



GOVERNMENT OF WESTERN AUSTRALIA

MINISTER FOR THE ENVIRONMENT; SCIENCE

Statement No.

000682

**STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED
(PURSUANT TO THE PROVISIONS OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

**GOLDSWORTHY IRON ORE MINES EXTENSION PROJECT
100 - 170 KILOMETRES EAST OF PORT HEDLAND**

Proposal: The extension of current mines, and new pits, to mine and crush iron ore at the Yarrie, Nimingarra and Cattle Gorge mine areas at a continuing rate of up to approximately 8.5 million tonnes per annum, for transportation by rail to Port Hedland; rehabilitation; and decommissioning of the site, as documented in schedule 1 of this statement.

Proponent: BHP Billiton Iron Ore Pty Ltd

Proponent Address: 225 St George's Terrace, PERTH WA 6000

Assessment Number: 1568

Report of the Environmental Protection Authority: Bulletin 1171

The proposal referred to above may be implemented by the proponent subject to the following conditions and procedures:

1 Implementation

1-1 The proponent shall implement the proposal as documented in schedule 1 of this statement subject to the conditions and procedures of this statement.

2 Proponent Commitments

2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement.

Published on

11 AUG 2005

3 Proponent Nomination and Contact Details

- 3-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposal.
- 3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposal will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposal shall also be provided.
- 3-3 The nominated proponent shall notify the Department of Environment of any change of contact name and address within 60 days of such change.

4 Commencement and Time Limit of Approval

- 4-1 The proponent shall substantially commence the proposal within five years of the date of this statement or the approval granted in this statement shall lapse and be void.

Note: The Minister for the Environment will determine any dispute as to whether the proposal has been substantially commenced.

- 4-2 The proponent shall make application for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement to the Minister for the Environment, prior to the expiration of the five-year period referred to in condition 4-1.

The application shall demonstrate that:

1. the environmental factors of the proposal have not changed significantly;
2. new, significant, environmental issues have not arisen; and
3. all relevant government authorities have been consulted.

Note: The Minister for the Environment may consider the grant of an extension of the time limit of approval not exceeding five years for the substantial commencement of the proposal.

5 Compliance Audit and Performance Review

- 5-1 The proponent shall prepare an audit programme and submit compliance reports to the Department of Environment which address:

1. the status of implementation of the proposal as defined in schedule 1 of this statement;
2. evidence of compliance with the conditions and commitments; and
3. the performance of the environmental management plans and programmes.

Note: Under sections 48(1) and 47(2) of the *Environmental Protection Act 1986*, the Chief Executive Officer of the Department of Environment is empowered to monitor the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement.

6 Conservation of Significant Flora and Fauna

- 6-1 Prior to any ground-disturbing activity following the formal authority issued to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986*, the proponent shall conduct surveys of the areas to be disturbed by the project for priority flora and significant fauna species, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.
- 6-2 The proponent shall provide each summary report of the results of the surveys required by condition 6-1 to the Environmental Protection Authority and the Department of Conservation and Land Management within two weeks of the report becoming available.
- 6-3 Within six months following the formal authority issued to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986*, the proponent shall prepare and submit Significant Species Management Plans for the Pilbara Leaf-nosed Bat (*Rhynonictus aurantius*), the Ghost Bat (*Macroderma gigas*) and any other priority flora or significant fauna species recorded during the surveys required by condition 6-1, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

The objective of these plans is to maintain the abundance, diversity, geographic distribution, conservation status and productivity of flora and fauna at species and ecosystem levels through the avoidance or management of adverse impacts and improvement in knowledge.

These plans shall describe the significant identified species of flora and fauna and significant vegetation associations and habitat areas, and shall set out procedures and measures to:

1. delineate the identified populations and/or individuals of conservation-significant identified species of flora and fauna, and map the extent of conservation-significant vegetation associations and habitat areas;

2. modify land clearing plans and evaluate alternative mine plans to minimise or avoid impacts on the conservation-significant identified species of flora and fauna, vegetation associations and habitat areas;
 3. minimise impacts where the proposed mining activities, changes to water flow patterns, or groundwater drawdown are likely to impact on conservation-significant identified species of flora and fauna, vegetation associations and habitat areas;
 4. monitor and record impacts on identified conservation-significant species of flora and fauna, vegetation associations and habitat areas; and
 5. implement appropriate contingency plans where impacts on conservation-significant species of flora and fauna, vegetation associations and habitat areas are identified.
- 6-4 The proponent shall implement the Significant Species Management Plans required by condition 6-3.
- 6-5 The proponent shall make the Significant Species Management Plans required by condition 6-3 publicly available.

7 Weeds

- 7-1 The proponent shall not carry out land-disturbing activities other than in accordance with a Weed Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

The objective of this plan is to control or eradicate both noxious and environmental weeds in the proposal area.

This plan shall:

1. describe the location and area affected for each weed species which occurs in the proposal area;
2. identify any additional weed species which have the potential to occur in the proposal area;

and shall set out procedures and measures to:

3. monitor weed species;
4. control or eradicate weed species;
5. prevent the spread of weed species; and
6. prevent the introduction of any additional weed species.

- 7-2 The proponent shall implement the Weed Management Plan required by condition 7-1.
- 7-3 The proponent shall make the Weed Management Plan required by condition 7-1 publicly available.

8 Subterranean Fauna

- 8-1 Within six months following the formal authority issued to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986*, the proponent shall commence surveys for subterranean fauna in accordance with a Subterranean Fauna Survey Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

The Subterranean Fauna Survey Plan shall set out procedures and measures to:

1. survey areas affected by project operations; and
2. survey areas with similar habitats outside the areas to be affected by project operations to establish the conservation significance of fauna within the areas to be affected.

- 8-2 In the event that the results of the surveys required by condition 8-1 indicate that there is a risk of loss of subterranean species or communities as a result of project operations, the proponent shall institute management measures in accordance with a Subterranean Fauna Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

The Subterranean Fauna Management Plan shall set out procedures and measures to:

1. avoid and/or manage impacts on subterranean fauna species and/or communities and their habitats where the long-term survival of those species and/or communities may be at risk as a result of project operations;
 2. monitor the distribution and abundance of species and/or communities of subterranean fauna, groundwater levels, groundwater quality and other relevant aspects of subterranean fauna habitat to ensure that the long-term survival of subterranean fauna species and communities is not compromised as a result of project operations; and
 3. take timely remedial action in the event that monitoring indicates that project operations may compromise the long-term survival of subterranean fauna and / or communities.
- 8-3 Prior to the commencement of dewatering activities at Cattle Gorge or Nimingarra I, the proponent shall implement the Subterranean Fauna Management Plan required by condition 8-2.

8-4 The proponent shall make the Subterranean Fauna Management Plan required by condition 8-2 publicly available.

9 Decommissioning and Final Rehabilitation

9-1 The proponent shall rehabilitate and decommission the new project areas in accordance with the Decommissioning and Rehabilitation Plan included in the Environmental Protection Statement (May 2005), or subsequent revisions of the Plan, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Water and Rivers Commission, the Department of Industry and Resources and the Department of Conservation and Land Management.

9-2 The proponent shall review and revise the Decommissioning and Rehabilitation Plan at intervals not exceeding five years, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Water and Rivers Commission, the Department of Industry and Resources and the Department of Conservation and Land Management.

The objective of this plan is to ensure that closure planning and rehabilitation are carried out in a coordinated, progressive manner and are integrated with development planning, consistent with the Australian and New Zealand Minerals and Energy Council / Minerals Council of Australia *Strategic Framework for Mine Closure (2000)*, current best practice, and the agreed land uses.

Each revision of the Decommissioning and Rehabilitation Plan shall set out procedures and measures to:

1. manage over the long term ground and surface water systems affected by the open pits and waste rock dumps;
2. rehabilitate all disturbed areas to a standard suitable for the agreed end land use(s);
3. backfill the Nim I and Cattle Gorge pits, to at least five metres above the pre-mining groundwater table so as to minimise impacts to groundwater quality and subterranean fauna;
4. identify contaminated areas, including provision of evidence of notification and propose management measures to relevant statutory authorities; and
5. develop management strategies and/or contingency measures in the event that operational experience and/or monitoring indicate that a closure objective is unlikely to be achieved.

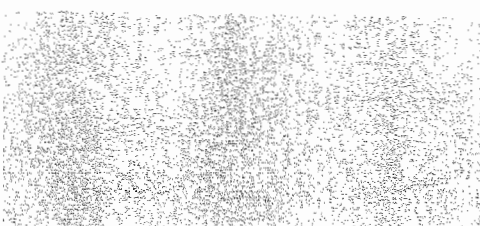
9-3 The proponent shall make revisions of the Decommissioning and Rehabilitation Plan required by condition 9-2 publicly available.

Procedures

1. Where a condition states "to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority", the Environmental Protection Authority will provide that advice to the Department of Environment for the preparation of written notice to the proponent.
2. The Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environment.
3. Where a condition lists advisory bodies, it is expected that the proponent will obtain the advice of those listed as part of its compliance reporting to the Department of Environment.

Notes

1. The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environment over the fulfilment of the requirements of the conditions.
2. The proponent may be required to apply for a Works Approval, Licence and/or Registration for this project under the provisions of Part V of the *Environmental Protection Act 1986*.
3. Compliance and performance reporting will endeavour to be in accord with the timing requirements of reporting under the *Iron Ore (Goldsworthy) Agreement Act 1964*.



Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT; SCIENCE

11 AUG 2005

Schedule 1

The Proposal (Assessment No. 1568)

The project is located on several mining tenements between 100 and 170 kilometres east of Port Hedland in the Pilbara (Figure 1). The proponent holds the mining lease which is operated in accordance with the *Iron Ore (Goldsworthy) Agreement Act 1964*.

The Goldsworthy iron ore deposits occur as in-situ ores within the Nimingarra Iron Formation and shallow crustal haematite deposits. The proposal is to continue mining at Nimingarra and Yarrie and to develop a new mine area at Cattle Gorge. As individual pits are mined, the voids may be partially infilled with overburden materials from other pits within the leases.

The project comprises:

- opencut mining of ore from the Nimingarra area (Nim I deposit) and Yarrie areas (Y4a, Y7 west, Y10 north deposits) and from the new mine area to be developed at Cattle Gorge;
- progressive associated construction of haul and access roads in addition to the existing layout;
- placement of overburden in mine voids and out-of-pit storage areas;
- crushing, loading and transportation of ore, with no increase in train frequencies; and
- the continued use of existing service infrastructure (e.g. workshops and administration areas) at Yarrie.

Significant features of the proposal are:

- continued ore production at the current rate of up to approximately 8.5 mega tonnes per annum over the remaining life of the mine, with closure of the proposal area by the end of 2007; and
- partial backfilling of Nim I and Cattle Gorge mine pits to at least 5 metres above the pre-mining water table where mining is proposed to go deeper than the water table.

The key proposal characteristics are shown in Table 1 below.

Table 1 – Key Proposal Characteristics

Characteristic	Quantities / Description
Location	Goldsworthy to Yarrie, 100-170 kilometres east of Port Hedland, East Pilbara Region.
Main activity	Extending existing mines at Yarrie: Y4A and Y10 north.
	New mines at Cattle Gorge, Nimingarra: Nim I, and Yarrie: Y7 west.
	Production continues unchanged at up to approximately 8.5 Mega tonnes per annum iron ore.
Contingent activities	Extend existing, and create new, overburden dumps adjacent to new pits. Some overburden material will be placed in mined-out pits. The Nim I and Cattle Gorge pits which are mined to below the water table will be backfilled to at least 5 metres above the pre-mining water table.
	(Previously approved) 11 kilometres haul road from Cattle Gorge to the Yarrie processing centre. Other access and haul roads to proposed mine areas, overburden dumps and other infrastructure.
	Rehabilitate mined-out areas, completed dumps and redundant roads.
	No changes to existing ore crushing and screening facilities, at Yarrie and Nimingarra.
	No changes to ore-train loading facilities or train frequency (4 per day average).
	Existing borefield water supplies to continue, supplemented where possible by mine dewatering.
Area disturbed	97 hectares.
Power supply	Existing supply, with extension to Cattle Gorge area.
Duration	Extends mining operations by 18 months to 2 years up to mid-2007.
Employment	Marginal increase to 230 employees, fly-in, fly-out.

Figures (attached)

Figure 1 - Regional location

Figure 2 - Project location

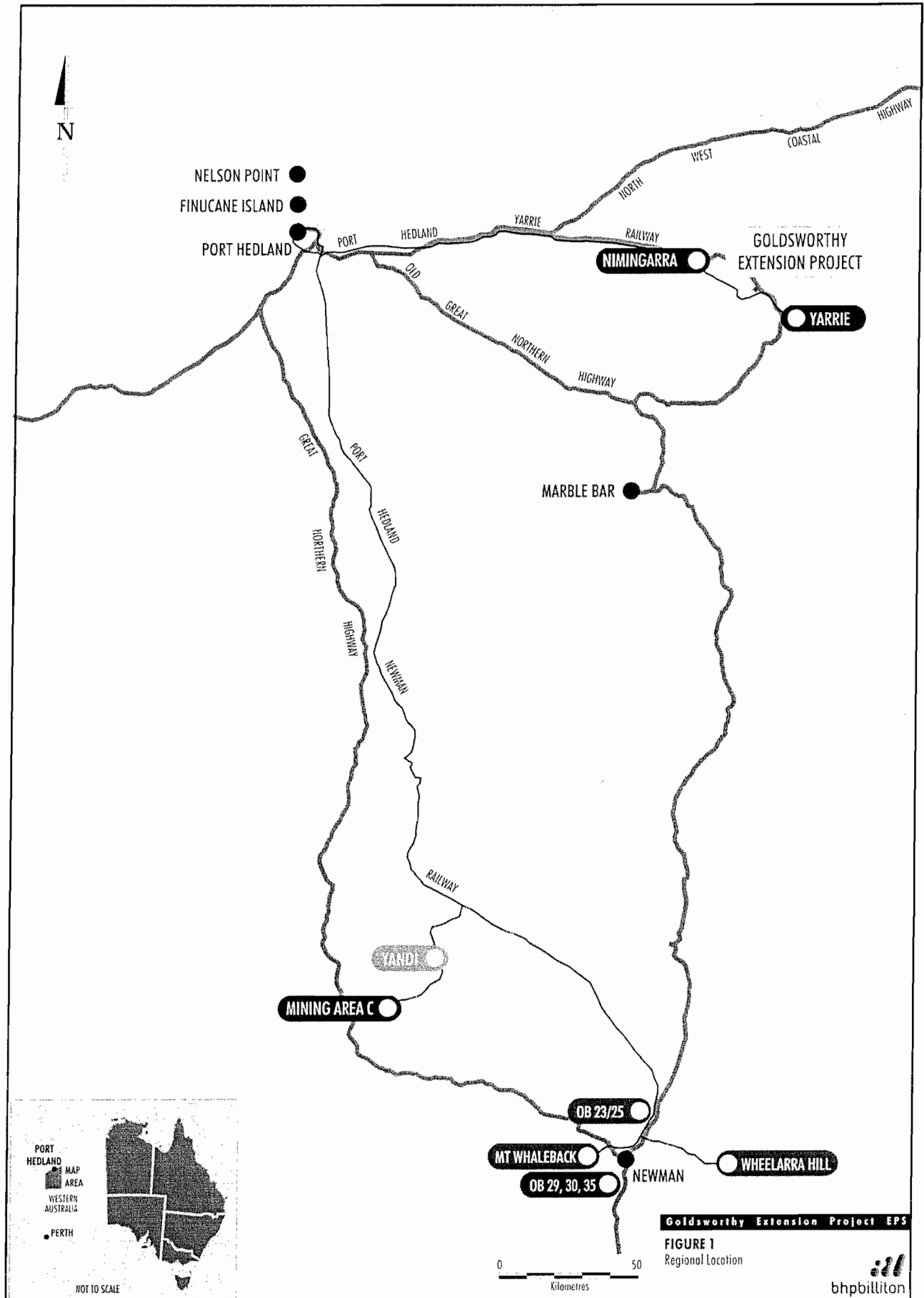


Figure 1: Regional location

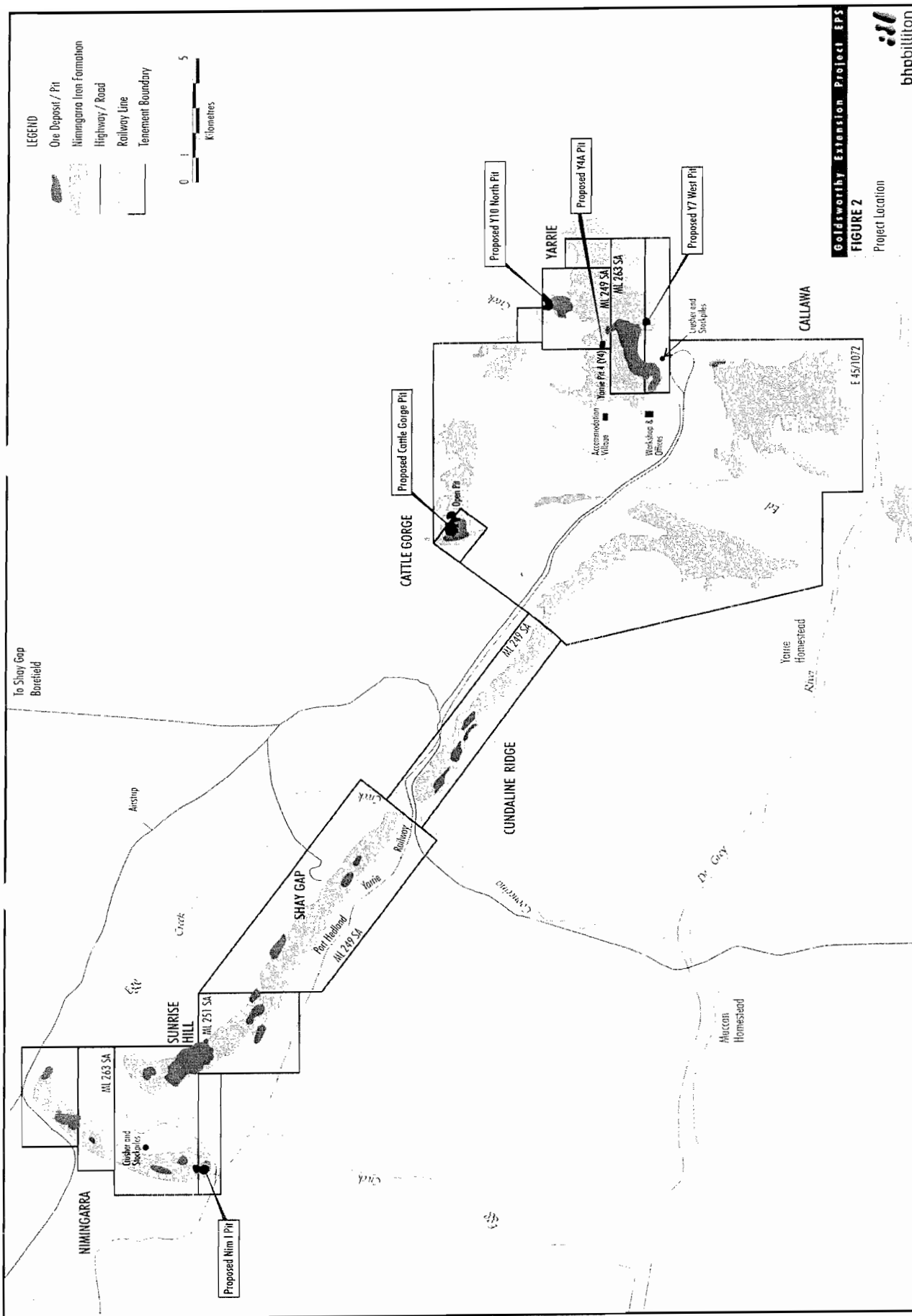


Figure 2: Project location

Proponent's Environmental Management Commitments

July 2005

**GOLDSWORTHY IRON ORE MINES EXTENSION
PROJECT
100 -170 KILOMETRES EAST OF PORT HEDLAND**

(Assessment No. 1568)

BHP Billiton Iron Ore Pty Ltd

**GOLDSWORTHY IRON ORE MINES EXTENSION PROJECT
100 - 170 KILOMETRES EAST OF PORT HEDLAND (Assessment No. 1568)**

Proponent's Environmental Management Commitments – July 2005

Note: The term "commitment" as used in this schedule includes the entire row of the table and its six separate parts as follows

- a commitment number;
- a commitment topic;
- the objective of the commitment;
- the "action" to be undertaken by the proponent;
- the timing requirements of the commitment; and
- the body/agency to provide technical advice to the Department of Environment.

No.	Topic	Objective	Action	Frequency	Responsible Party
1	Environmental Management Plan.	Protection of key environmental aspects during all phases of mining.	<ul style="list-style-type: none"> • Implement an Environmental Management Plan for the Project which includes the following: <ul style="list-style-type: none"> ○ A description of key components of the Project (ie. mining method, overburden management, ore processing, ore loading and transportation, water and power supply, and service infrastructure). ○ A description of the Environmental Management System, and the Environmental Risk Assessment and Management systems which will be used at the Project. This section will include a description of the findings of the proponent's most recent Environmental Risk Assessment of the Goldsworthy Extension Project operations. It will also include a description of how best practicable environmental measures have been applied to risks which are identified (through the Risk Assessment Process) as requiring this level of management to reduce residual risk to an acceptable level. ○ A description of the environmental management procedures and practices to be used to minimise impacts on key environmental aspects. These aspects are to include: soil resources, landforms, surface water, groundwater, flora (including priority species and species of interest), fauna (including priority species and species of interest), air quality, noise, waste, dangerous goods and hazardous materials, and Aboriginal heritage. ○ For each environmental aspect, the Environmental Management Plan will describe the overall management objective, potential impacts, management measures, and monitoring programme to track performance. 	Revised at intervals of no more than five years during operations.	DOIR DOCEP CALM DIA

			<ul style="list-style-type: none"> The Environmental Management Plan will be reviewed and revised at intervals of no more than five years, or when significant changes occur at the Mine. A copy of each new revision of the Environmental Management Plan will be provided to key stakeholders, and to other interested parties if requested. 	
2	Annual Environmental Report.	Environmental management, monitoring and rehabilitation.	<ul style="list-style-type: none"> Prepare Annual Environmental Reports (AERs) which discuss environmental management actions, summarise monitoring results and describe rehabilitation activities at the Project over the 12-month reporting period. The AERs will be made publicly available to key stakeholders and copies will be provided to other interested parties if requested. 	Annually during operations.
3	Disturbance to Cattle Gorge	To minimise the potential for direct or indirect disturbance to the Cattle Gorge. (located approximately 400 to 500 metres east of the Cattle Gorge mining area.)	<ul style="list-style-type: none"> Manage the proposed mining activities at the Cattle Gorge mining area to minimise the potential for direct or indirect disturbance to the Cattle Gorge through the implementation of the following measures: <ul style="list-style-type: none"> a buffer zone of approximately 400 metres will be established between all mining and land disturbance activities at the Cattle Gorge mining area and the Gorge itself. Permission to enter the buffer zone will be restricted to employees and contractors authorised by the proponent. employees and contractors will be made aware of the environmental, heritage and land use values of Cattle Gorge, and their obligations to protect these values, via the Goldsworthy induction programme. 	During operations

Key

CALM = Department of Conservation & Land Management

DIA = Department of Indigenous Affairs

DOCEP = Department of Consumer & Employment Protection (Resources Safety Division)

DOIR = Department of Industry & Resources.

Attachment to Statement 682

Change to Description of Proposal

Proposal: Goldsworthy Iron Ore Mines Extension Project 100 – 170 Kilometres East of Port Hedland.

Proponent: BHP Billiton Iron Ore Pty Ltd

Change: to Schedule 1

From:

Element	Quantities/Description
Main Activity	Extending existing mines at Yarrie: Y4A and Y10 north.
Area Disturbed	97 hectares

To:

Element	Quantities/Description
Main Activity	Extending existing mines at Yarrie: Y10.
Area Disturbed	145 hectares

Approval Date: 8/06/06

Attachment 2 to Ministerial Statement 682

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

Attachment 2 replaces Schedule 1 and Attachment 1 of Ministerial Statement 682

Proposal: Goldsworthy Iron Ore Mines Extension Project, 100 - 170 kilometres East of Port Hedland

Proponent: BHP Billiton Iron Ore Pty Ltd

The Proposal (Assessment No. 1568) (Revised Description)

The project is located between 100 and 170 kilometres east of Port Hedland in the Pilbara (Figure 1). The proponent holds the mining lease which is operated in accordance with the *Iron Ore (Goldsworthy) Agreement Act 1964* and the *Iron Ore (Goldsworthy-Nimingarra) Agreement Act 1972*.

The proposal is to continue mining at Nimingarra and Yarrie and the newly developed mine at Cattle Gorge. As individual pits are mined, the voids may be partially infilled with overburden materials from other pits within the mining leases.

The project comprises:

- opencut mining of ore from the Nimingarra area (Nim 1 deposit) and Yarrie areas (Y4a, Y7 west, Y10 north deposits) and from the newly developed Cattle Gorge mine;
 - progressive associated construction of haul and access roads in addition to the existing layout;
 - placement of overburden in mine voids and out-of-pit storage areas;
 - partial backfilling of Nim 1 and Cattle Gorge mine pits to at least 5 metres above the pre-mining water table where mining is proposed to go deeper than the water table;
 - crushing, loading and transportation of ore; and
 - the continued use of existing service infrastructure at Yarrie.
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Changes:

- Revised Proposal Description
- Removal of Location, Duration and Employment from the Key Characteristics Table;
- Increase the area of disturbance from approximately 145 hectares (ha) to 270 ha; and
- Formalise new Maximum Disturbance Boundaries (development envelope) of approximately 455 ha for the site.

Key Characteristics Table:

<u>Element</u>	<u>Description of proposal</u>	<u>Description of approved change to proposal</u>
Location	Goldsworthy to Yarrie, 100-170 kilometres east of Port Hedland, East Pilbara Region.	“Location” removed as it is contained in the Proposal description.
Main activity	Extending existing mines at Yarrie: Y10.	Extending existing mines at Yarrie: Y10.
	New mines at Cattle Gorge, Nimingarra: Nim I, and Yarrie: Y7 west.	New mines at Cattle Gorge, Nimingarra: Nim I, and Yarrie: Y7 west.
	Production continues unchanged at up to approximately 8.5 Mega tonnes per annum iron ore.	Up to approximately 8.5 Mega tonnes per annum iron ore.
Contingent activities	Extend existing, and create new, overburden dumps adjacent to new pits. Some overburden material will be placed in mined-out pits. The Nim I and Cattle Gorge pits which are mined below the water table will be backfilled to at least 5 metres above the pre-mining water table.	Extend existing, and create new, overburden dumps adjacent to new pits. Some overburden material will be placed in mined-out pits. The Nim I and Cattle Gorge pits which are mined below the water table will be backfilled to at least 5 metres above the pre-mining water table.
	(Previously approved) 11 kilometres haul road from Cattle Gorge to the Yarrie processing centre. Other access and haul roads to proposed mine areas, overburden dumps and other infrastructure.	(Previously approved) 11 kilometres haul road from Cattle Gorge to the Yarrie processing centre. Other access and haul roads to proposed mine areas, overburden dumps and other infrastructure.
	Rehabilitate mined-out areas, completed dumps and redundant roads.	Rehabilitate mined-out areas, completed dumps and redundant roads.
	No change to existing ore crushing and screening facilities, at Yarrie and Nimingarra.	Existing ore crushing and screening facilities, at Yarrie and Nimingarra.
	No changes to ore-train loading facilities or train frequency (4 per day average)	No changes to ore-train loading facilities or train frequency (4 per day average)
	Existing borefield water supplies to continue, supplemented where possible by mine dewatering.	Existing borefield water supplies to continue, supplemented where possible by mine dewatering.
	Area Disturbed	145 hectares

¹ Development Envelope

<u>Element</u>	<u>Description of proposal</u>	<u>Description of approved change to proposal</u>
		<p>70 ha Area of Disturbance within a 121 ha MDB.</p> <p>Cattle Gorge 167 ha Area of Disturbance within a 268 ha MDB.</p> <p>Nim I 33 ha Area of Disturbance within a 66 ha MDB.</p>
Power Supply	Existing supply, with extension to Cattle Gorge area.	Existing supply, with extension to Cattle Gorge area.
Duration	Extends mining operations by 18 months to 2 years up to mid-2007.	“Duration” removed as it is not a key characteristic relevant to the environment.
Employment	Marginal increase to 230 employees, fly-in, fly-out.	“Employment” removed as it is not a key characteristic relevant to the environment.

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

List of Figures: Figures 1 to 5 replace all Figures in Schedule 1

- Figure 1: Regional location
- Figure 2: Goldsworthy Iron Ore Mines Project Location
- Figure 3: Nim 1 mine location
- Figure 4: Cattle Gorge mine location
- Figure 5: Yarrie (Y4A, Y7W and Y10) mines locations

[Signed on 9 October 2013]

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

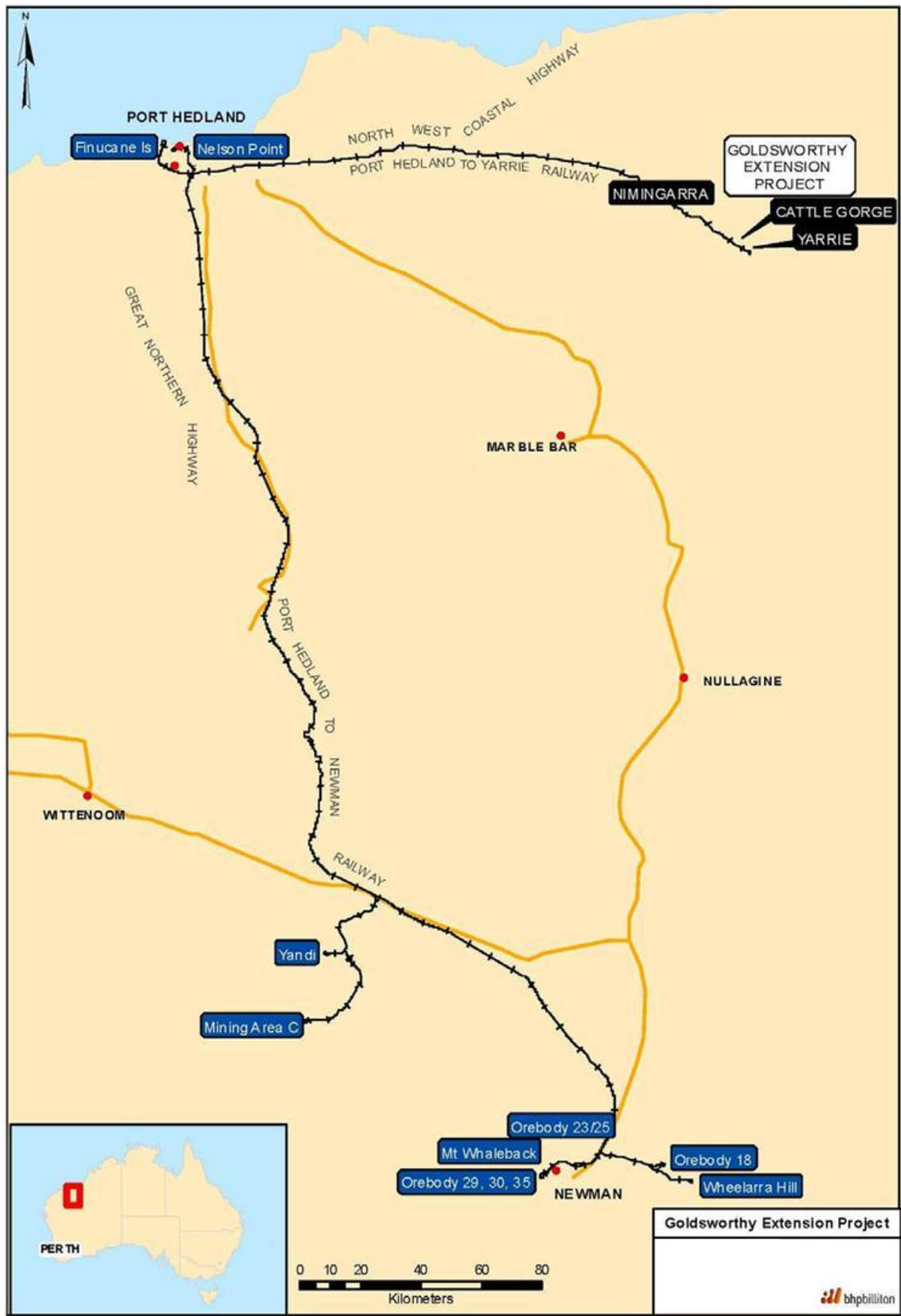


Figure 1: Regional Location

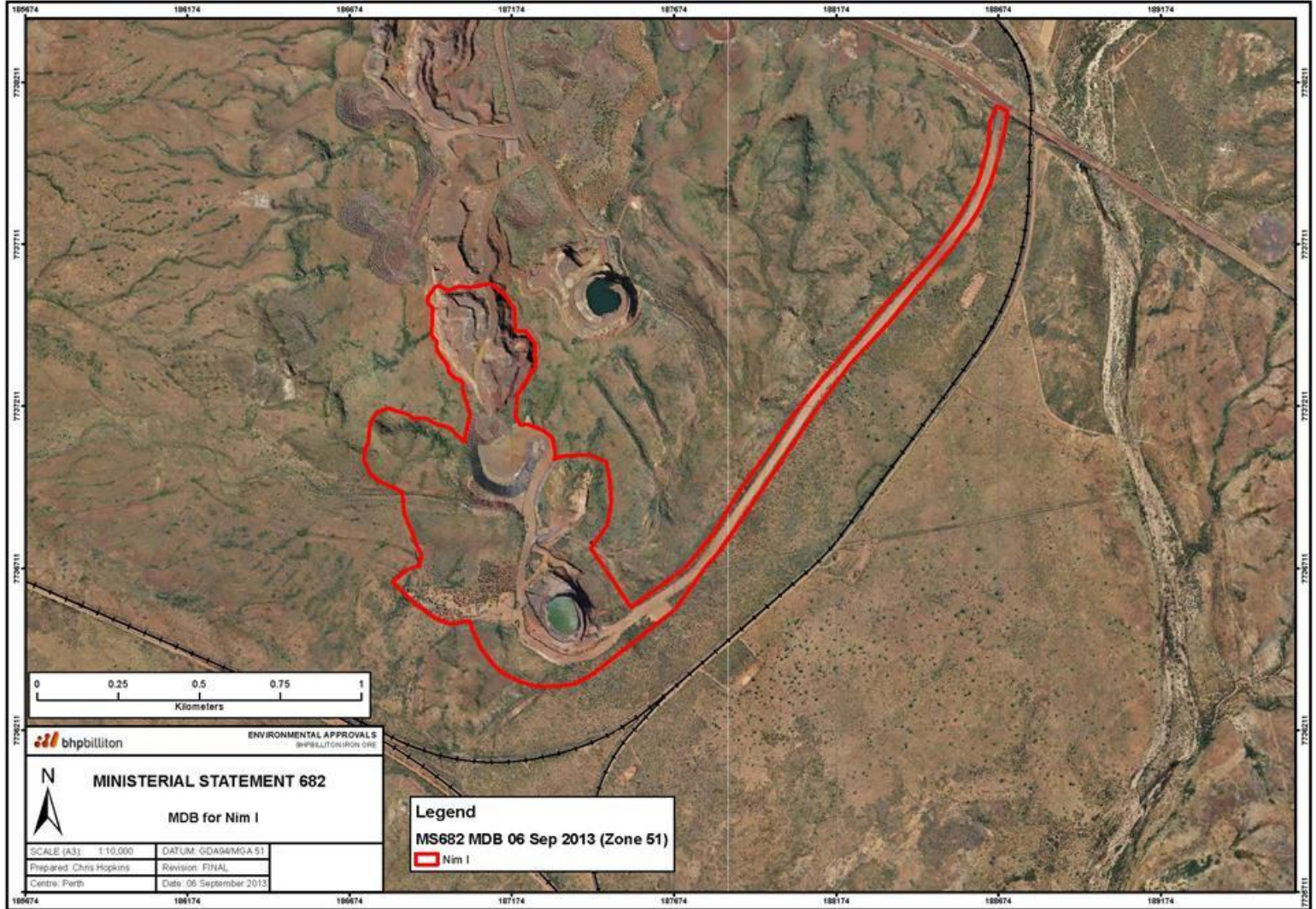


Figure 3: Nim I mine location

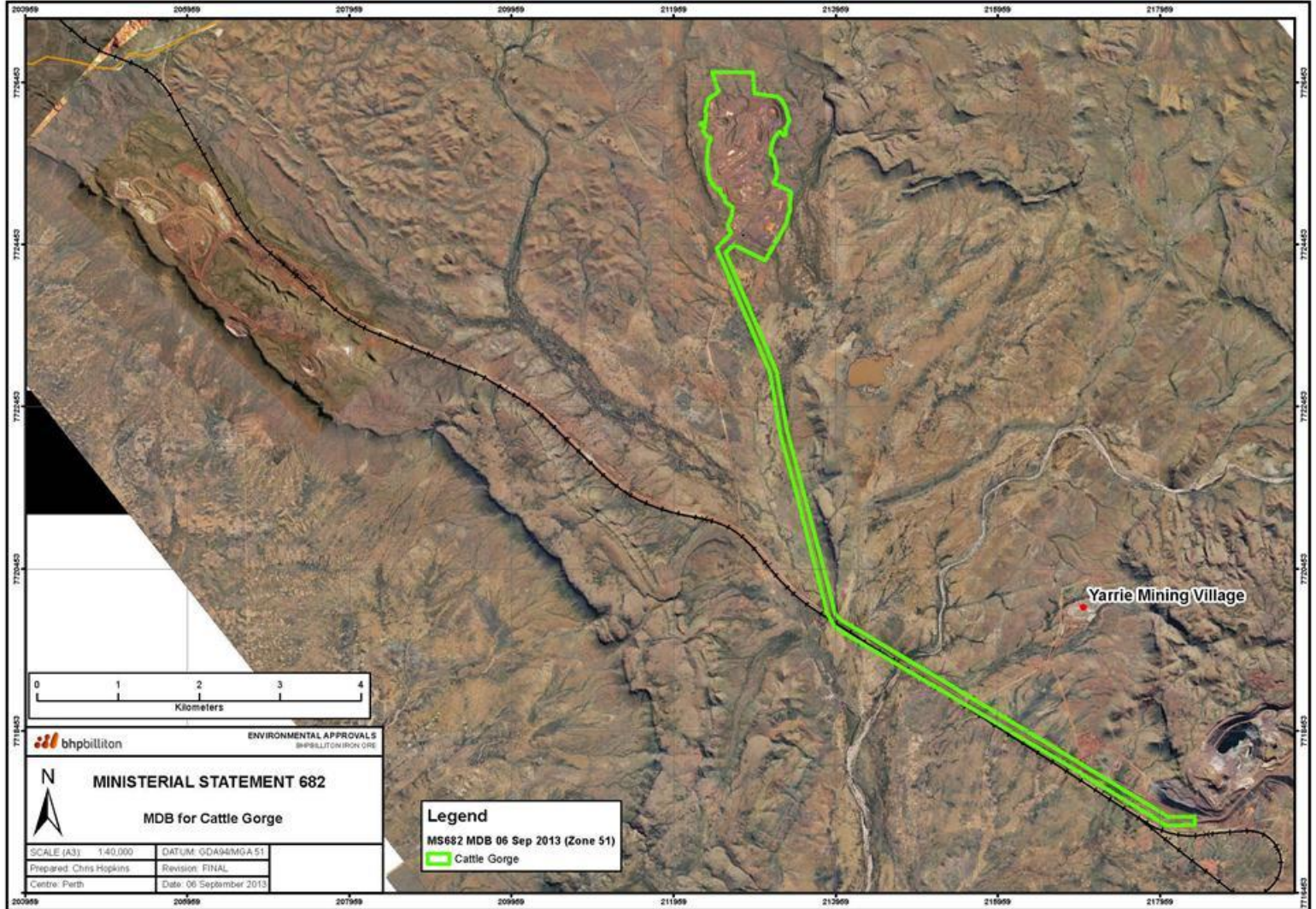


Figure 4: Cattle Gorge mine location

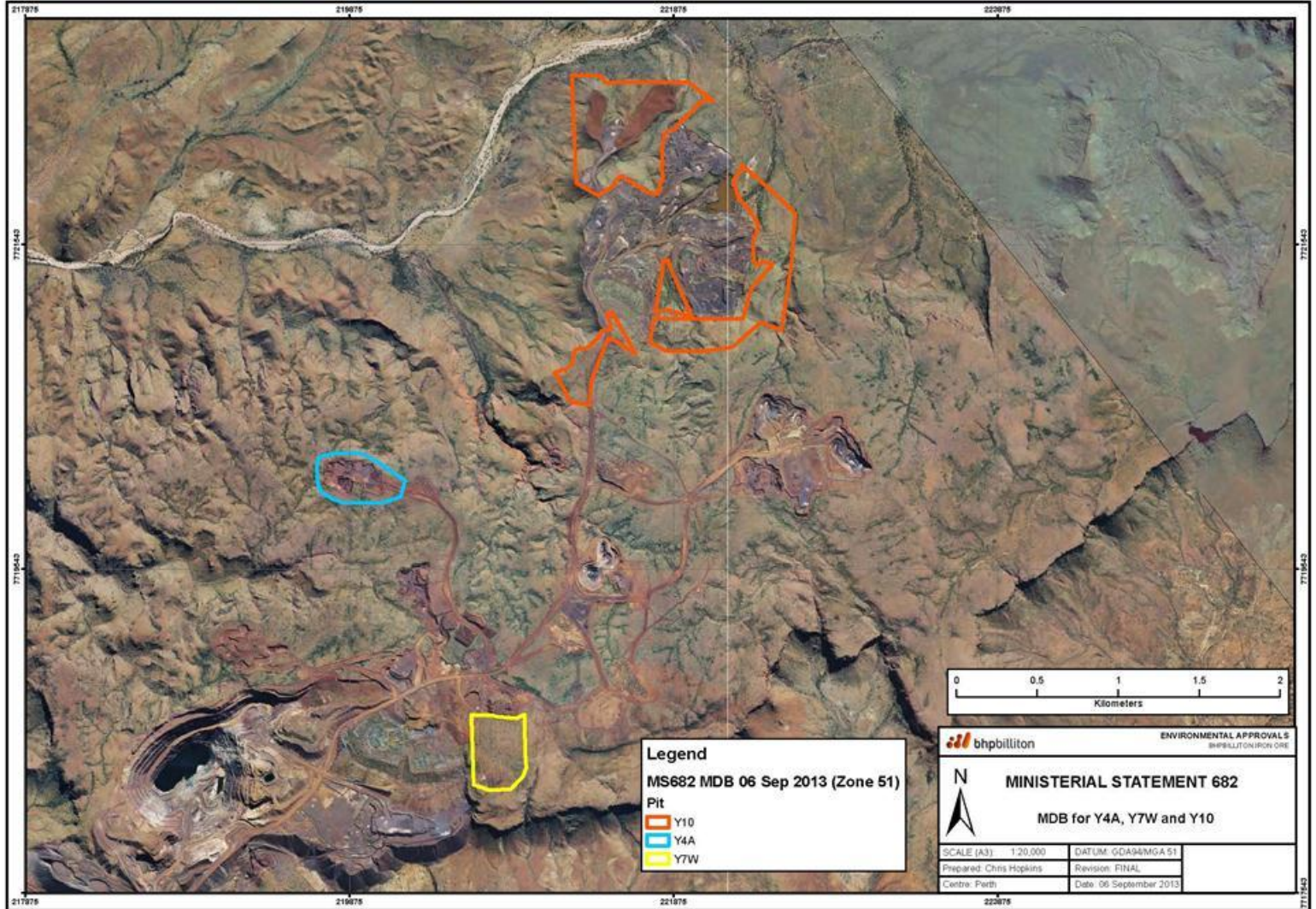


Figure 5: Yarrarie (Y4A, Y7W and Y10) mines locations