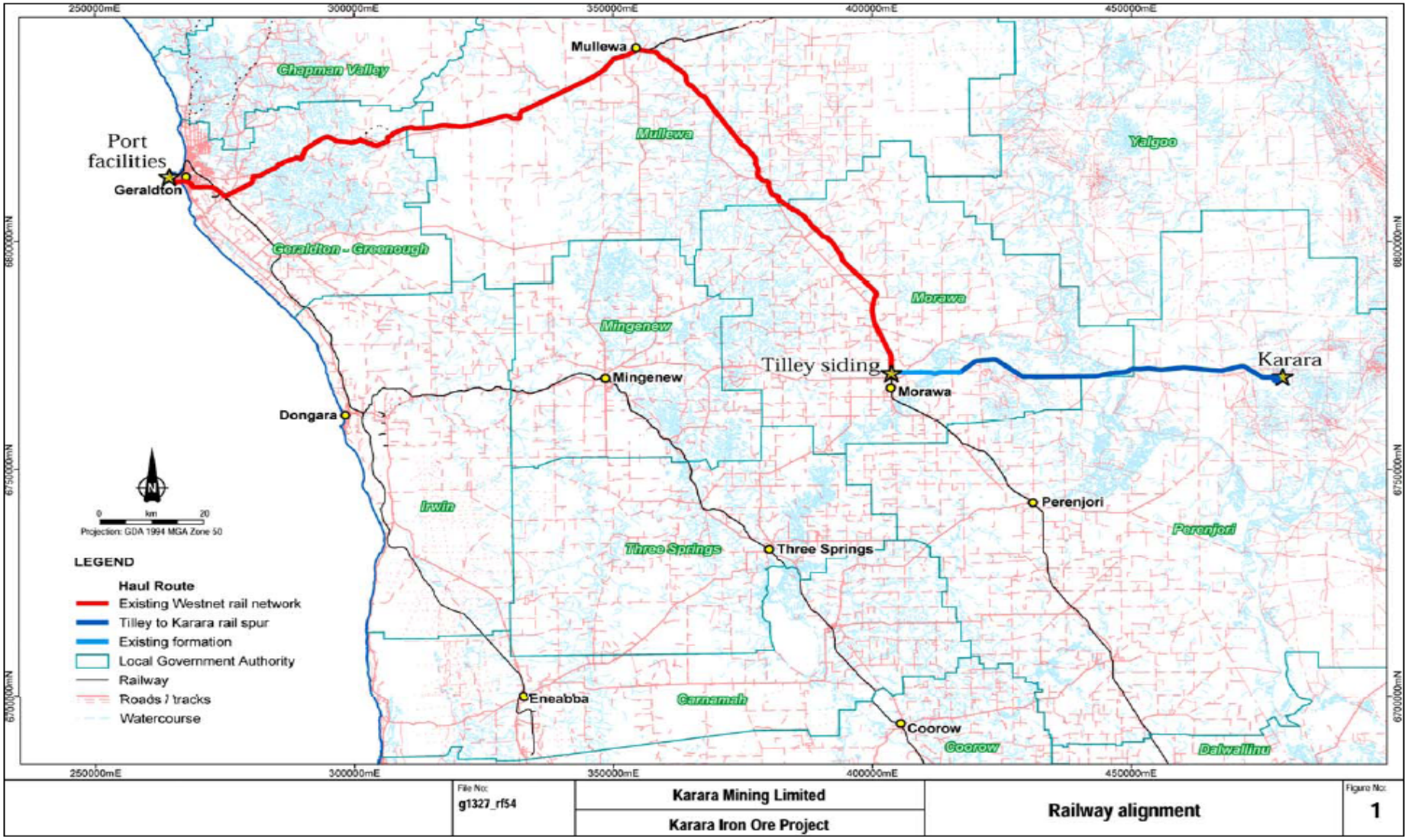


Figure 1: Site location map

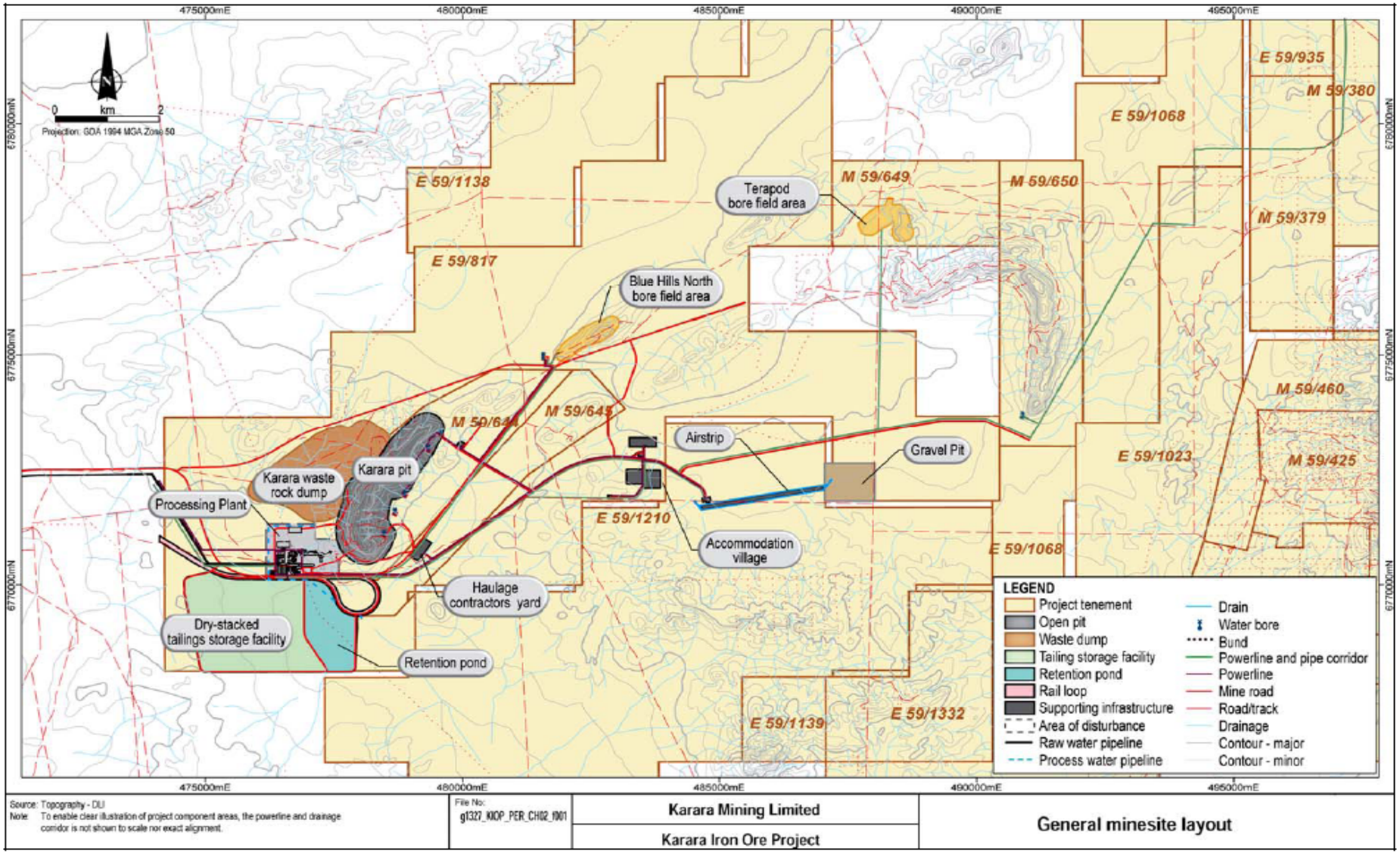


Figure 2: Site mine plan

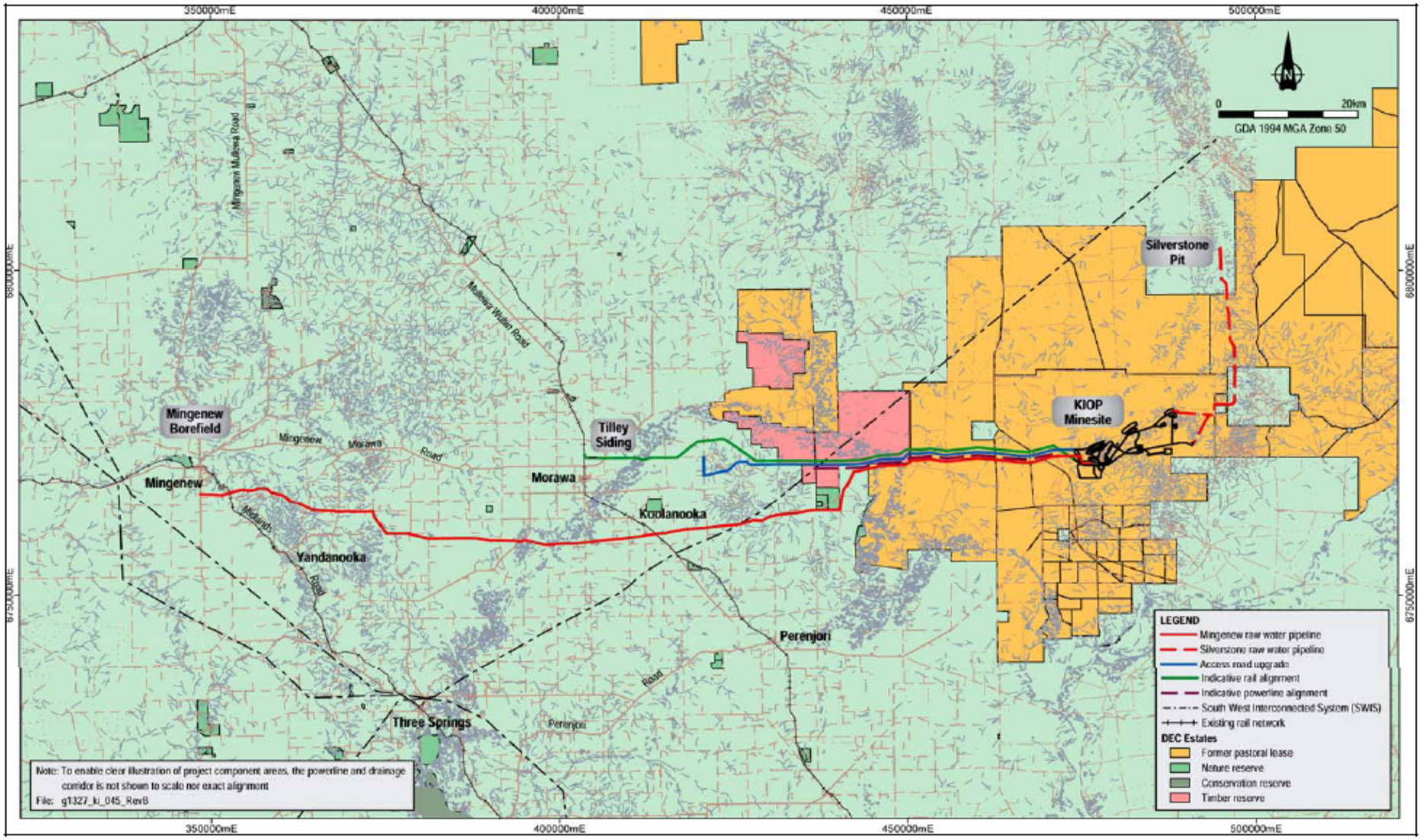


Figure 3 – Location of minesite, Linear Infrastructure Corridor and associated infrastructure

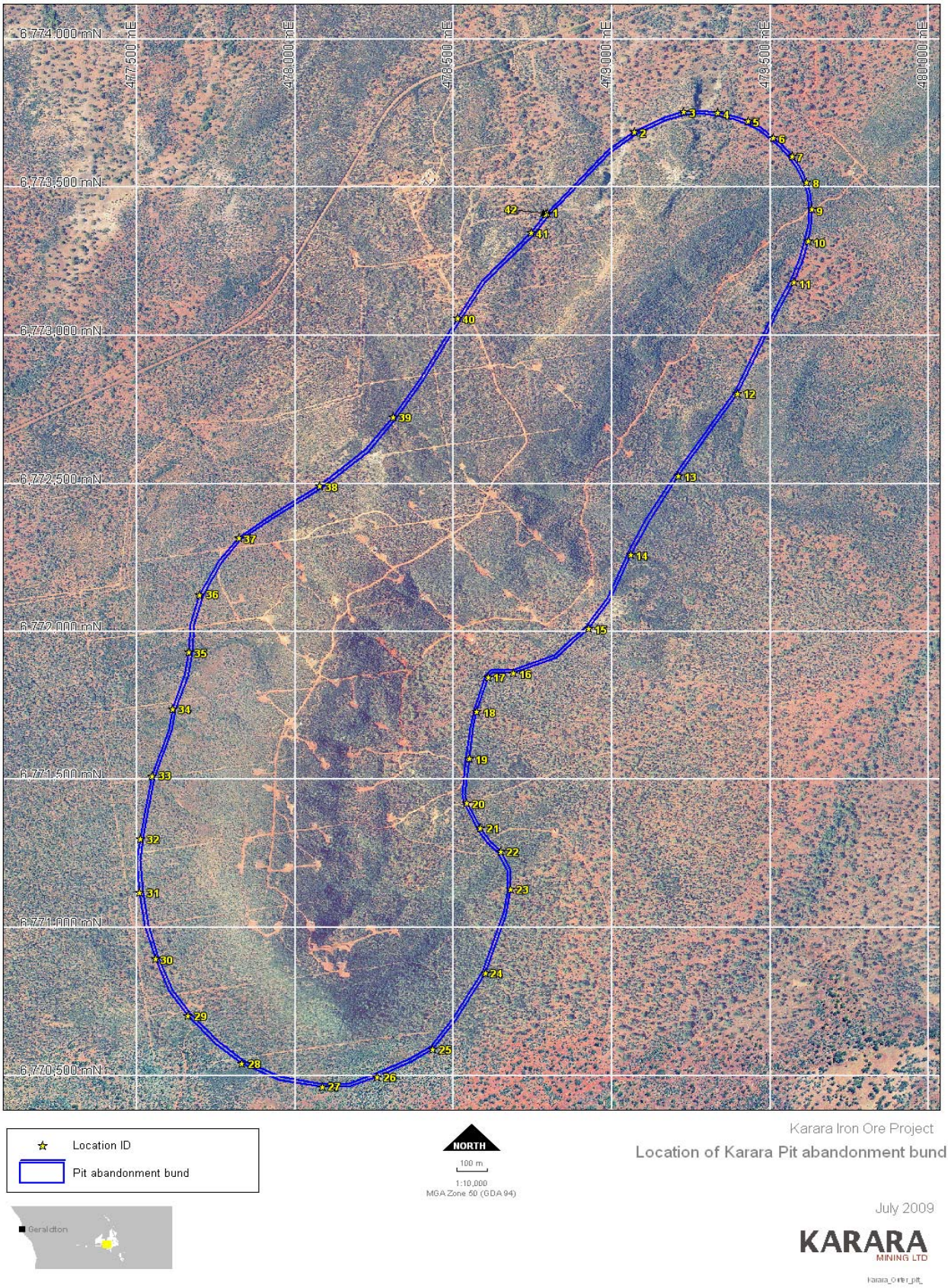


Figure 4 – Mine Pit Footprint MGA Coordinates

Schedule 2

MGA coordinates for the mine pit footprint

Karara Pit Abandonment Bund Coordinates - April 2008 PER footprint		
ID	Easting MGA (GDA94) UTM Zone 50	Northing MGA (GDA94) UTM Zone 50
1	478795.71	6773414.61
2	479070.98	6773688.16
3	479227.34	6773754.79
4	479334.22	6773752.67
5	479429.78	6773723.54
6	479510.03	6773668.02
7	479568.56	6773605.89
8	479615.26	6773519.01
9	479631.26	6773426.55
10	479619.41	6773320.14
11	479573.47	6773180.02
12	479396.42	6772805.72
13	479210.37	6772526.64
14	479060.82	6772261.83
15	478925.57	6772012.03
16	478688.99	6771859.28
17	478608.87	6771845.45
18	478573.83	6771728.86
19	478549.05	6771570.77
20	478542.3	6771421.84
21	478585.24	6771335.97
22	478648.28	6771258.07
23	478680.88	6771129.64
24	478601.42	6770847.18
25	478434.17	6770590.22
26	478259.11	6770496.98
27	478085.34	6770461.4
28	477832.72	6770540.82
29	477661.92	6770702.83
30	477558.68	6770893.6
31	477510.04	6771117.98
32	477511.56	6771300.16
33	477548.54	6771511.45
34	477613.5	6771737.36
35	477664.91	6771929.78
36	477699.57	6772126.59
37	477822.58	6772318.8
38	478076.86	6772493.45
39	478309.26	6772725.62
40	478512.49	6773058.87
41	478745.62	6773346.89
42	478791.6	6773409.59

Attachment 1 to Statement 805

Change to Proposal

Proposal: Karara Iron Ore Project, 215 Kilometres East-Southeast of Geraldton and 320 Kilometres North-Northeast of Perth, Shire of Perenjori

Proponent: Karara Mining Limited

Change: Relocation of the accommodation village, relocation of the airstrip, consolidation of mine infrastructure and removal of internal roads, a borrow pit and a water pipeline.

Key Characteristics Table:

Element	Description of proposal	Description of approved change to proposal
General		
Project life	Greater than 40 years	Greater than 40 years
Area of disturbance	Estimated 2,330 ha comprising: • Mine – 1,723 ha; • LIC – 405 ha; and • Access Road – 200 ha.	**Estimated 2,433 ha comprising:** • **Mine – 1,742 ha;** • **LIC – 384 ha; and** • **Access Road – 307 ha.**
Ore production rate	Approx. 12 Mtpa of concentrate	Approx. 12 Mtpa of concentrate
Ore reserve	• Estimated 497 Mt magnetite reserve; • Estimated 929 Mt of magnetite resource; (a total of 1,426 Mt) • Approx 0.83 Mt direct shipping ore.	• Estimated 497 Mt magnetite reserve; • Estimated 929 Mt of magnetite resource; (a total of 1,426 Mt) • Approx 0.83 Mt direct shipping ore.
Mining		
Pit	Single open cut pit: • Approx. 3,400 m long; • Approx. 1,300 m wide; and • Approx. 300 m deep.	Single open cut pit: • Approx. 3,400 m long; • Approx. 1,300 m wide; and • Approx. 300 m deep.
Total mining rate	Average of approx. 45 Mtpa	Average of approx. 45 Mtpa
Waste rock	Approx. 15 Mtpa	Approx. 15 Mtpa
Waste dump	Single waste dump located next to the pit, approx. 325 ha	Single waste dump located next to the pit, approx. 325 ha
Potentially Acid Forming (PAF) Material	Approx. 20% (3 Mtpa) of the waste rock is classified as PAF and would be contained inside isolation cells in the waste dump.	Approx. 20% (3 Mtpa) of the waste rock is classified as PAF and would be contained inside isolation cells in the waste dump.
Tailings	Single dry-stack tailings storage facility approx. 18 Mtpa (max. 90 m high)	Single dry-stack tailings storage facility approx. 18 Mtpa (max. 90 m high)

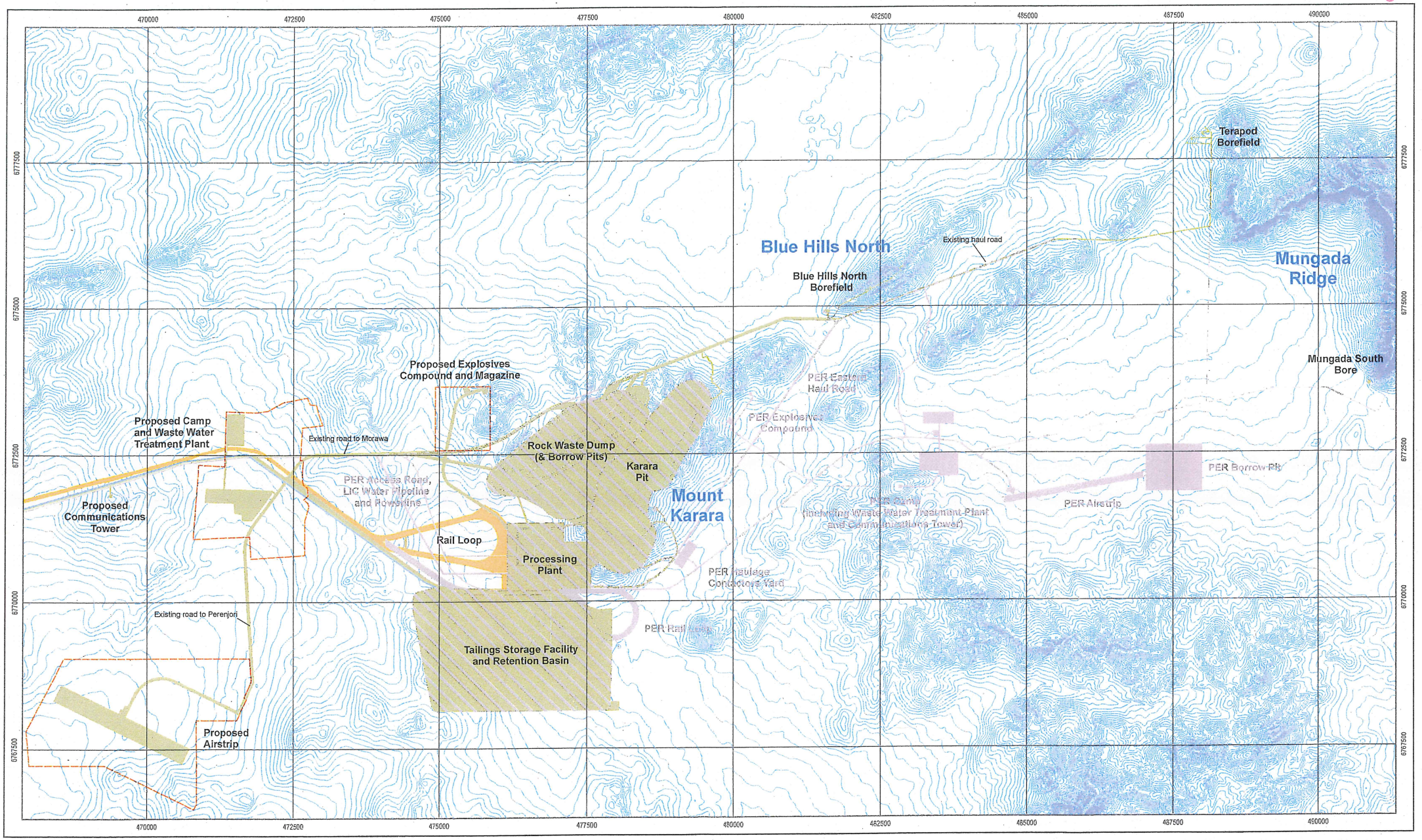
Dewatering	The groundwater table is predicted to be intersected by the pit in year 3 which would require pit dewatering of approx 600 kL/d: • Increasing to approx 1,300 kL/d in year 16; and • Decreasing to approx 830 kL/d in year 23.	The groundwater table is predicted to be intersected by the pit in year 3 which would require pit dewatering of approx 600 kL/d: • Increasing to approx 1,300 kL/d in year 16; and • Decreasing to approx 830 kL/d in year 23.
Infrastructure		
Water supply	• Construction – 2.3 GL of water piped from disused pits at the Silverstone area and bores at the minesite; and • Operation – 6.6 GLpa of process water piped from the borefield near Mingenew down the LIC to the minesite and onsite bores and pit dewatering.	• **Construction – 2.3 GL of water piped from bores at the minesite**; and • Operation – 6.6 GLpa of process water piped from the borefield near Mingenew down the LIC to the minesite and onsite bores.
Power supply	• Construction – on-site diesel generators; and • Operation – proposed from the SWIS via a 330/132 kV connecting line from the Koola Metering Station on the Golden Grove high voltage transmission line to the minesite and back-up generators.	• Construction – on-site diesel generators; and • Operation – proposed from the SWIS via a 330/132 kV connecting line from the Koola Metering Station on the Golden Grove high voltage transmission line to the minesite and back-up generators.
Product transportation	Load products onto trains at the minesite. Transport via separately proposed new rail spur line to Morawa, and the existing rail network to the Port of Geraldton.	Load products onto trains at the minesite. Transport via separately proposed rail spur line to Morawa, and the existing rail network to the Port of Geraldton.
Site access	Upgrading a number of existing roads, part of which would run parallel to the LIC. Borrow material for road base (approx. 200,000m^3) would be sourced from five pits located within 1.5 km.	Upgrading a number of existing roads, part of which would run parallel to the LIC. Borrow material for road base (approx. 200,000m^3) would be sourced from five pits located within 1.5 km.
Supporting mine infrastructure	• Processing plant; • ROM pad; • Workshop and hard stand areas; • Internal access roads; • Bulk fuel storage and re-fuelling pads; • Explosives compound and magazine; • Administrative	• Processing plant; • ROM pad; • Workshop and hard stand areas; • Internal access roads; • Bulk fuel storage and re-fuelling pads; • Explosives compound and magazine; • Administrative

	buildings; • Laboratory; • Wastewater treatment facility; • Reverse osmosis plant; • Landfill; • Accommodation village; and • Air strip.	buildings; • Laboratory; • Wastewater treatment facility; • Reverse osmosis plant; • Landfill; • Accommodation village; and • Air strip.

List of Figures: Figure 1: KIOP PER vs Alternate Minesite Disturbance Footprints

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 15 March 2010



NORTH

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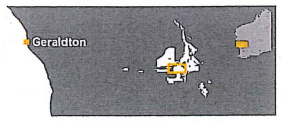
MGA Zone 50 (GDA 94)



Disturbance Footprints

- KIOP Final Disturbance Footprint - Minesite
- KIOP Final Disturbance Footprint - Linear Infrastructure Corridor
- KIOP Final Disturbance Footprint - Access Road
- Infrastructure - General Location Areas
- Public Environmental Review Project Footprint (Unchanged)
- Public Environmental Review Project Footprint (No longer required if proposed changes adopted)
- Karara-Tilley Rail Project (Level of Assessment - Not Assessed by EPA)

Karara Iron Ore Project

KIOP PER vs Alternate Minesite Disturbance Footprints

13th January 2010

Figure 1

KARARA MINING LTD

TS-ENV-Footprint Comparison A3-IP-13Jan2010

Attachment 2 to Ministerial Statement 805

Change to Proposal under section 45C of the
Environmental Protection Act 1986

Proposal: Karara Iron Ore Project

Proponent: Karara Mining Limited

Change: Increase in disturbance area to allow for increased waste dump area, rail loop and airstrip clearing

Key Characteristics Table: This table replaces the Key Characteristics Table in Attachment 1

Element	Description of Approved Proposal	Description of approved change to proposal
General		
Project life	Greater than 40 years	Greater than 40 years
Area of disturbance	Estimated approx 2,433 ha comprising: • Mine – approx 1,742 ha; • LIC – approx 384 ha; and • Access Road – approx 307 ha.	Estimated **approx 2,588** ha comprising: • Mine – **approx 1,897** ha; • LIC – approx 384 ha; and • Access Road – approx 307 ha.
Production rate	Approx. 12 Mtpa of concentrate	Approx. 12 Mtpa of concentrate
Ore reserve	• Estimated 497 Mt magnetite reserve; • Estimated 929 Mt of magnetite resource; (a total of 1426 Mt) • Approx 0.83 Mt direct shipping ore	**Removed as not environmentally significant**
Mining		
Pit	Single open cut pit: • Approx. 3,400 m long; • Approx. 1,300 m wide; and • Approx. 300 m deep.	Single open cut pit: • Approx. 3,400 m long; • Approx. 1,300 m wide; and • Approx. 300 m deep.
Total mining rate	Average of approx. 45 Mtpa	**Removed as not environmentally significant**
Waste rock	Approx. 15 Mtpa	Approx. 15 Mtpa
Waste dump	Single waste dump located next to the pit, approx. 325 ha	Single waste dump located next to the pit, approx. **365** ha
Potentially Acid Forming (PAF) Material	Approx. 20% (3 Mtpa) of the waste rock is classified as PAF and would be contained inside isolation cells in the waste dump.	Approx. 20% (3 Mtpa) of the waste rock is classified as PAF and would be contained inside isolation cells in the waste dump.
Tailings	Single dry-stack tailings storage facility approx. 18 Mtpa (max. 90 m high)	Single dry-stack tailings storage facility approx. 18 Mtpa (max. 90 m high)
Dewatering	The groundwater table is predicted to be intersected by the pit in year 3 which would require pit dewatering of approx 600 kL/d: • Increasing to approx 1,300 kL/d in year 16; and • Decreasing to approx 830 kL/d in year 23.	The groundwater table is predicted to be intersected by the pit in year 3 which would require pit dewatering of approx 600 kL/d: • Increasing to approx 1,300 kL/d in year 16; and • Decreasing to approx 830 kL/d in year 23.
Infrastructure		
Water supply	• Construction – 2.3 GL of water piped from bores at the minesite; • Operation – 6.6 GLpa of process water piped from the borefield near Mingenew down the LIC to the minesite and onsite bores and pit dewatering.	**Removed as managed by the *Rights in Water and Irrigation Act 1914***

Element	Description of Approved Proposal	Description of approved change to proposal
Power supply	• Construction – on-site diesel generators; and • Operation – proposed from the SWIS via a 330/132 kV connecting line from the Koola Metering Station on the Golden Grove high voltage transmission line to the minesite and back-up generators.	**Removed, as not environmentally significant**
Product transportation	Load products onto trains at the minesite. Transport via a separately proposed new rail spur line to Morowa, and the existing rail network to the Port of Geraldton.	**Removed, as not environmentally significant**
Site access	Upgrading a number of existing roads, part of which would run parallel to the LIC. Borrow material for road base (approx. 200,000 m^3) would be sourced from five pits located within 1.5 km.	Upgrading a number of existing roads, part of which would run parallel to the LIC. Borrow material for road base (approx. 200,000 m^3) would be sourced from five pits located within 1.5 km.
Supporting mine infrastructure	• Processing plant; • ROM pad; • Workshop and hard stand areas; • Internal access roads; • Bulk fuel storage and re-fuelling pads; • Explosives compound and magazine; • Administrative buildings; • Laboratory; • Wastewater treatment facility; • Reverse osmosis plant; • Landfill; • Accommodation village; and • Air strip	• Processing plant; • ROM pad; • Workshop and hard stand areas; • Internal access roads; • Bulk fuel storage and re-fuelling pads; • Explosives compound and magazine; • Administrative buildings; • Laboratory; • Wastewater treatment facility; • Reverse osmosis plant; • Landfill; • Accommodation village; and • Air strip

Abbreviations

approx. approximately
d/wk days per week
GL gigalitre
GLpa gigalitres per annum
ha hectare
hrs/d hours per day
kL/d kilolitres per day
kV kilovolt
m metre
m3 cubic metres
max. maximum
Mt million tonnes
Mtpa million tonnes per annum
LIC Linear infrastructure corridor

Note: Text in bold in the Key Characteristics Table, indicates change/s to the proposal.

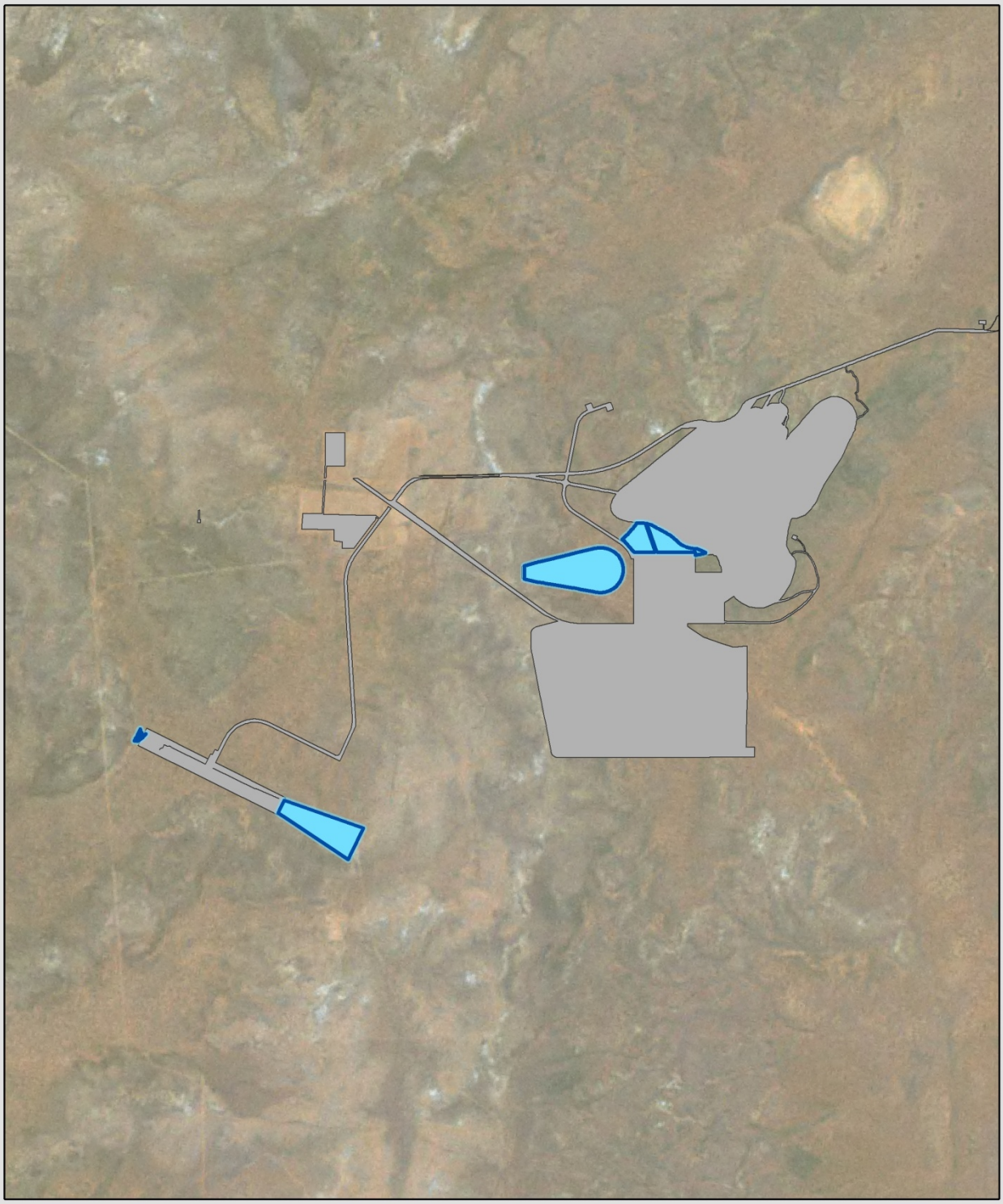
List of Figures: Figure 5 proposed disturbance footprint

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 21 June 2012

Office of the Environmental Protection Authority

Figure 5: Additional Disturbance Footprint



Legend

- Proposed 45c Area
- KIOP Disturbance Footprint

0 0.4 0.8 1.6 2.4 3.2
Kilometres

N

Projection: Map Grid of Australia, Zone 50
Datum: Geocentric Datum of Australia, 1994
Scale: 1:80,000

Presentation
Creation date:
11/06/2012
Created by: G. Burke

Data sources: Data proveided by proponent (Karara Mining Ltd)
Image Source: Landsat 7 (2001)

LOCALITY MAP

Attachment 3 to Ministerial Statement 805

Change to proposal under s45C of the *Environmental Protection Act 1986*

Proposal: Karara Iron Ore Project

Proponent: Karara Mining Limited

Change: Additional clearing for construction of processing plant to facilitate the phased KIOP Expansion Project

Key Characteristics Table: This table replaces Table 1 in Schedule 1

Element	Description of Approved Proposal	Description of Approval Requested
General		
Project life	Greater than 40 years	**Approximately 25 years**
Area of disturbance	Estimated approx. 2,588 ha comprising: • Mine – approx. 1,897 ha; • LIC – approx. 384 ha; and • Access Road – approx. 307 ha	Estimated **approx. 2958** ha comprising: • Mine – **approx. 2267** ha; • LIC – approx. 384 ha; and • Access Road – approx. 307 ha.
Production rate	Approx. 12 Mtpa of concentrate	**Stage 2 (first expansion) - Approx. 15.4 Mtpa of concentrate** **Stage 3 - Approx. 22.8 Mtpa of concentrate** **Stage 4 &5 - Approx. 37.6 Mtpa of concentrate**
Mining		
Pit	Single open cut pit: • Approx. 3,400 m long; • Approx. 1,300 m wide; and • Approx. 300 m deep.	Single open cut pit: • Approx. 3,400 m long; • Approx. 1,300 m wide; and • Approx. 300 m deep.
Waste rock	Approx. 15 Mtpa	**Stage 2 (first expansion) - Approx. 23.1 Mtpa** **Stage 3 - Approx. 34.2 Mtpa** **Stage 4 &5 - Approx. 37.6 Mtpa**
Waste dump	Single waste dump located next to the pit, approx. 365 ha	Single waste dump located next to the pit, approx. 365 ha
Potentially Acid Forming (PAF) Material	Approx. 20% (3 Mtpa) of the waste rock is classified as PAF and would be contained inside isolation cells in the waste dump.	Approx. 20% **(9.4 Mtpa)** of the waste rock is classified as PAF and would be contained inside isolation cells in the waste dump.
Tailings	Single dry-stack tailings storage facility approx. 18 Mtpa (max. 90 m high)	Single dry-stack tailings storage facility **Stage 2 (first expansion) - Approx. 23.1 Mtpa** **Stage 3 - Approx. 34.2 Mtpa** **Stage 4 &5 - Approx. 56.4 Mtpa** (max. 90 m high)
Dewatering	The groundwater table is predicted to be intersected by the pit in year 3 which would require pit dewatering of approx 600 kL/d:	The groundwater table is predicted to be intersected by the pit in year 3 which would require pit dewatering of approx 600 kL/d:

Element	Description of Approved Proposal	Description of Approval Requested
	• Increasing to approx 1,300 kL/d in year 16; and • Decreasing to approx 830 kL/d in year 23.	• Increasing to approx 1,300 kL/d in year 16; and • Decreasing to approx 830 kL/d in year 23.
Infrastructure		
Site access	Upgrading a number of existing roads, part of which would run parallel to the LIC. Borrow material for road base (approx. 200,000 m^3) would be sourced from five pits located within 1.5 km.	Upgrading a number of existing roads, part of which would run parallel to the LIC. Borrow material for road base (approx. 200,000 m^3) would be sourced from five pits located within 1.5 km.
Supporting mine infrastructure	• Processing plant; • ROM pad; • Workshop and hard stand areas; • Internal access roads; • Bulk fuel storage and re-fuelling pads; • Explosives compound and magazine; • Administrative buildings; • Laboratory; • Wastewater treatment facility; • Reverse osmosis plant; • Landfill; • Accommodation village; and • Air strip	**Reduce Supporting Mine Infrastructure to only Environmentally related structures.** • **Processing plant;** • **ROM pad;** • **Bulk fuel storage and re-fuelling pads;** • **Explosives compound and magazine;** • **Wastewater treatment facility;** • **Reverse osmosis plant; and** • **Landfill** • **Air strip**

Note: Text in **bold** in the Key Characteristics Table, indicates change/s to the proposal.

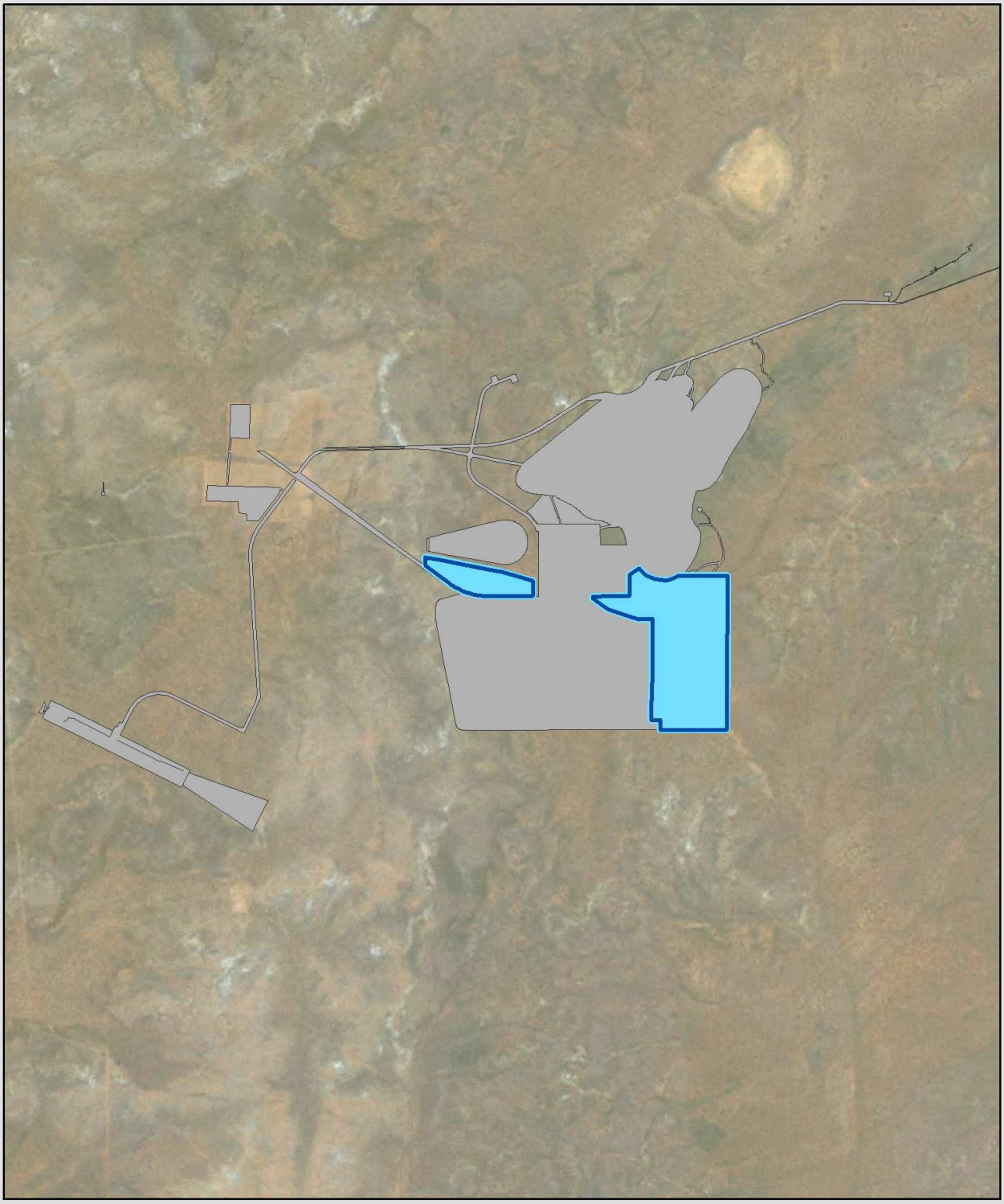
List of Figures: Figure 6 – Approved additional disturbance footprint.

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 20 February 2013

Office of the Environmental Protection Authority

Figure 6: Additional Disturbance Footprint



Legend

- Approved Section 45c Area
- KIOP Disturbance Footprint

0 0.4 0.8 1.6 2.4 3.2

Kilometres

N

Projection: Map Grid of Australia, Zone 50
Datum: Geocentric Datum of Australia, 1994
Scale: 1:80,000

Presentation

Creation date:04/02/2013
Created by: G. Burke

Data sources: Data provided by proponent (Karara Mining Ltd)
Image Source: Landsat 7 (2001)

LOCALITY MAP

Attachment 4 to Ministerial Statement 805

Change to proposal approved under s45C of the
Environmental Protection Act 1986

This Attachment replaces Attachment 3 of Ministerial Statement 805

Proposal: Karara Iron Ore Project

Proponent: Karara Mining Limited

Changes: **Inclusion of wet tailings cells within the final tailings storage facility landform, being a single dry stack tailings storage facility.**

Table 1: Summary of the Proposal

Proposal Title	Karara Iron Ore Project
Short Description	The proposal is to construct and operate: • an iron ore mine to extract approximately 1426 Mt of magnetite ore; • associated mining infrastructure (i.e. processing plant, tailings storage facility, waste dumps, workshops etc); and • a Linear Infrastructure Corridor to contain the raw water pipeline to the borefield near Mingenew and an access road to Morawa.

Table 2: Location and authorised extent of physical and operational elements

Element	Previously Authorised Extent	Authorised Extent
General		
Project life	Approximately 25 years	Approximately 25 years
Area of disturbance	Estimated approx. 2958 ha comprising: • Mine – approx. 2267 ha; • LIC – approx. 384 ha; and • Access Road – approx. 307 ha.	Estimated approx. 2958 ha comprising: • Mine – approx. 2267 ha; • LIC – approx. 384 ha; and • Access Road – approx. 307 ha.
Production rate	Stage 2 (first expansion) - Approx. 15.4 Mtpa of concentrate Stage 3 - Approx. 22.8 Mtpa of concentrate Stage 4 &5 - Approx. 37.6 Mtpa of concentrate	Stage 2 (first expansion) - Approx. 15.4 Mtpa of concentrate Stage 3 - Approx. 22.8 Mtpa of concentrate Stage 4 &5 - Approx. 37.6 Mtpa of concentrate
Mining		
Pit	Single open cut pit: • Approx. 3,400 m long; • Approx. 1,300 m wide; and • Approx. 300 m deep.	Single open cut pit: • Approx. 3,400 m long; • Approx. 1,300 m wide; and • Approx. 300 m deep.

Element	Previously Authorised Extent	Authorised Extent
Waste rock	Stage 2 (first expansion) - Approx. 23.1 Mtpa Stage 3 - Approx. 34.2 Mtpa Stage 4 &5 - Approx. 37.6 Mtpa	Stage 2 (first expansion) - Approx. 23.1 Mtpa Stage 3 - Approx. 34.2 Mtpa Stage 4 &5 - Approx. 37.6 Mtpa
Waste dump	Single waste dump located next to the pit, approx. 365 ha	Single waste dump located next to the pit, approx. 365 ha
Potentially Acid Forming (PAF) Material	Approx. 20% (9.4 Mtpa) of the waste rock is classified as PAF and would be contained inside isolation cells in the waste dump.	Approx. 20% (9.4 Mtpa) of the waste rock is classified as PAF and would be contained inside isolation cells in the waste dump.
Tailings	Single dry-stack tailings storage facility. Stage 2 (first expansion) - Approx. 23.1 Mtpa Stage 3 - Approx. 34.2 Mtpa Stage 4 & 5 - Approx. 56.4 Mtpa (max. 90 m high)	**Dry-stack and wet tailings cells within the final tailings storage facility landform, being a single dry stack tailings storage facility.**
Dewatering	The groundwater table is predicted to be intersected by the pit in year 3 which would require pit dewatering of approx 600 kL/d: • Increasing to approx 1,300 kL/d in year 16; and • Decreasing to approx 830 kL/d in year 23.	The groundwater table is predicted to be intersected by the pit in year 3 which would require pit dewatering of approx 600 kL/d: • Increasing to approx 1,300 kL/d in year 16; and • Decreasing to approx 830 kL/d in year 23.
Infrastructure		
Site access	Upgrading a number of existing roads, part of which would run parallel to the LIC. Borrow material for road base (approx. 200,000 m^3) would be sourced from five pits located within 1.5 km.	Upgrading a number of existing roads, part of which would run parallel to the LIC. Borrow material for road base (approx. 200,000 m^3) would be sourced from five pits located within 1.5 km.
Supporting mine infrastructure	Reduce Supporting Mine Infrastructure to only Environmentally related structures. • Processing plant; • ROM pad; • Bulk fuel storage and re-fuelling pads; • Explosives compound and magazine; • Wastewater treatment facility; • Reverse osmosis plant; and • Landfill • Air strip	• Processing plant; • ROM pad; • Bulk fuel storage and re-fuelling pads; • Explosives compound and magazine; • Wastewater treatment facility; • Reverse osmosis plant; and • Landfill • Air strip

Note: Text in **bold** in Table 2 indicates changes to the proposal.

Table 3: Abbreviations

Abbreviation	Term
ha	hectare
Mtpa	Million tonnes per annum
kL/d	Kilolitres per day

Figures (attached) – these figure replace all previous figures

Figure 1 Location of minesite, Linear Infrastructure Corridor and associated infrastructure.

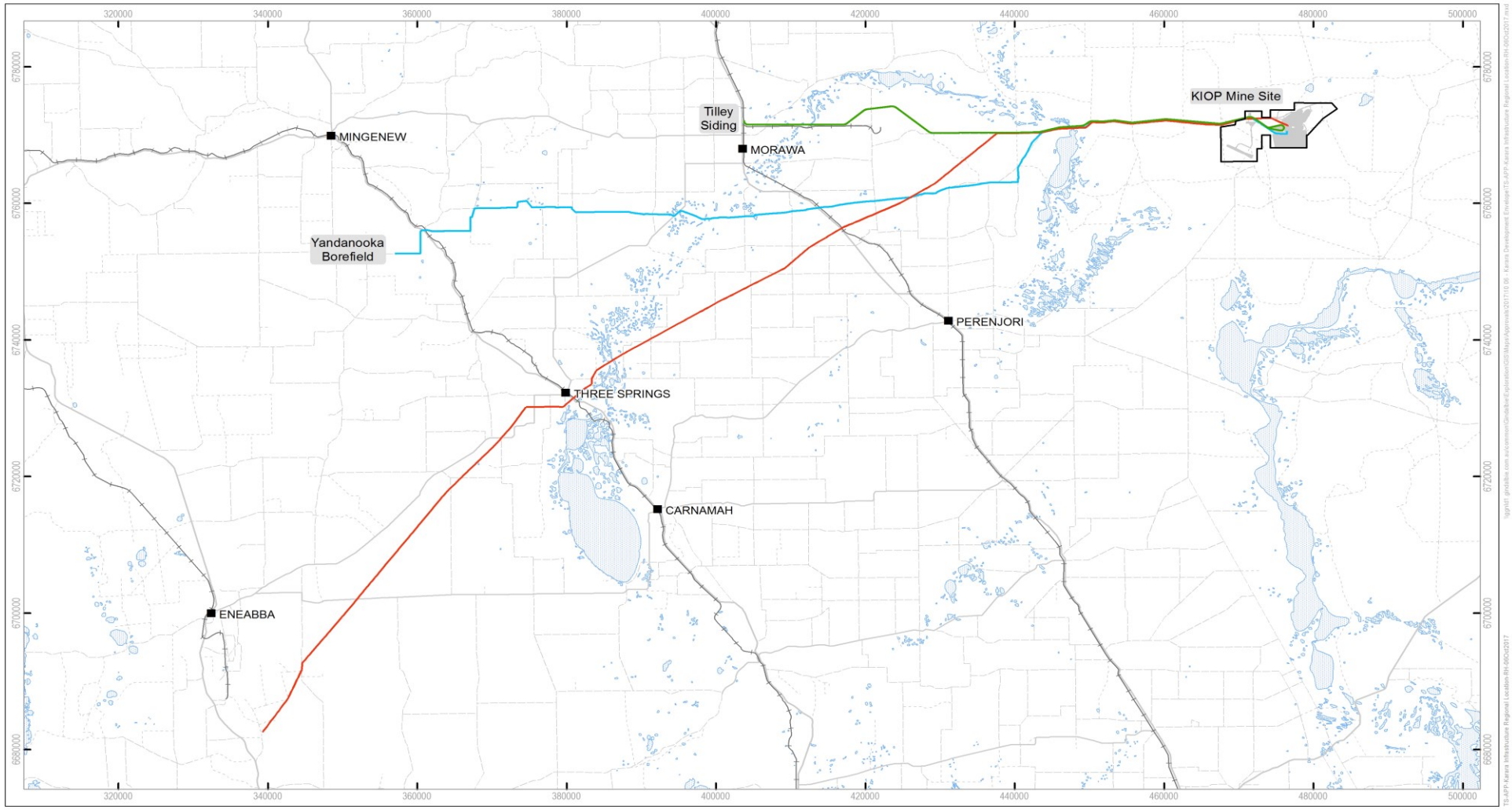
Figure 2 Mine Site Infrastructure

[Signed 13 December 2017]

_____

Dr Tom Hatton
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: _____



4 December 2017

Version: A

Size: A3

Karara Iron Ore Project

Figure 1. Location of minesite, Linear Infrastructure Corridor and associated infrastructure

NORTH

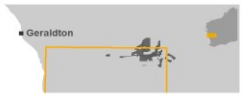
0 kilometres 20

1:500,000

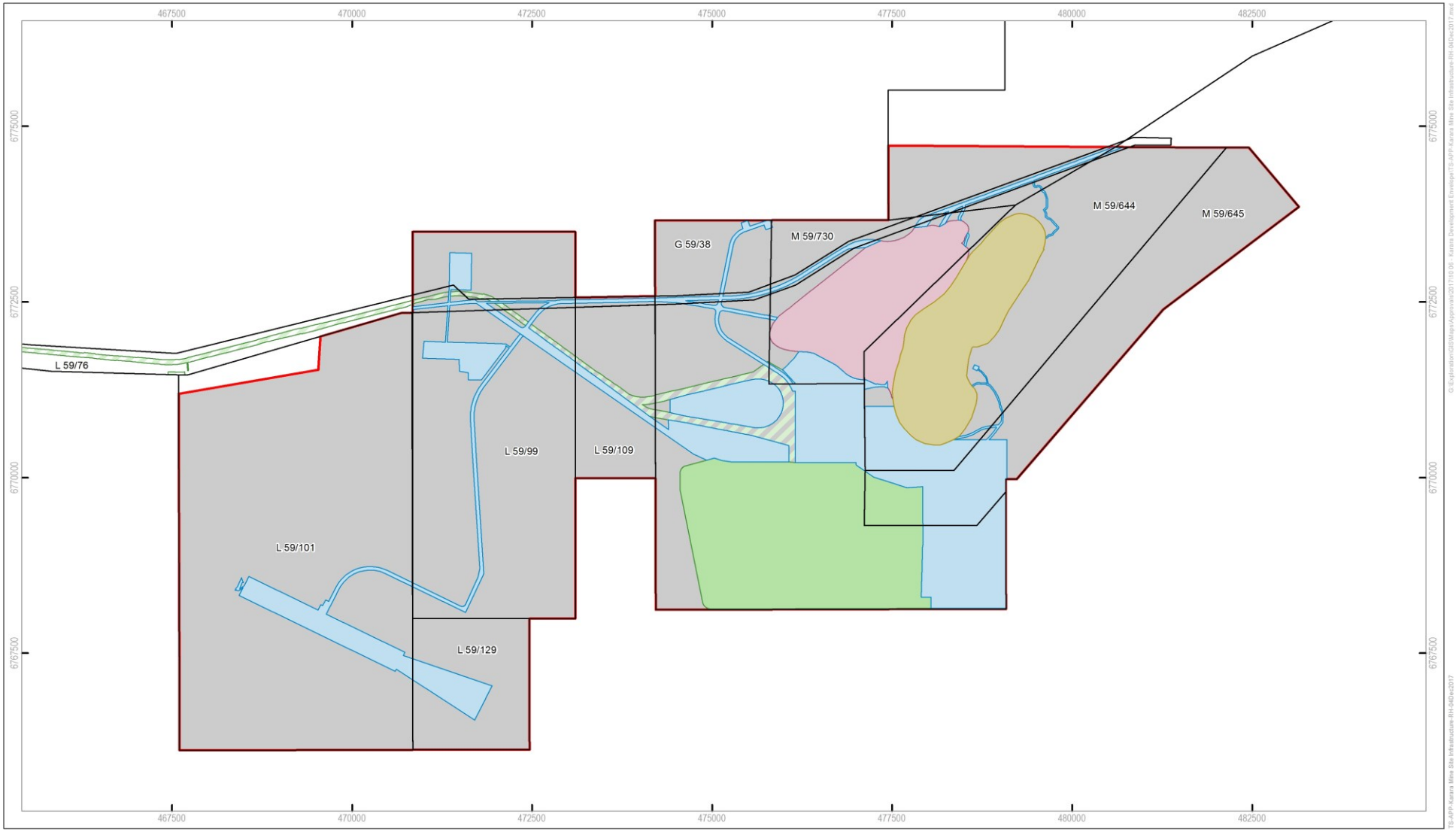
GDA 1994 MGA Zone 50

Legend

- Locality
- Planned Disturbance Footprint
- Proposed Karara Mine Site Development Envelope
- Waterbody
- Karara Rail Alignment
- Karara Power Transmission Route
- Yandanooka Pipeline
- Other Railway
- Principal Road
- Secondary Road
- Minor Road
- Track



KARARA MINING LTD



4 December 2017

Version: B

Size: A3

Karara Iron Ore Project

Figure 2. Mine Site Infrastructure

Legend

- KML Granted Tenement
- Rail NVCP
- Karara Mine Site Development Envelope

Disturbance Footprint by Feature

- Other Infrastructure
- Pit
- TSF
- Waste rock dump

NORTH

0 kilometres 2

1:50,000

GDA 1994 MGA Zone 50

Geraldton

KARARA MINING LTD

Attachment 5 to Ministerial Statement 805

Change to proposal approved under section 45C of the *Environmental Protection Act 1986*

This Attachment replaces Attachment 1 to Attachment 4 of Ministerial Statement 805

Proposal: Karara Iron Ore Project

Proponent: Karara Mining Limited

Changes: Increase the current authorised area of disturbance by an additional 69 ha to facilitate:

- relocation of the landfill facility;
- extension of the ROM pad;
- adding additional topsoil storage; and
- supporting service/infrastructure corridors.

Table 1: Summary of the Proposal

Proposal Title	Karara Iron Ore Project
Short Description	The proposal is to construct and operate: • an iron ore mine to extract approximately 1426 Mt of magnetite ore; • associated mining infrastructure (i.e. processing plant, tailings storage facility, waste dumps, workshops etc); and • a Linear Infrastructure Corridor to contain the raw water pipeline to the borefield near Mingenew and an access road to Morawa.

Table 2: Location and authorised extent of physical and operational elements

Element	Previously Authorised Extent	Authorised Extent
General		
Project Life	Approximately 25 years	Approximately 25 years
Area of disturbance	Estimated approx. 2958 ha comprising: • Mine – approx. 2267 ha; • LIC – approx. 384 ha; and • Access Road – approx. 307 ha.	Estimated approx. **3,027** ha comprising: • Mine – approx. **2,336** ha; • LIC – approx. 384 ha; and Access Road – approx. **308** ha.
Production rate	Stage 2 (first expansion) – Approx. 15.4 Mtpa of concentrate Stage 3 – Approx. 22.8 Mtpa of concentrate Stage 4 & 5 – Approx. 37.6 Mtpa of concentrate	Stage 2 (first expansion) – Approx. 15.4 Mtpa of concentrate Stage 3 – Approx. 22.8 Mtpa of concentrate Stage 4 & 5 – Approx. 37.6 Mtpa of concentrate

Element	Previously Authorised Extent	Authorised Extent
Mining		
Pit	Single open cut pit: • Approx. 3,400 m long; • Approx. 1,300 m wide; and • Approx. 300 m deep.	Single open cut pit: • Approx. 3,400 m long; • Approx. 1,300 m wide; and • Approx. 300 m deep.
Waste rock	Stage 2 (first expansion) – Approx. 23.1 Mtpa Stage 3 – Approx. 34.2 Mtpa Stage 4 & 5 – Approx. 37.6 Mtpa	Stage 2 (first expansion) – Approx. 23.1 Mtpa Stage 3 – Approx. 34.2 Mtpa Stage 4 & 5 – Approx. 37.6 Mtpa
Waste dump	Single waste dump located next to the pit, approx. 365 ha	Single waste dump located next to the pit, approx. 365 ha
Potentially Acid Forming (PAF) Material	Approx. 20% (9.4 Mtpa) of the waste rock is classified as PAF and would be contained inside isolation cells in the waste dump.	Approx. 20% (9.4 Mtpa) of the waste rock is classified as PAF and would be contained inside isolation cells in the waste dump.
Tailings	Dry-stack and wet tailings cells within the final tailings storage facility landform, being a single dry stack tailings storage facility.	Dry-stack and wet tailings cells within the final tailings storage facility landform, being a single dry stack tailings storage facility.
Dewatering	The groundwater table is predicted to be intersected by the pit in year 3 which would require pit dewatering of approx. 600 kL/d: • Increasing to approx. 1,300 kL/d in year 16; and • Decreasing to approx. 830 kL/d in year 23	The groundwater table is predicted to be intersected by the pit in year 3 which would require pit dewatering of approx. 600 kL/d: • Increasing to approx. 1,300 kL/d in year 16; and • Decreasing to approx. 830 kL/d in year 23
Infrastructure		
Site access	Upgrading a number of existing roads, part of which would run parallel to the LIC. Borrow material for road base (approx. 200,000 m^3) would be sourced from five pits located within 1.5 km.	Upgrading a number of existing roads, part of which would run parallel to the LIC. Borrow material for road base (approx. 200,000 m^3) would be sourced from five pits located within 1.5 km.
Supporting Mine infrastructure	• Processing plant; • ROM pad; • Bulk fuel storage and re-fuelling pads; • Explosive compound and magazine; • Wastewater treatment facility; • Reverse osmosis plant; • Landfill; and • Air strip.	• Processing plant; • ROM pad; • Bulk fuel storage and re-fuelling pads; • Explosive compound and magazine; • Wastewater treatment facility; • Reverse osmosis plant; • Landfill; and • Air strip.

Note: Text in **bold** in Table 2 indicates a change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
ha	hectare
GL	gigalitre
km	kilometre

Figures (attached)

Figure 1 Revised Development Envelope and Disturbance Area

Coordinates defining the Approved Total Disturbance Area for the Karara Iron Ore Project are held by the Department of Water and Environmental Regulation (File Reference number 1DWERA-001145).

[Signed 8 March 2019]

Dr Tom Hatton
CHAIRMAN
Environmental Protection Authority
under delegated authority

Figure 1: Revised Development Envelope and Disturbance Area